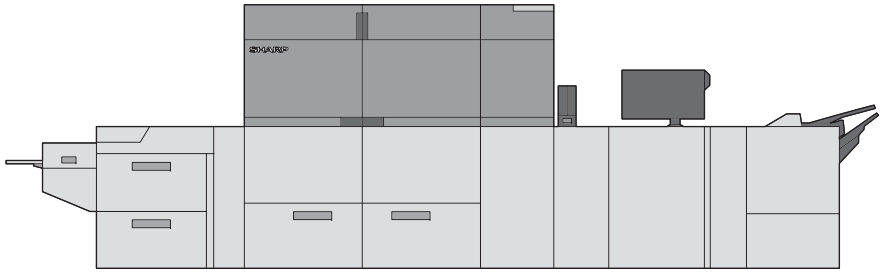
SHARP

SERVICE MANUAL · PARTS GUIDE

CODE: 00ZBP1200/S3E

DIGITAL FULL COLOR PRODUCTION PRINTER

BP-1200 SERIES



MODEL BP-1200S
MODEL BP-1200C

SHARP CORPORATION

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BP-1200S / BP-1200C Series Service Manual Modification History

No.	Issue Date	Page	Revised content	Before revision	After revision
1	Feb-2024	Cover		—	00ZBP1200/S1E
2	Oct-2024	Cover		00ZBP1200/S1E	00ZBP1200/S2E
3		1-6	Corrected description 1.1.4 Types of Power Supply and Precautions	50A 6. About the Power Outlet Connect the power cord to an electric outlet whose over current protection is 50A. 8. About the power plug • Round Terminal The recommended ring terminal specification is to use one that is compatible with wire size 4 AWG. The recommended terminal model number is R22-6. Minimum rating is 200V, 50A.	60A 6. About the Power Outlet Connect the power cord to an electric outlet whose over current protection is 60A. 8. About the power plug • Round Terminal The recommended ring terminal specification is to use one that is compatible with wire size 4 AWG. The recommended terminal model number is R22-6. Minimum rating is 200V, 60A.
4		1-12	Corrected description 1.5 Periodical Replaced Parts/Consumables List	–	**[No]** 5 **[Sub Module Name]** DRIVE **[Chain-Link]** 004-804 **[HFSI Name]** GEAR IBT DRIVE 56T **[Part Name]** IBT Drive Gear (56T) **[PL No.]** PL 6.5 Item 10 **[Qty]** 1 **[HFSI Replacement Life (Count Data)]** 550000 **[Replacement Interval (A4 Impression)]** 5000K **[Units]** No. of IBT Belt revo-lutions*
5		1-13	1.5 Periodical Replaced Parts/Consumables List	No.27~35 PN.No. 27.DW PL 5.2 Item 4 (CLR) 28.PL 5.2 Item 4 (GLD) 29.PL 5.2 Item 4 (GLD) 30.PL 5.2 Item 4 (SLV) 31.PL 5.2 Item 4 (SLV) 32.PL 5.2 Item 4 (Y) 33.PL 5.2 Item 4 (M) 34.PL 5.2 Item 4 (C) 35.PL 5.2 Item 4 (K) Description 「—」	No.27~35 ：PL.No.「—」 Description 27.BP-NV120LA 28.BP-NV120GA 29.BP-NV120GA 30.BP-NV120SA 31.BP-NV120SA 32.BP-NV120YA 33.BP-NV120MA 34.BP-NV120CA 35.BP-NV120BA
6		1-14	1.5 Periodical Replaced Parts/Consumables List	No.45.47.49 PN.No PL 5.2 Item 4 (TX) PL 5.2 Item 4 (PINK) PL 5.2 Item 4 (PINK) Description 「—」	No.45.47.49 ：PL.No.「—」 Description 45.BP-NV120TA 47.BP-NV120PA 49.BP-NV120PA
7		1-15	1.5 Periodical Replaced Parts/Consumables List	No.63.64.69 PN.No. PL 5.2 Item4 (WHT) PL 5.2 Item4 (WHT) PL 5.2 Item7 Description 「—」	No.63.64.69 ：PL.No.「—」 Description 63.64.BP-NV120WA 68.BP-DU120

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8	Oct-2024	1-16	1.5 Periodical Replaced Parts/Consumables List	No.70~74 PN.No. PL 5.2 Item4 (WHT) PL 5.2 Item4 (WHT) PL 5.2 Item7 Description 「ー」	No.70~74 ：PL.No.「ー」 Description 70~74:BP-DU120
9		1-17	Corrected description 1.5 Periodical Replaced Parts/Consumables List	ー	**[No]** 103 **[Sub Module Name]** Fusing (BRF) **[Chain-Link]** 010-816 **[HFSI Name]** ER TORQUE-LIMIT-TER **[Part Name]** Torque Joint **[PL No.]** PL 7.7 Item 12 **[Qty]** 1 **[HFSI Replacement Life (Count Data)]** 3000000 **[Replacement Interval (A4 Impression)]** 35000K **[Units]** Number of Torque Limitter Rotations
10		2-83 2-103 2-121 2-137 2-84 2-106 2-123 2-138 2-85 2-108 2-125 2-140 2-86 2-109 2-127 2-141 2-87 2-110 2-128 2-143 2-88 2-111 2-129 2-145 2-89 2-113 2-130 2-147 2-91 2-114 2-131 2-149 2-93 2-115 2-132 2-151 2-95 2-116 2-133 2-153 2-97 2-117 2-134 2-155 2-98 2-118 2-135 2-100 2-119 2-136	Corrected description	ARDBEG PWB (PL 23.4) or LAGAVULIN PWB (PL 23.3) [See Print Server manual]	Printer Interface board [See Print Server manual]
11		2-196 2-197 2-198 2-199 2-200 2-201 2-313 2-314 2-316	Corrected description	ARDBEG PWB (PL 23.4)	Printer Interface board

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No.	Issue Date	Page	Revised content	Before revision	After revision
12	Oct-2024	4-322	Added and corrected the explanation. ADJ 18.1.3 PC-UI Recovery Procedure	CAUTION When recovery is performed, the PC will be initialized. • The configuration file of the standard software (Sys-SW, UI-SW, LogHarvest 2, etc.) already installed on the PC-UI will be transferred with this procedure but other proprietary installed software and data will be erased. • Reinstall software and data installed specially after recovery. 3. Back up the standard software settings file. *Copy the [Data] folder inside <C:\Production\Data\Download> to an external HDD, etc. *Copy the 3 folders, [NvmData], [SysStarter], and [TonerReplacement] inside <C:\Production\ Data\Sys> to an external HDD, etc. (3)Overwrite and copy the backed up folder to the same location. *Copy backed up [PCSys_Files] folder to <C:\ProgramData\fujifilm>. *Copy backed up [Data] folder to <C:\ProgramData\fujifilm\ProductionPrinter\Download>. *Copy the 3 backed up folders, [NvmData], [SysStarter], and [TonerReplacement] to <C:\ProgramData\ fujifilm\ProductionPrinter\Sys>.	CAUTION When recovery is performed, the PC will be initialized. • The configuration file of the standard software (Sys-SW, UI-SW, LogHarvest 2, etc.) already installed on the PC-UI will be transferred with this procedure but other proprietary installed software and data will be erased. • Reinstall software and data installed specially after recovery. ・C:\Production\Data\UI\public\custom\ The data related to the media library and profiles is stored in the following folder. It is recommended to have the user back up this data. C:\Production\Data\UI\public\custom\ 3.Back up the standard software settings file. Copy the three folders [NvmData] and [TonerReplacement] located in <C:\Production\Data\Sys> to an external HDD or similar device. If you do not save [Data], any changes made to the Sys software settings after installation will revert to the default values. If you do not save [NVMData], any changes made to the Sys software settings or fault history after installation will revert to the default values. If you do not save [TonerReplacement], the settings for special color engines not installed on the printer will revert to the default values. (3)Overwrite the previously backed-up folders to the same location. Copy the backed-up [Data] folder to <C:\Production\Data\Download>. Copy the three backed-up folders [NvmData] and [TonerReplacement] to <C:\Production\Data\Sys>.
13		4-362	Change the illustrator	Figure 5 dar418513	Figure 5 j0cx418602
14		5-1	Parts list update		
15		6-5	Corrected description 6.1.1 Product Code Table1 (Change) Table2 (Addition)	Table1 [Product Name] PC-UI Table2 [Product Name] - [Product Code] -	Table1 [Product Name] Printer Operation PC Table2 [Product Name] Banner Feeder Extension Kit [Product Code] BP-PT26
16		6-7	Corrected description 6.1.2 Weight, Machine Size, and Mobility Plate Configuration	[Name] HCS High Capacity Stacker NOTE: Including Dolly 11 kg [Name] High Capacity Stacker Top Tray Extension Kit [Weight (kg)] 0.7 kg or lower [Name] Finisher [Weight (kg)] 0.5 kg or lower	[Name] HCS High Capacity Stacker NOTE: Including Stacker Cart 11kg [Name] High Capacity Stacker Top Tray Extension Kit [Weight (kg)] 6.2 kg or lower [Name] Finisher [Weight (kg)] 1.72 kg or lower
17		6-8	Corrected description 6.1.2 Weight, Machine Size, and Mobility Plate Configuration	<2nd HCF A3> + <HCF A3> + <IOT> + <CDM> + <IP> + <SEM> + <HCS> + <HCS (Chained)> +<TCBM> + <Folder> + <Finisher (Booklet)> + <SBFT> for example	<ASF> + <2nd HCF A3> + <HCF A3> + <IOT> + <CDM> + <IP> + <SEM> + <HCS> + <HCS(Chained)> + <TCBM> + <Folder> + <Finisher (Booklet)> + <SBFT> for example
18		6-9	Corrected description 6.1.3 Installation Space	<2nd HCF A3> + <HCF A3> + <IOT> + <CDM> + <IP> + <SEM> + <HCS> + <HCS (Chained)> + <TCBM> + <Folder> + <Finisher (Booklet)> + <SBFT> for example	<ASF> + <2nd HCF A3> + <HCF A3> + <IOT> + <CDM> + <IP> + <SEM> + <HCS> + <HCS(Chained)> + <TCBM> + <Folder> + <Finisher (Booklet)> + <SBFT> for example
19		6-10	Corrected description 6.1.5 Electrical Specifications/Power Consumption/Exhaust Heat	Power Cable with 50 A capacity	60A circuit is required

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No.	Issue Date	Page	Revised content	Before revision	After revision
20	Oct-2024	6-16	Corrected description 6.1.13 Printable/Print Guaranteed Area	・Maximum printable area: 326.0mm wide x 1192.0mm long	・Maximum printable area: 326.0mm wide x 1190.0mm long
21		6-20	Corrected description 6.1.17 OCT (Offset Catch Tray: Option)	・Paper width for operation: 170.1 mm or more, 330.2 mm or less ・Paper length for operation: 182.1 mm or more, 488.0 mm or less	・Paper width for operation: 98 mm or more, 330.2 mm or less ・Paper length for operation: 148 mm or more, 488.0 mm or less
22		6-21	Change and delete Contents 6.1.18 LCT (Long Catch Tray: Option)	*1: Long paper with a length of 98.0 mm or more and less than 210.0 mm may require Extension Wire of Long Catch Tray to prevent drooping and fall. NOTE: During the installation of LCT, – For IOT Ver. 4.x.x and earlier, select 2 for NVM742-809. – For IOT Ver. 5.x.x and later, NVM742-809 setting is not needed because connections are automatically detected.	*1: Long paper with a length of 148.0 mm or more and less than 1200.0 mm may require Extension Wire of Long Catch Tray to prevent drooping and fall. -delete
23		6-40	Added and corrected the explanation. 6.2.3 Consumables	[Consumables] Staple Cartridge [Remarks] 5000 Staples x 2 sets/Box [Developer] None stated	[Consumables] Staple Cartridge [Remarks] 5000 Staples x 3 sets/Box [Developer] Add Developer
24		6-95	6.3.3 DC135 HFSI List Table 1 6.3.3 DC135 HFSI List	–	**[Chain-Link]** 004-804 **[HFSI Name]** GEAR IBT DRIVE 56T **[Part Name]** IBT Drive Gear (56T) **[PL No.]** PL 6.5 Item 10 **[HFSI Replacement Life (Count Data)]** 550,000[Replacement Interval (A4 Impression)] **[Replacement Interval (A4 Impressions)]** 5000K **[Units]** No. of IBT Belt revo-lutions* **[Sub Module Name]** DRIVE
25		6-96	6.3.3 DC135 HFSI List Table 1 6.3.3 DC135 HFSI List	009-800:PL.5.2 Item 4(CLR) 009-802:PL.5.2 Item 4(GLD) 009-804:PL.5.2 Item 4(GLD) 009-806:PL.5.2 Item 4(SLV) 009-807:PL.5.2 Item 4(SLV) 009-808:PL.5.2 Item 4(Y) 009-809:PL.5.2 Item 4(M) 009-810:PL.5.2 Item 4(C) 009-811:PL.5.2 Item 4(K) Description 「—」	009-800:PL.No.「—」 009-802:PL.No.「—」 009-804:PL.No.「—」 009-806:PL.No.「—」 009-807:PL.No.「—」 009-808:PL.No.「—」 009-809:PL.No.「—」 009-810:PL.No.「—」 009-811:PL.No.「—」 Description 009-800:BP-NV120LA 009-802:BP-NV120GA 009-804:BP-NV120GA 009-806:BP-NV120SA 009-807:BP-NV120SA 009-808:BP-NV120YA 009-809:BP-NV120MA 009-810:BP-NV120CA 009-811:BP-NV120BA

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26	Oct-2024	6-97	6.3.3 DC135 HFSI List Table 1 6.3.3 DC135 HFSI List	009-824:PL.5.2 Item 4(TX) 009-826:PL.5.2 Item 4(PINK) 009-828:PL.5.2 Item 4(PINK) 009-840:PL.5.2 Item 7 009-842:PL.5.2 Item 7 009-844:PL.5.2 Item 7 009-846:PL.5.2 Item 7 009-848:PL.5.2 Item 7 009-850:PL.5.2 Item 7 Description 「ー」	009-824:PL.No.「ー」 009-826:PL.No.「ー」 009-828:PL.No.「ー」 009-840:PL.No.「ー」 009-842:PL.No.「ー」 009-844:PL.No.「ー」 009-846:PL.No.「ー」 009-848:PL.No.「ー」 009-850:PL.No.「ー」 Description 009-824:BP-NV120TA 009-826:BP-NV120PA 009-828:BP-NV120PA 009-840:BP-DU120 009-842:BP-DU120 009-844:BP-DU120 009-846:BP-DU120 009-848:BP-DU120 009-850:BP-DU120
27		6-100	6.3.3 DC135 HFSI List Table 1 6.3.3 DC135 HFSI List	011-800:PL.5.2 Item 4(WHT) 011-816:PL.5.2 Item 4(WHT) Description 「ー」	011-800:PL.No.「ー」 011-816:PL.No.「ー」 Description 011-800:BP-NV120WA 011-816:BP-NV120WA
28		9-59	Corrected description 9.1.1.13 Installation of Main Unit (13 of 14)	ー	24. Connection the devices. A.Connect IOT and PC-UI with Net Cable. B.Connect IOT and Fiery with Printer interface cable. C.Connect PC-UI and Fiery with Net Cable Addition the illustrator
29		9-60 9-61 9-62	Corrected description 9.1.1.14 Installation of Main Unit (14 of 14)	1. [6 Color Type] Install the Toner Cartridge (Y, M, C, K, CLR/GLD/SLV/WHT/TX/PINK). [4 Color Type] Load the Toner Cartridge (Y, M, C, K). 19. Open the IOT-L Front Left Door Assembly and IOT-L Front Right Door Assembly. 20. Pull the guide of the supply port toward you and set the paper funnel. (Figure 8) (1) Remove the Screw. (2) Bring down the Guide. (3) Set the bundled paper funnel on the Joint Pipe. 21. Use the DC955 Automatic Developer Replacement Mode to fill the Developer of the color you want to use. (Figure 9) NOTE: Do not select #2 (Y), #3 (M), #4 (C), #5 (K) in toner selection (1) Select the developer supply feature. (2) Select the toner color of Developer to be supplied. (3) Click the [Execute] button.	1. Open the Dispenser Cover. 19. Open the IOT-L Front Left/Right Door. (PL 19.1) 20. Remove the Developer Inner Cover and the IBT Front Cover. (1) Loosen the Screw (x6). (2) Remove the Developer Inner Cover. (3) Loosen the Screw (x4). (4) Remove the IBT Front Cover. 21..Lower the IBT Lever to lower the IBT Belt. (Figure 2) (1) Bring down the Handle of the Big Module. (2) Lightly push the IBT Lever to rotate the Stopper Plate. (3) Lower the IBT Lever.
30	Jul-2025	Cover		00ZBP1200/S2E	00ZBP1200/S3E
31		5-1	Parts list update		

0 Introduction

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0.2 How to use the Service Manual 3
0.3 Description for Terminology And Symbols 4

0.1 Getting to know this Service Manual

This manual is used as the standard service manual for Digital Full Color Production Printer.

For more information on this product, please refer to the following manuals.

Table 1

No	Option Name	Manual Name
1	Finisher Group	OUTPUT OPTION SERVICE MANUAL
2	HCF A3 & 2nd HCF A3	BP-PT17/PT18 SERVICE MANUAL
3	ASF A3 & Chainned ASF A3	AIR SUCTION FEEDER SERVICE MANUAL

0.2 How to use the Service Manual

This manual describes the standard procedures for the servicing this product. Refer to Chapter 1 Service Call Procedure for efficient and effective servicing during maintenance calls.

For more information on the options, refer to the options manual.

0.2.1 Contents of Manual

This manual is divided into several chapters as described below.

- Chapter 1 Service Call Procedure

  This chapter describes the general work and servicing procedures for the maintenance of this product.
- Chapter 2 Troubleshooting

  This chapter describes the troubleshooting procedures other than image quality troubleshooting for this product.
- Chapter 3 Image Quality Troubleshooting

  This chapter describes the image quality troubleshooting procedures for this product.
- Chapter 4 Disassembly/Assembly and Adjustment

  This chapter describes the disassembly, assembly, adjustment and replacement procedures for components of this product.
- Chapter 5 Parts List

  This chapter contains the spare parts information for this product.
- Chapter 6 General

  This chapter contains the following information.

  6.1 Specifications

  6.2 Tools/ Service Consumables/ Consumables/ Modifications

  6.3 Service Data

  6.4 Service Mode

  6.5 Other Task Procedures
- Chapter 7 Wiring Data

  This chapter contains the information about the Wiring Connector List/Locations, the Wiring Data, the BSD, and the Electrical Component Locations for this machine.
- Chapter 8 Accessories (not yet issued)
- Chapter 9 Installation / Removal

  This chapter contains the installation and removal procedures for this product and the options that are specific to it.

0.3 Description for Terminology And Symbols

The terms and symbols used throughout this manual are explained here.

- The terms and symbols used at the beginning of a text are defined as follows:

Danger

Indicates an imminently hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

Warning

Indicates a potentially hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

CAUTION

Indicates a potentially hazardous situation, such as injury or property damage if operators do not handle the machine correctly by disregarding the statement.

Instruction: Used to alert you to a procedure which, if not strictly observed, could result in damage to the machine or equipment.

NOTE: *Used when work procedures and rules are emphasized.*

NOTE: *Used when other explanations are given.*

Purpose

Used to describe the purposes of Adjustment and Troubleshooting.

REP: Indicates the disassembly/assembly procedure for reference.

ADJ: Indicates the adjustment procedure for reference.

PL: Indicates the parts list for reference.

Terminology

Table 1 Terminology

Terminology	Description
Assy	Means Assembly.
WSD	WSD is the abbreviation for Web Services on Devices.
XPS	XPS is the abbreviation for XML Paper Specification.

Safety Critical Components (SCC)

In relation to safety management, etc of parts designated as safety critical components, it must be performed in accordance with the rules relating to safety components stipulated by us.

As to replacement of any component designated SCC, the complete component unit must be replaced. It must never be disassembled or no individual internal parts of it must be replaced. However, even the parts specified as SCC can be disassembled if they include spare parts at the lower level.

Installation of any part other than the ones designated by our company shall be strictly prohibited because it cannot be guaranteed in quality and safety.

Important Information Stored Component (ISC)

This component stores all the important customer information that is input after the installation. When performing replacement, follow the procedures in 'Chapter 4 Disassembly/Assembly Adjustment' to replace/discard. Make absolutely sure that no customer information gets leaked outside.

Chapter 1 Service Call Procedure

1 Service Call Procedure

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1.2 Service Call Procedure..... 7
1.3 Detailed contents of the Servicing Call..... 7
1.4 TRIM..... 8
1.5 Periodical Replaced Parts/Consumables List 11

1.1 Before Starting the Servicing

1.1.1 Safety

To prevent any accident that may occur during a maintenance service, any warning or any caution regarding the servicing must be strictly observed. Do not perform any hazardous operation.

1. Power Supply

   To prevent electrical shocks, burns, or injury, etc., be sure to switch OFF the machine and disconnect the plug before starting the maintenance service.

   If the machine has to be switched ON, such as when measuring the voltage, take extra care not to get an electrical shock.

2. Laser Radiation

   Never insert any foreign substance that has a high specular feature, such as tools like drivers or mirrors, into the opening of the Charge Corotron or window in order not to be exposed to invisible laser radiation.

   For your safety, when removing the Toner Cartridge Unit, do not look straight at the opening of the Charge Corotron or the opening of the window regardless if the power is turned OFF.

3. Drive Area

   Never inspect, clear or lubricate the drive area such as chain belts, chain wheel or gears during the machine operation.

4. Heavy Parts

   Position your hip lower when removing or installing heavy parts as shown below.

   Under C11- EHS-702 electromechanical safety standards, the upper limit value when one person holds up the product from the floor to his/her chest level is 15.8 kg or lighter.

Table 1

No	Name	Weight	Remarks
1	Fusing Unit	About 53 kg or lighter	In principle, 4 persons for the task. (However, within REP 7.1.1, weight can be reduced by removing the parts, and task can be carried out by 2 persons.)
2	Tray 1/2 Assembly	About 25 kg or lighter	In principle, 2 persons for the task.
3	IBT Drawer Assembly	About 60 kg or lighter	In principle, 4 persons for the task. There is a caution label at the IBT Drawer Assembly for lifting by 4 persons.
4	Aligner Assembly	About 15.95 kg or lighter	In principle, 2 persons for the task. (However, within REP 15.7.1, weight can be reduced by removing the parts, and task can be carried out by 1 person.)
5	Exit Drawer Unit	About 18 kg or lighter	In principle, 2 persons for the task.
6	Big Module Drawer	About 21 kg or lighter	In principle, 2 persons for the task.
7	IBT Belt Assembly	About 30 kg or lighter	In principle, 2 persons for the task.

   Even when removing or installing heavy parts other than the above mentioned, take extra care of your working posture to prevent a possible backache.

5. Safety Device

   See that safety devices for preventing mechanical accidents, such as fuses, circuit breakers, interlock switches, etc., and those for protecting customers from injury, such as panels and covers, function properly.

   Modifications that hinder the function of any safety devices are strictly prohibited.

6. Installing and Removing Parts

   The edge of parts and covers may be sharp, take care not to touch them. Be careful not to touch those parts, and wipe OFF any oil that may have adhered to your fingers or hands before servicing.

   When removing parts or cables, do not pull them out by force but remove them slowly.

7. Lithium battery (Lithium-metal battery)

   Never replace the lithium battery by itself.

   - The lithium battery may produce heat, blow out, or catch fire if the terminal comes in contact with the other metal and short-circuits. If the battery alone is to be collected, be sure to cover the terminal with an adhesive insulating tape, etc.
   - If the lithium battery is attached on the PWB or other part, put it in the packing materials (bag or box) for the part to be replaced for collection.

8. Specified Tools

   Follow the instruction when a tool is specified.

9. Cleaning the Toner/Developer

   As the toner can be explosive, sweep or brush the spilled toner into a container for collecting the sweepings.

   To clean away the remaining toner using a vacuum cleaner, always use a standard vacuum cleaner that is toner-tolerant. Never use the customer's vacuum cleaner.

   Do the same when cleaning the Developer because it also contains some toner.

10. Organic Solvents

    When using an organic solvent such as the Drum Cleaner or Machine Cleaner, pay attention to the following:

    - Ensure good ventilation in the room to prevent too much inhalation of solvent fumes.
    - Do not use heated solvent.
    - Keep it away from fire.
    - Wash your hands thoroughly after use.

11. Things to note when pulling out the Big Module

    Do not pull out the Big Module if the power supply to the machine had been cutoff in the middle of an operation (Power OFF state) due to power outage or accidentally unplugged socket.

Turn ON the power before accessing the Big Module.

12. No application software other than this product can be installed on the PC-UI.
    When you transfer the tool on the PC-UI during log collection, etc., be sure to delete the Tool afterwards. Also, delete the logs which are collected. If you leave them when you go back to the office, there is a possibility that they may be used by the customer, causing unexpected problem.

13. Other Safety Precautions
    For safety, you should also pay attention to precautions other than the above items 1 to 12. Follow the instructions below to ensure greater safety during servicing.

1.1.2 Things to Take Note When Handling Customer Information

1. Handling of customer's electronic information - printouts, log files, etc.
   Before you bring back any samples for the purpose of investigation/analysis, always obtain permission from the customer. Make sure to assure them that the data will not be used for any other purpose. When requesting for a retrieval application from the customer, use a letterhead that has been specified by the customer after obtaining their agreement.

2. Handling of a PWB/HDD, etc. that contains customer information.
   Data such as URL that are registered in the customer's machine are all important customer information. These types of information are stored in the PWB/HDD, etc. within the machine. Take extra care when handling them.
   (1) In case of replacements, transfer the data to the new PWB/HDD and make sure that all data in the old components are thoroughly erased before disposing them. Make sure that no important customer information gets leaked. (For details, refer to the preface in Chapter 4 and 5)
   (2) If a component was replaced and it was not found to be the cause of the malfunction, return it to the machine it came from. (For components that were temporarily installed/removed for troubleshooting, etc. clear the data using Diag, etc.)
   (3) When unable to electrically erase the data in the Hard Disk and the customer has requested for it, destroy the Hard Disk (charges applies).

3. Security related NVM values that were changed during maintenance.
   If any security related NVM values were set for test purposes, make sure you return them to their original values after the test.

4. When connecting our company machine to the customer's network during maintenance, make sure that you have gone through the person-in-charge to obtain permission from the customer's systems administrator (or person-in-charge) before proceeding.

5. Other things to take note when handling customer data
   When handling customer data, you should also pay attention to precautions other than the above items 1 to 4.
   Ensure that customer data do not get leaked out when servicing.

1.1.3 Other Precautions

Pay attention to the following when performing maintenance service to avoid wrong or redundant servicing:

1. Reference Materials

   Before performing maintenance servicing, read all relevant technical materials to make a systematic approach.
2. Disassembling

   Make sure to check the assembled condition before removing parts or disassembling the machine.
3. Installation and Adjustment

   After the installation or adjustment is complete, check that no parts or tools are left inside or on the assemblies before using the machine.
4. Notes for use of the Component Control

   Take note that the following Component Controls have some restrictions on use.
   - Do not use except when there is no toner in the toner supply path due to Dispense Motor, Cartridge Motor installation work, Toner Low Sensor failure, etc. (Color balance deviation, occurrence of toner jam)
   - Drum Motor

     Do not use for 1 minute or more. (Concern about blade curl occurrence)
   - TC discharge

     Do not allow TC discharge while tracking Drum ERU to Drum. (Occurrence of band-like density unevenness)
5. Handling of replaced parts/consumables

   Make sure that the replaced parts or consumables as well as their packaging materials are collected back to the Service Center.
   - Drum Cleaner

     WARNING

     Never discard the Drum Cleaner into a fire. Always keep it away from open flames to prevent it from catching and causing a fire. Always dispose of the Drum Cleaner after it is completely used up. For recyclable parts, fill the necessary items in the "U-TAG" and perform collection.
6. General Precautions
   - Take care not to disturb the customer's daily work.
   - Place a drip cloth or paper on the customer's floor when working on the machine because the toner may dirty the floor and it is difficult to clean.
   - When discarding litter, consumables, parts and etc., put them in a plastic or paper bag and get the customer's agreement to do so.
   - Record clearly the service details and the consumables and parts replaced at visit in the Machine Service Log.

1.1.4 Types of Power Supply and Precautions

1. Except for single-phase 3-wire, supply power from the phase including Neutral.

   Reason: Single-phase 3-wire line is ground voltage of 100V whereas 3-phase 3-wire line is 200V, hence, it is dangerous to use 2 lines.

2. Neutral should not be substituted for the Earth circuit. Neutral belongs to another system.

3. About necessity of Earth

   This product is obliged to implement Type 3 grounding.

   Types of grounding include Type 1 grounding, Type 2 grounding, and Type 3 grounding, which is the least standard among them and is specified as [ground resistance of 100 ohm or less].

4. About method of distinguishing the Earth status

   A grounding resistance measuring device is necessary to reliably investigate the ground resistance, but in the field, it is examined according to the following method. (Another name for Line described here is Hot side)

   In the case of single-phase 2 wire + ground (Line-Neutral, +Earth)

   a. Measure voltage between Line-Neutral.

   b. Measure between Line-Earth, and the closer it is to the voltage between Line-Neutral, the better.

   c. Measure between Neutral-Earth, and the better if it is zero potential. (5V or less is fine.)

   In the case of 200V from single-phase 3 wire + ground (Line-Neutral, +Earth)

   a. Measure voltage between Line-Line.

   b. Measure between Line-Earth, and the closer it is to half of the voltage between each Line-Line, the better.

   - Single-phase 2-wire

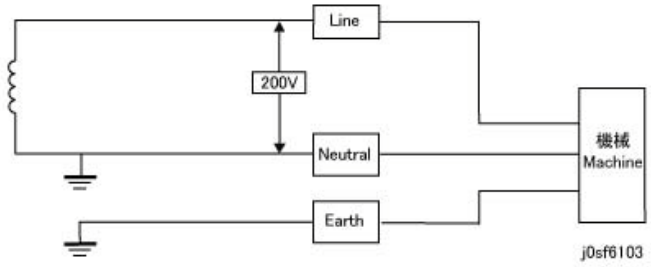


Figure 1 j0sf6103

- Single-phase 3-wire

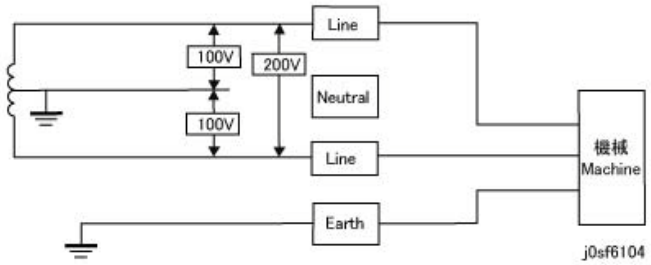


Figure 2 j0sf6104

- Single-phase 3-wire delta connection

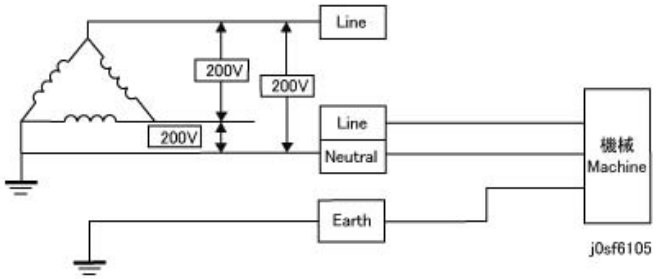


Figure 3 j0sf6105

5. About grounding

   No engineer can perform simple construction in regards to electric construction.

   Based on the Electric Construction Law, only those qualified as electrical workers are allowed to undertake construction. No water pipe grounding, gas pipe grounding, window frame grounding, etc. should be performed at all.

   Discuss well with the customer's Administrator on the need for grounding for Digital Full Color Production Printer. (In principle, grounding work should be completed with consent from customers before starting rental agreement.)

6. About the Power Outlet

   Connect the power cord to an electric outlet whose over current protection is 60A.

7. About extension of power cord

   - If the power cord is not long enough, use an intermediate connector. Extension by soldering is a violation. The intermediate connector and cable must be 60A 250V UL certified.

8. About the power plug

   - Round Terminal

   The recommended ring terminal specification is to use one that is compatible with wire size 4 AWG.
   The recommended terminal model number is R22-6. Minimum rating is 200V, 60A.
   Electrical work must be carried out by an electrical contractor.

   Cable Specification:

   - G/Y Wire: Earth
   - BLK_N Marking Wire: Neutral
   - BLK Wire: Line

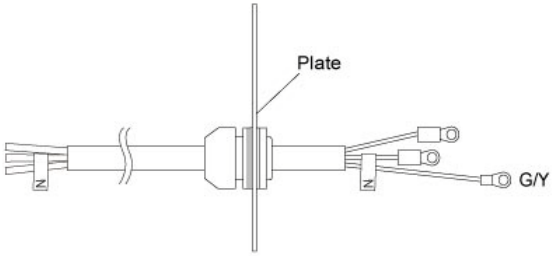


Figure 4 j0kol100102

9. Power Supply Connection

   This product is a "permanent connection type". Install in electrical equipment with "All-pole DISCONNECT DEVICE".

1.2 Service Call Procedure

1.2.1 Initial Actions

1. Ask the operator(s) about the machine condition.
2. Record the billing meter readings.
3. Inspect any error printing to grasp the machine status.
4. Check the Service Log.

1.2.2 Actions to Take During UM

1. If a fault code is displayed for the problem, refer to the appropriate FIP and fix the problem.
2. Check the image quality.

   Output a few sheets of the following test sample, and check the image quality.
   - DC612: Procon PG/Highlight Adjustment
3. Check the no. of feeds from each Tray using DC135 HFSI Counter, then check the no. of misfeeds of each Tray using DC118 Jam Counter, and clean or replace the Feed Roll, Nudger Roll and Retard Roll as required.
4. Repair all the secondary problem.
5. Perform TRIM Service.

1.2.3 Actions to Take During SM

1. Check the image quality.

   Output a few sheets of the following test sample, and check the image quality.
   - DC612: Procon PG/Highlight Adjustment
2. Check the no. of feeds from each Tray using DC135 HFSI Counter, then check the no. of misfeeds of each Tray using DC118 Jam Counter, and clean or replace the Feed Roll as required.
3. If there are no applicable items, troubleshoot by referring to the BSD.
4. Perform TRIM Service.

1.2.4 Final Actions

1. Check overall operation/features.
2. Check the machine exterior and consumables.
3. Train the operator as required.
4. Complete the Service Log and Service Report.
5. Keep the print sample with the Service Log.

1.3 Detailed contents of the Servicing Call

1.3.1 Initial Actions

1. Ask the operator(s) about the machine condition.
   - How often and where do paper jams have been occurring recently
   - How is the image quality
2. Record the Printer Meter.
3. Inspect the printing to grasp the machine status.
4. Check the print samples from previous service calls and the Service Log.

1.3.2 Checking Reproducibility of Problem

1. Check the problem status by carrying out 2.2.1 Level 1 Troubleshooting in "Chapter 2 Troubleshooting".
2. Perform the appropriate items in the Level 2 Troubleshooting in "Chapter 2 Troubleshooting" or Chapter 3 Image Quality Troubleshooting.
3. If there are no applicable items, troubleshoot by referring to "Chapter 7 BSD".

1.3.3 Checking Image Quality

1. Output a few sheets of the following test sample, and check the image quality.
   - DC612: Procon PG/Highlight Adjustment

   [Image Check Items]
   - Color Balance
   - Color Shift
   - Density (Color) unevenness
   - Low density reproducibility failure
   - Others
2. If there is a problem in image quality, carry out the applicable Item in "Chapter 3 Image Quality Troubleshooting".

1.3.4 TRIM Servicing Procedure

Perform TRIM servicing during a SM/UM to maintain the machine performance.

1. Follow the TRIM checklist to perform the required TRIM items. The following items must always be performed during a service call.
   - Check the Waste Toner Container
   - Check remaining amount of Fusing Oil
   - Check remaining amount of Fusing Cleaning Web
2. Check for parts that require periodical cleaning/replacement (consumables, parts) by referring to the Periodic Replacement Parts/Consumables List and DC135 HFSI Screen, and clean them if necessary.

   After replacement, always clear the relevant counters on the DC135 HFSI screen.

1.4 TRIM

1.4.1 TRIM Check List

V: Perform checking. Clean, replace or supply if necessary.

O: Always perform checking and cleaning.

Table 1

Servicing Items	OK	Servicing Points
Check overall operation before servicing	O	1. Record DC135 HFSI/DC118 Jam/DC120 Counter and the meter during visit in the Service Log. 2. Select [Paper: A3], [Halftone 3C 20%] and [Halftone K 20%] in [DC612 Test Pattern Print], and print. Confirm each output sample, and check density unevenness/blank areas/drum scratches/IBT belt scratches/paper feed (each tray). etc. 3. Collect samples in FS/SS direction, and check the density.
Check around the Drum/ EPG Module	V	1. Result of checking print output, • If K is NG, check CC Assy/Drum Assy, etc., and perform auto cleaning or replacement. • If Y/M/C/CT is NG, check the BCR/BCR Cleaner Roll or replace the Drum Assy.
Check around the Transfer Belt	V	1. Result of checking print output, • In the case of NG, check scratches/dirt on the IBT Belt surface, wear/dent on 1st BTR, etc., and perform cleaning and replacement. • When much grease adheres to the IBT Belt surface, output with Cin 60% (Halftone) and perform replacement. 2. Check the 2nd BTR Unit for contamination. • 2nd BTR Cleaning Precautions *Take note of adhesion of grease, etc. to the 2nd BTR surface and wipe it with a clean cloth. 3. Check that there is no toner leakage/clogging in the IBT Belt Cleaner Collector. 4. Check for dirt on the surface of the Upper Chute Assembly (PL 6.3 Item 2) before IBT Belt Assembly Secondary Transfer, and Belt Guard Assembly (PL 6.3 Item 3) after Secondary Transfer, and clean them if necessary.

Table 1

Servicing Items	OK	Servicing Points
Check paper feed/fusing	V	1. Check result of [DC118 JAM Counter]/[DC122 Shutdown History] • In the case of NG, check the paper transport path, the corresponding Paper Path Sensor, and clean and replace the Feed/Retard/Nudger Roll of the Feeder Section of each Tray. • Cleaning Precautions *When dirt/paper dust, etc., adheres to each ROLL, always clean each ROLL with a damp cloth. 2. Check adhesion of paper dust, etc. in the Aligner section and clean it as necessary. For Pad Bracket Assembly PAD cleaning, perform it for every 1000K. Refer to the following item 1.4.2 for details on PAD cleaning. 3. Check the Transport Belt (PL 7.5 Item15) of V-Tra 4 Assembly for contamination, and clean it as necessary. ***NOTE:*** *Removal of Idler Shaft occurs when replacing Transport Belt (HFSI: 010-811). (Refer to REP 7.5.1 for details.)* *At that time, be careful not to let the dry grease and conductive grease, applied at the time of factory shipment as a countermeasure against abnormal noise of the V-Tra 4 Assembly, adhere to the Transport Belt. In particular, pay attention to the conductive grease. For details of grease application locations, see next section 1.4.3.*
Check Fusing Web	V	Check the remaining amount of Web and replace it as necessary.
Check ILS WR Roll Assembly WR Roll	V	1. Check result of [DC120 Fail Counter]/[DC122 Shutdown History] • If ILS-related fault has occurred, wipe the WR Roll with a dry cloth.
ILS Lamp Assembly Window	V	1. Check result of [DC120 Fail Counter]/[DC122 Shutdown History] • If ILS-related fault has occurred, wipe both sides of the Window with a dry cloth. For heavy cleaning of the outer side, use a lens cleaner and wipe with a silicon cloth.
Check the Waste Toner Container	V	1. Check the Waste Toner Container, and replace as required.
Safety Check	O	1. Check the connection of the power plug (200V&100V) and any damage to the cord and plug.
Check the machine overall operation after performing task	O	1. Collect sample of [Paper: A3], [Halftone 3C 20%] and [Halftone K 20%] in [DC612 Test Pattern Print], and check there is no problem in image quality. 2. Clear the corresponding HFSI counter after part replacement. 3. Clear [DC118 Jam Counter]/[DC122 Shutdown History]. 4. After checking that there is no problem with paper feeding, noise, meter count up, fill in the Service Log.

1.4.2 Trim (Aligner)_Pad Bracket Assembly PAD Cleaning Procedures

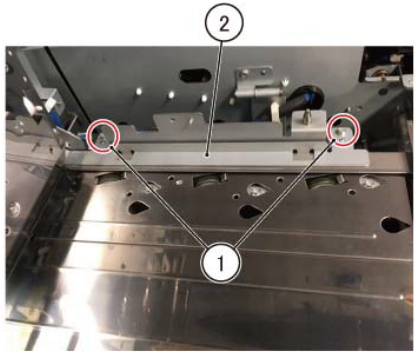
WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open Aligner Assembly Aligner Upper Chute. (Figure 1)
   (1) Pull out the Big Module.
   (2) Lift Lever [3a], and open the Aligner Upper Chute.

Figure 1 j0kol100001

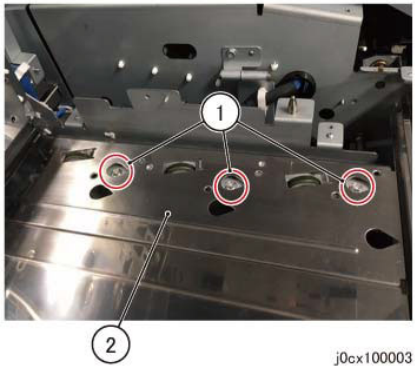
2. Remove the Guide Support. (Figure 2)
   (1) Remove the screw (x2).
   (2) Remove the Guide Support.



j0cx100002

Figure 2 j0cx100002

3. Remove the Aligner Lower Rear Chute. (Figure 3)
   (1) Remove the screw (x3).
   (2) Remove the Aligner Lower Rear Chute.

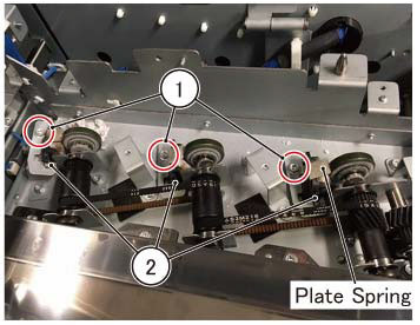


j0cx100003

Figure 3 j0cx100003

4. Remove the Pad Bracket Assembly. (Figure 4)
   (1) Remove the screw (x3).
   (2) Remove the Pad Bracket Assembly (x3).

   NOTE: *Take note that the Plate Spring (part intended for scraping OFF paper dust on the surface of Aligner Roll or the coating transferred from coated paper) easily bends when removing the Pad Bracket Assembly.*



j0cx100004

Figure 4 j0cx100004

5. Remove the paper dust adhering to the Pad Bracket Assembly PAD and Plate Spring. (Figure 5)
   (1) Remove the Bracket. (To make the job easier)
   (2) Paper dust accumulating on PAD and Plate Spring (before cleaning)
   (3) After paper dust is removed from PAD and Plate Spring (after cleaning)

   NOTE: *To clean the PAD, after roughly clearing the pieces of accumulated paper dust by hand, clear the fine paper dust completely with a minus mini-driver.*

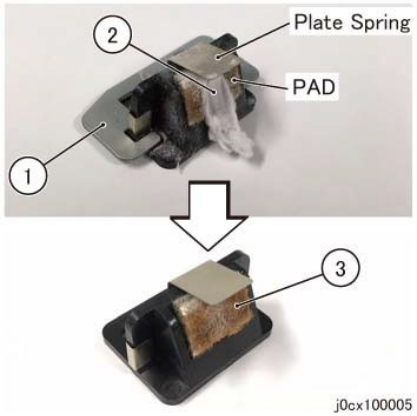


Figure 5 j0cx100005

6. To install, carry out removal Steps 1 to 5 in reverse order.

   NOTE: *Take note that there is no bending of the Plate Spring when installing the Pad Bracket Assembly, and that the tip of the Plate Spring comes into contact with the Aligner Roll surface. (Refer to* REP 15.12.1 *for details.)*

7. After performing PAD cleaning, clear the following HFSI (DC 135) counter.
   Trim (Aligner): "Chain Link: 008-832"

1.4.3 Grease application locations of V-Tra 4 Assembly

1. When shipped from the factory, as a countermeasure against abnormal noise of the V-Tra 4 Assembly, grease is applied to the following 2 locations which are the abnormal sound-generating parts. (Figure 6)
   (1) Apply conductive grease to the ground plate that rubs against the Rear end of the Idler Shaft.
   (2) Apply dry grease (Sankol) to the Idler Shaft which rubs against the resin Frame.

   NOTE: *Removal of Idler Shaft occurs when replacing Transport Belt (HFSI: 010-811). At that time, be careful that the applied grease (especially conductive grease) does not adhere to the Transport Belt. If conductive grease adhering to the Transport Belt adheres to paper or other parts (fusing/ cooling/Dup pass/transfer etc.), DEFECT (fusing defects/print contamination/ ransfer failure etc.) may occur.*

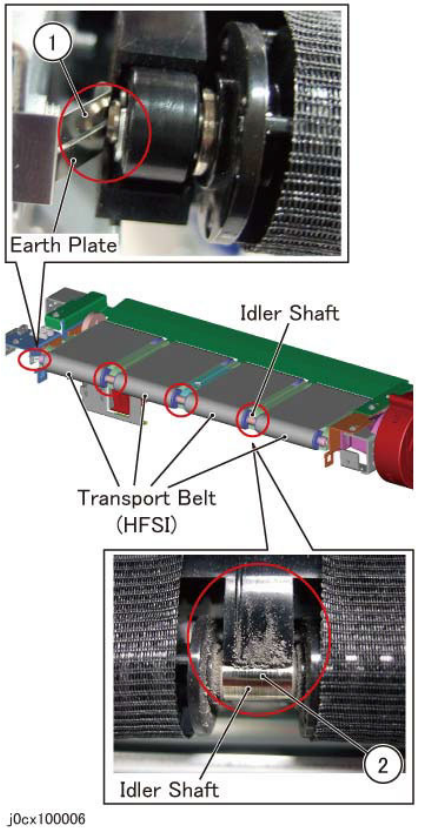


Figure 6 j0cx100006

1.5 Periodical Replaced Parts/Consumables List

Check the consumables and the parts that require periodical cleaning/replacement for the number of copies, the number of revolution of the Drum/IBT Belt, and the number of field sheets when performing TRIM. Clean or replace them if necessary. The history can be checked in the DC135 HFSI of Diag. mode.

NOTE:*Refer to Chapter 6 "6.3.3 DC135 HFSI List".*

For the items that cannot be checked in HFSI, clean or replace them according to the replacement intervals (standard CV).

- Consumables

  CAUTION

  Do not place the drawing materials such as toner, developer, and drum in the car for long periods of time.

  NOTE:

  – *The matrix of the total counter and periodic replacement is described below after the table.*

  – *[Replacement interval (A4 Impression)] condition: FC ratio: 100%, A4 Job Size: 250, Area coverage: Each color 7.5%.*

  NOTE:

  **1: When white toner is used, the replacement interval is changed because the HFSI count up value is changed and used.*

IOT

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
1	DRIVE	004-800	DRIVE ASSY-PR #1	DRIVE ASSY-DRUM A	PL 3.1 Item 1	1	10000000	10000K	#1 Number of Drum rotations	
2	DRIVE	004-801	DRIVE ASSY-PR #6	DRIVE ASSY-DRUM A	PL 3.1 Item 1	1	10000000	10000K	#6 Number of Drum rotations	
3	DRIVE	004-802	DRIVE ASSY-PR #2, 3, 4	DRIVE ASSY-DRUM A	PL 3.1 Item 1	3	10000000	10000K	#2, 3, 4 Number of Drum rotations	
4	DRIVE	004-803	DRIVE ASSY-PR #5	DRIVE ASSY-DRUM A	PL 3.1 Item 1	1	10000000	10000K	#5 Number of Drum rotations	
5	DRIVE	004-804	GEAR IBT DRIVE 56T	IBT Drive Gear (56T)	PL 6.5 Item 10	1	550000	5000K	No. of IBT Belt revolutions*	
6	NOHAD	004-810	Suction Filter #1	FILTER ASSY-MAIN	PL 4.11 Item 9 (#1)	1	500000	500K	Total Impressions	
7	NOHAD	004-811	Suction Filter #6	FILTER ASSY-MAIN	PL 4.10 Item 5 (#6)	1	500000	500K	Total Impressions	
8	NOHAD	004-812	Suction Filter #2, 3, 4	FILTER ASSY-MAIN	• PL 4.11 Item 9 (#2) • PL 4.10 Item 5 (#3, #4)	3	500000	500K	Total Impressions	
9	NOHAD	004-813	Suction Filter #5	FILTER ASSY-MAIN	PL 4.10 Item 5 (#5)	1	500000	500K	Total Impressions	
10	NOHAD	004-816	CC Dust Filter #1	FILTER ASSY-CC DUST	PL 4.4 Item 6	1	2000000	2000K	Total Impressions	
11	NOHAD	004-817	CC Dust Filter #6	FILTER ASSY-CC DUST	PL 4.4 Item 6	1	2000000	2000K	Total Impressions	
12	NOHAD	004-818	CC Dust Filter #2, 3, 4	FILTER ASSY-CC DUST	PL 4.4 Item 6	3	2000000	2000K	Total Impressions	
13	NOHAD	004-819	CC Dust Filter #5	FILTER ASSY-CC DUST	PL 4.4 Item 6	1	2000000	2000K	Total Impressions	
14	NOHAD	004-820	VOC Filter	FILTER-VOC UPPER	PL 19.9 Item 13	2	800000	800K	Total Impressions	
15	PH (Feeder)	007-800	Feed/Retard/Nudger Roll (#1 Tray)	ROLL ASSY NUD ROLL ASSY-FEED ROLL ASSY-RETARD	• PL 10.7 Item 14 • PL 10.7 Item 16 • PL 10.10 Item 6	1 1 1	500000	500K Feed	#1 Tray Feed Count	
16	PH (Feeder)	007-801	Feed/Retard/Nudger Roll (#2 Tray)	ROLL ASSY NUD ROLL ASSY-FEED ROLL ASSY-RETARD	• PL 10.7 Item 14 • PL 10.7 Item 16 • PL 10.10 Item 6	1 1 1	500000	500K Feed	#2 Tray Feed Count	
17	PH (Feeder)	007-803	#1 Feeder Unit	FEEDER ASSY-SMH	PL 10.5 Item 1	1	3000000	3000K Feed	#1 Tray Total Feed Count	
18	PH (Feeder)	007-804	#2 Feeder Unit	FEEDER ASSY-SMH	PL 10.5 Item 1	1	3000000	3000K Feed	#2 Tray Total Feed Count	
19	PH (Feeder)	007-806	#1 T/A Roll	ROLL ASSY-TA	PL 10.8 Item 9	1	1500000	1500K Feed	T/A Roll #1 Feed Count	
20	PH (Feeder)	007-807	#2 T/A Roll	ROLL ASSY-TA	PL 10.8 Item 9	1	1500000	1500K Feed	T/A Roll #2 Feed Count	

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
21	PH (ALIGNER/ REG)	008-821	ALIGNER ROLL CROSSED	• ROLL ASSY-CROSSED • BRACKET ASSY-PAD	• PL 15.12 Item 5 • PL 15.12 Item 3	3 3	3000000	3000K	Total Impressions	
22	PH (ALIGNER/ REG)	008-830	REG ROLL	• ROLLER ASSY-REGI DRIVE • ROLLER ASSY-REGI PINCH • GEAR-Z15 47 M0.5	• PL 15.13 Item 1 • PL 15.13 Item 26 • PL 15.14 Item 9	1 1 1	3200000	3200K	TOTAL Regi COUNT	
23	V-Tra	008-840	V-Tra #1 Belt	BELT-TRANSPORT	PL 6.22 Item 9	4	3000000	3000K	Total Impressions	
24	V-Tra	008-841	V-Tra #2 Belt	BELT-TRANSPORT	PL 6.22 Item 9	4	3000000	3000K	Total Impressions	
25	V-Tra	008-842	V-Tra #3 Belt	BELT-TRANSPORT	PL 6.22 Item 9	4	3000000	3000K	Total Impressions	
26	V-Tra	008-843	V-Tra Brush	BRUSH ASSY-BELT	PL 6.22 Item 10	3	1000000	1000K	Total Impressions	
27	Developer	009-800	DEVELOPER CT #1	KIT SP DEV CLR DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120LA
28	Developer	009-802	DEVELOPER GLD #1	KIT SP DEV GLD DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120GA
29	Developer	009-804	DEVELOPER GLD #6	KIT SP DEV GLD DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120GA
30	Developer	009-806	DEVELOPER SLV #6	KIT SP DEV SLV DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120SA
31	Developer	009-807	DEVELOPER SLV #1	KIT SP DEV SLV DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120SA
32	Developer	009-808	DEVELOPER #2 (Y)	KIT SP DEV Y DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120YA
33	Developer	009-809	DEVELOPER #3 (M)	KIT SP DEV M DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120MA
34	Developer	009-810	DEVELOPER #4 (C)	KIT SP DEV C DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120CA
35	Developer	009-811	DEVELOPER #5 (K)	KIT SP DEV K DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120BA
36	Developer	009-812	DEVE Housing CT #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (CLR)	1	4000000	4000K	Deve Motor Drive Time	
37	Developer	009-814	DEVE Housing GLD #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (GLD)	1	4000000	4000K	Deve Motor Drive Time	
38	Developer	009-816	DEVE Housing GLD #6	KIT DEVE SP SC NB	PL 5.8 Item 1 (GLD)	1	4000000	4000K	Deve Motor Drive Time	
39	Developer	009-818	DEVE Housing SLV #6	KIT DEVE SP SC NB	PL 5.8 Item 1 (SLV)	1	4000000	4000K	Deve Motor Drive Time	
40	Developer	009-819	DEVE Housing SLV #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (SLV)	1	4000000	4000K	Deve Motor Drive Time	

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
41	Developer	009-820	DEVE Housing #2 (Y)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (Y)	1	4000000	4000K	Deve Motor Drive Time	
42	Developer	009-821	DEVE Housing #3 (M)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (M)	1	4000000	4000K	Deve Motor Drive Time	
43	Developer	009-822	DEVE Housing #4 (C)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (C)	1	4000000	4000K	Deve Motor Drive Time	
44	Developer	009-823	DEVE Housing #5 (K)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (K)	1	4000000	4000K	Deve Motor Drive Time	
45	Developer	009-824	DEVELOPER TX #1	KIT SP DEV TX DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120TA
46	Developer	009-825	DEVE Housing TX #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (TX)	1	4000000	4000K	Deve Motor Drive Time	
47	Developer	009-826	DEVELOPER P #1	KIT SP DEV PINK DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120PA
48	Developer	009-827	DEVE Housing P #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (P)	1	4000000	4000K	Deve Motor Drive Time	
49	Developer	009-828	DEVELOPER P #6	KIT SP DEV PINK DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120PA
50	Developer	009-829	DEVE Housing P #6	KIT DEVE SP SC NB	PL 5.8 Item 1 (P)	1	4000000	4000K	Deve Motor Drive Time	
51	Developer	009-836	DEVE Filter CT #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (CLR)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where CLR#1 is installed is converted to PV per A4 and accumulated.
52	Developer	009-838	DEVE Filter GLD #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (GLD)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where GLD#1 is installed is converted to PV per A4 and accumulated.
53	Developer	009-839	DEVE Filter SLV #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (SLV)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where SLV#1 is installed is converted to PV per A4 and accumulated.
54	Developer	009-891	DEVE Filter GLD #6	KIT DEVE FILTER NB	PL 5.8 Item 30 (GLD)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where GLD#6 is installed is converted to PV per A4 and accumulated.
55	Developer	009-892	DEVE Filter SLV #6	KIT DEVE FILTER NB	PL 5.8 Item 30 (SLV)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where SLV#6 is installed is converted to PV per A4 and accumulated.

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
56	Developer	009-893	DEVE Filter TX #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (TX)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where TX #1 is installed is converted to PV per A4 and accumulated.
57	Developer	009-894	DEVE Filter P #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (P)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where P #1 is installed is converted to PV per A4 and accumulated.
58	Developer	009-895	DEVE Filter #2 (Y)	KIT DEVE FILTER NB	PL 5.8 Item 30 (Y)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where Y (#2) is installed is converted to PV per A4 and accumulated.
59	Developer	009-896	DEVE Filter #3 (M)	KIT DEVE FILTER NB	PL 5.8 Item 30 (M)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where M (#3) is installed is converted to PV per A4 and accumulated.
60	Developer	009-897	DEVE Filter #4 (C)	KIT DEVE FILTER NB	PL 5.8 Item 30 (C)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where C (#4) is installed is converted to PV per A4 and accumulated.
61	Developer	009-898	DEVE Filter #5 (K)	KIT DEVE FILTER NB	PL 5.8 Item 30 (K)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where K (#5) is installed is converted to PV per A4 and accumulated.
62	Developer	009-899	DEVE Filter P #6	KIT DEVE FILTER NB	PL 5.8 Item 30 (P)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where P #6 is installed is converted to PV per A4 and accumulated.
63	Developer	011-800	Developer SP 1(WWW) #1	KIT SP DEV WHT DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120WA
64	Developer	011-816	Developer SP 1(WWW) #6	KIT SP DEV WHT DW	-	1	4000000	4000K	Deve Motor Drive Time	BP-NV120WA
65	Developer	011-832	Developer Housing SP1(WWW) #1	KIT DEVE SP W NB	PL 5.8 Item1 (WHT)	1	4000000	4000K	Deve Motor Drive Time	
66	Developer	011-848	Developer Housing SP1(WWW) #6	KIT DEVE SP W NB	PL 5.8 Item1 (WHT)	1	4000000	4000K	Deve Motor Drive Time	
67	Developer	011-864	Developer Filter SP 1(WWW) #1	KIT DEVE FILTER NB	PL 5.8 Item30 (WHT)	1	1200000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where WHT#1 is installed is converted to PV per A4 and accumulated.
68	Developer	011-880	Developer Filter SP 1(WWW) #6	KIT DEVE FILTER NB	PL 5.8 Item30 (WHT)	1	1200000	1200K	Deve Motor Drive Time	
69	EPG/CLN	009-840	Drum Uint PV #1	KIT DRUM DW	-	1	1200000	1200K	Total Impressions	BP-DU120

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
70	EPG/CLN	009-842	Drum Unit PV #2	KIT DRUM DW	-	1	1200000	1200K	Total Impressions	BP-DU120
71	EPG/CLN	009-844	Drum Unit PV #3	KIT DRUM DW	-	1	1200000	1200K	Total Impressions	BP-DU120
72	EPG/CLN	009-846	Drum Unit PV #4	KIT DRUM DW	-	1	1200000	1200K	Total Impressions	BP-DU120
73	EPG/CLN	009-848	Drum Unit PV #5	KIT DRUM DW	-	1	1200000	1200K	Total Impressions	BP-DU120
74	EPG/CLN	009-850	Drum Unit PV #6	KIT DRUM DW	-	1	1200000	1200K	Total Impressions	BP-DU120
75	Xfer	009-870	2nd BTB Unit (IMPS)	BELT ASSY-2ND,BTB,C2,LOW	PL 6.20 Item 4	1	720000	720K	Total Impressions	
76	Xfer	009-872	Belt Cleaner Unit (IMPS)	CLEANER ASSY-HIGH,C2	PL 6.2 Item 10	1	720000	720K	Total Impressions	
77	Xfer	009-874	1st BTR #1	ROLLER ASSY 1ST	PL 6.7 Item 1	1	720000	720K	Total Impressions	
78	Xfer	009-875	1st BTR #6	ROLLER ASSY 1ST	PL 6.7 Item 1	1	720000	720K	Total Impressions	
79	Xfer	009-876	1st BTR #2 ~ #4	ROLLER ASSY 1ST	PL 6.7 Item 1	3	720000	720K	Total Impressions	
80	Xfer	009-877	1st BTR #5	ROLLER ASSY 1ST	PL 6.7 Item 1	1	720000	720K	Total Impressions	
81	Xfer	009-878	IBT BELT (IMPS)	BELT ASSY-|IBT	PL 6.3 Item 1	1	1200000	1200K	Total Impressions	
82	Xfer	009-880	Belt Inner Cleaner	BRUSH ASSY-INNER	PL 6.6 Item 20	1	1200000	1200K	Total Impressions	
83	Xfer	009-881	Back Up Roll	ROLL ASSY-BUR,FIN	PL 6.15 Item 2	1	1200000	1200K	Total Impressions	
84	Xfer	009-882	Bearing 1st BTR Assy #1	• HOLDER ASST BTR F(Front Parts) • HOLDER ASSY BTR R(RearParts)	• PL 6.7 Item 12 • PL 6.7 Item 3	1 1	2400000	2400K	Total Impressions	
85	Xfer	009-883	Bearing 1st BTR Assy #6	• HOLDER ASST BTR F(Front Parts) • HOLDER ASSY BTR R(RearParts)	• PL 6.7 Item 15 • PL 6.7 Item 16	1 1	2400000	2400K	Total Impressions	
86	Xfer	009-884	Bearing 1st BTR Assy #2 ~ #4	• HOLDER ASST BTR F(Front Parts) • HOLDER ASST BTR F(Front Parts #3,#4) • HOLDER ASSY BTR R(Rear Parts)	• PL 6.7 Item 2 • PL 6.7 Item 3 • PL 6.7 Item 12	1 1 1	2400000	2400K	Total Impressions	
87	Xfer	009-885	Bearing 1st BTR Assy #5	• HOLDER ASST BTR F(Front Parts) • HOLDER ASSY BTR R(RearParts)	• PL 6.7 Item 13 • PL 6.7 Item 14	1 1	2400000	2400K	Total Impressions	
88	Xfer	009-886	Back Up Roll Assy	ROLLER ASSY-BACKUP,C2	PL 6.6 Item 8	1	2400000	2400K	Total Impressions	
89	Xfer	009-887	Torque Limiter Assy GEAR IDLER	• BRACKET ASSY-TORQUE • GEAR-BELT,IDLE • HOLDER ASSY-BTB,RR	• PL 6.25 Item 1 • PL 6.24 Item 10 • PL 6.25 Item 9	1 1 1	1600000	1600K	Total Impressions	
90	Xfer	009-889	IBT CLN MOT GEARS	GEAR-HELICAL,35	PL 6.5 Item 19	1	3200000	3200K	Total Impressions	

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
91	Xfer	009-890	BTB FRAME ESB GEARS	• GEAR-HERICAL,32 • GEAR-HERICAL,41/15	• PL 6.24 Item 7 • PL 6.24 Item 8	1 1	1600000	1600K	Total Impressions	
92	Fusing (BRF)	010-800	Web CRU	WEB ASSY DW	• PL 7.2 Item 3	1	1200000	1200K	WEB (H/R) MOTOR ON TIME(S)	
93	Fusing (BRF)	010-801	Oil Wick	WICK ASSY-BELT OIL	PL 7.4 Item 8	1	500000	500K	Total Impressions	
94	Fusing (BRF)	010-802	BELT Module	BELT ASSY-FUSING,MODULE	PL 7.4 Item 2	1	1500000	1500K	Total Impressions	
95	Fusing (BRF)	010-803	Fusing Belt	BELT ASSY-Fusing	PL 7.4 Item 1	1	500000	500K	Total Impressions	
96	Fusing (BRF)	010-804	P/Roll	ROLL ASSY-PRESS	PL 7.3 Item 19	1	500000	500K	Total Impressions	
97	Fusing (BRF)	010-805	External Assy	ROLL ASSY-EXTERNAL	PL 7.7 Item 26	1	1000000	1000K	Total Impressions	
98	Fusing (BRF)	010-806	Sheet	PLATE ASSY-PAD	PL 7.14 Item 29	1	500000	500K	Total Impressions	
99	Fusing (BRF)	010-807	Refresh Roll	ROLL ASSY-REFRESH	PL 7.10 Item 1	1	1000000	1000K	Total Impressions	
100	Fusing (BRF)	010-808	CHUTE ASSY-FINGER PR	CHUTE ASSY-FINGER PR	PL 7.3 Item 12	1	500000	500K	Total Impressions	
101	Fusing (BRF)	010-809	V-Tra Exit Belt	• BELT-TRANSPORT EXIT W • BELT-TRANSPORT EXIT S	• PL 7.6 Item 27 • PL 7.6 Item 8	2 1	2000000	2000K	Total Impressions	
102	Fusing (BRF)	010-811	V-TRA BELT INLET	BELT-TRANSPORT,INLET	PL 7.5 Item 15	4	2000000	2000K	Total Impressions	
103	Fusing (BRF)	010-816	ER TORQUE-LIMITER	Torque Joint	PL 7.7 Item 12	1	3000000	35000K	Number of Torque Limiter Rotations	
104	Fusing (BRF)	010-817	Web CRU Film	WEB ASSY FILM DW	PL 7.2 Item3	1	55000	55K	WEB (H/R) MOTOR ON TIME	Accumulate Fusing Web Motor ON Time (sec).
105	Fusing (Decurler)	010-820	BELT-DECURLER	BELT-DECURLER	PL 16.24 Item 10	5	3000000	3000K	Total Impressions	
106	Fusing (Decurler)	010-822	ROLL ASSY-LEVER PENE	ROLL ASSY-LEVER PENE	PL 16.23 Item 33	1	400000	400K	Total Impressions	
107	Fusing (Cooling)	010-840	Cooling Belt Upper	BELT-COOLING	PL 16.5 Item 1	1	1000000	1000K	Total Impressions	
108	Fusing (Cooling)	010-841	Cooling Belt Lower	BELT-COOLING	PL 16.7 Item 1	1	1000000	1000K	Total Impressions	
109	Fusing (Cooling)	010-842	ROLL ASSY-DRIVE_COOLING	ROLL ASSY-DRIVE BRG	PL 16.5 Item 2 PL 16.9 Item 5	2	4000000	4000K	Total Impressions	
110	Fusing (Cooling)	010-843	ROLL ASSY-BACKUP D32	ROLL ASSY-BACKUP D32	PL 16.8 Item 2	2	4000000	4000K	Total Impressions	
111	Fusing (Cooling)	010-844	ROLL ASSY-BACKUP D20	• ROLL ASSY-BACKUP D20 • ROLL ASSY-BACKUP D20S	• PL 16.8 Item 1 • PL 16.8 Item 19	3 1	4000000	4000K	Total Impressions	

Table 1 IOT Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
112	Fusing (Cooling)	010-845	ROLL ASSY-STEERING_UPPER	ROLL ASSY-STEER-ING	PL 16.6 Item 38	1	4000000	4000K	Total Impressions	
113	Fusing (Cooling)	010-846	ROLL ASSY-STEERING_LOWER	ROLL ASSY-STEER-ING	PL 16.9 Item 37	1	4000000	4000K	Total Impressions	
114	Fusing(Burr Press)	010-860	BURR PRESS ROLLER UPPER	ROLL ASSY,UPPER	PL 12.3 Item 10	1	3000000	3000K	Total Impressions	

HCF A3 & 2nd HCF A3

Table 2 HCF A3 & 2nd HCF A3 Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
1	HCF A3	078-800	HCF3.5ADV Tray 1 Feed/Retard/Nudger Roll	Nudger/Feed/Retard Roll Kit (Tray 1)	• PL 32.12 Item 38 • PL 32.15 Item 11	1	500000	500K	HCF3.5ADV Tray 1 Feed Count	***NOTE:*** *Replace the 3 Rolls - Nudger Roll, Feed Roll, and Retard Roll at the same time.* ***NOTE:*** *For details, refer to the options manual.*
2	HCF A3	078-801	HCF3.5ADV Tray 1 Feeder Unit	(SCC) Feeder (Tray 1)	PL 32.5 Item 6	1	3000000	3000K	HCF3.5ADV Tray 1 Total Feed Count	***NOTE:*** *For details, refer to the options manual.*
3	HCF A3	078-802	HCF3.5ADV Tray 1 T/A Roll	Takeaway Roll (Tray 1)	PL 32.13 Item 9	1	1500000	1500K	HCF3.5ADV Tray 1 T/A Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
4	HCF A3	078-803	HCF3.5ADV Tray 2 Feed/Retard/Nudger Roll	Nudger/Feed/Retard Roll Kit (Tray 2)	• PL 32.12 Item 38 • PL 32.15 Item 11	1	500000	500K	HCF3.5ADV Tray 2 Feed Count	***NOTE:*** *Replace the 3 Rolls - Nudger Roll, Feed Roll, and Retard Roll at the same time.* ***NOTE:*** *For details, refer to the options manual.*
5	HCF A3	078-804	HCF3.5ADV Tray 2 Feeder Unit	(SCC) Feeder (Tray 2)	PL 32.5 Item 6	1	3000000	3000K	HCF3.5ADV Tray 2 Total Feed Count	***NOTE:*** *For details, refer to the options manual.*
6	HCF A3	078-805	HCF3.5ADV Tray 2 T/A Roll	Takeaway Roll (Tray 2)	PL 32.13 Item 9	1	1500000	1500K	HCF3.5ADV Tray 2 T/A Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
7	HCF A3	078-810	HCF3.5ADV J-Tra Exit Roll	J-Tra Exit Roll	PL 32.27 Item 4	1	8000000	8000K	HCF3.5ADV J-Tra Exit Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
8	2nd HCF A3	078-811	HCF 3.5 ADV J-Tra Trans Roll Clutch 1	(SCC) J-Tra Trans Roll Clutch 1	PL 34.27 Item 33	1	8000000	8000K	HCF3.5ADV J-Tra Trans Roll Clutch1 Feed Count	***NOTE:*** *For details, refer to the options manual.*
9	2nd HCF A3	078-813	HCF3.5ADV J-Tra Exit Roll Clutch	(SCC) J-Tra Exit Roll Clutch	PL 32.27 Item 7	1	8000000	8000K	HCF3.5ADV J-Tra Exit Roll Clutch Feed Count	***NOTE:*** *For details, refer to the options manual.*
10	2nd HCF A3	078-814	HCF3.5ADV MBT Feed/Retard/Nudger Roll	Feed Roll Kit (MBT)	• PL 32.40 Item 21 • PL 34.54 Item 21	1	300000	300K	HCF3.5ADV MBT Feed Count	***NOTE:*** *Replace the 3 Rolls - Feed Roll, Retard Roll, and Nudger Roll at the same time.* ***NOTE:*** *For details, refer to the options manual.*
11	HCF A3	078-815	HCF3.5ADV J-Tra MBT T/A Roll 1	MBT Takeaway Roll	PL 32.22 Item 3	1	1500000	1500K	HCF3.5ADV J-Tra MBT T/A Roll 1 Feed Count	***NOTE:*** *For details, refer to the options manual.*

Table 2 HCF A3 & 2nd HCF A3 Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
12	2nd HCF A3	078-816	HCF3.5ADV Tray 3 Feed/Retard/Nudger Roll	Nudger/Feed/Retard Roll Kit (Tray 3)	• PL 34.12 Item 38 • PL 34.15 Item 11	1	500000	500K	HCF3.5ADV Tray 3 Feed Count	***NOTE:*** *Replace the 3 Rolls - Nudger Roll, Feed Roll, and Retard Roll at the same time.* ***NOTE:*** *For details, refer to the options manual.*
13	2nd HCF A3	078-817	HCF3.5ADV Tray 3 Feeder Unit	(SCC) Feeder (Tray 3)	PL 34.5 Item 6	1	3000000	3000K	HCF3.5ADV Tray 3 Total Feed Count	***NOTE:*** *For details, refer to the options manual.*
14	2nd HCF A3	078-818	HCF3.5ADV Tray 3 T/A Roll	Takeaway Roll (Tray 3)	PL 34.13 Item 9	1	1500000	1500K	HCF3.5ADV Tray 3 T/A Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
15	2nd HCF A3	078-819	HCF3.5ADV Tray 4 Feed/Retard/Nudger Roll	Nudger/Feed/Retard Roll Kit (Tray 4)	• PL 34.12 Item 38 • PL 34.15 Item 11	1	500000	500K	HCF3.5ADV Tray 4 Feed Count	***NOTE:*** *Replace the 3 Rolls - Nudger Roll, Feed Roll, and Retard Roll at the same time.* ***NOTE:*** *For details, refer to the options manual.*
16	2nd HCF A3	078-820	HCF3.5ADV Tray 4 Feeder Unit	(SCC) Feeder (Tray 4)	PL 34.5 Item 6	1	3000000	3000K	HCF3.5ADV Tray 4 Total Feed Count	***NOTE:*** *For details, refer to the options manual.*
17	2nd HCF A3	078-821	HCF3.5ADV Tray 4 T/A Roll	Takeaway Roll (Tray 4)	PL 34.13 Item 9	1	1500000	1500K	HCF3.5ADV Tray 4 T/A Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
18	2nd HCF A3	078-822	HCF3.5ADV F-Tra Pre Regi Roll	F-Tra Pre Regi Roll	PL 34.47 Item 2	1	3000000	3000K	HCF3.5ADV F-Tra Pre Regi Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
19	2nd HCF A3	078-823	HCF3.5ADV F-Tra Regi Roll	F-Tra Regi Roll	PL 34.47 Item 1	1	3000000	3000K	HCF3.5ADV F-Tra Regi Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*
20	2nd HCF A3	078-824	HCF 3.5 ADV T-Tra Exit Roll	T-Tra Exit Roll	PL 34.37 Item 7	1	8000000	8000K	HCF3.5ADV T-Tra Exit Roll Feed Count	***NOTE:*** *For details, refer to the options manual.*

Finisher

Table 3 Finisher Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
1	Finisher (IP)	957-800	IP Roll Life	Feed Roll/Nudger Roll/ Retard Roll Kit	PL 46.13 Item 17	1	300000	300K	FEED*	*: Paper feed from the Interposer. ***NOTE:*** *Replace the three Rolls (Feed Roll, Nudger Roll, and Retard Roll) (same parts) at the same time.* ***NOTE:*** *For details, refer to the options manual.*
2	Finisher	957-801	Paper Rev Sub Paddle	Sub Paddle Assembly	PL 27.11 Item 7	1	900000	900K	PV*	*: Paper output to the Stacker Compiler section. ***NOTE:*** *Replace the two Paddles of the Sub Paddle Assembly and the Compile Paddle Assembly at the same time.* ***NOTE:*** *For details, refer to the options manual.*
3	Finisher	957-802	Paper Rev Paddle Lif	Compile Paddle Assembly	PL 27.4 Item 19	1	900000	900K	PV*	*: Paper output to the Stacker Compiler section. ***NOTE:*** *Replace the two Paddles of the Sub Paddle Assembly and the Compile Paddle Assembly at the same time.* ***NOTE:*** *For details, refer to the options manual.*
4	Finisher	957-803	Booklet Paddle Life	Paddle Shaft Assemblyl	PL 27.30 Item 13	1	900000	900K	PV*	*: Paper output to the Booklet Compiler section. ***NOTE:*** *For details, refer to the options manual.*
5	Finisher	957-804	Stacker Stapler Life	(SCC) Stapler Head Assembly	PL 27.6 Item 2	1	500000	500K	staple*	*: Staple operation count. ***NOTE:*** *For details, refer to the options manual.*
6	Finisher	957-805	Booklet Stapler Life	Stapler Assy	PL 27.28 Item 23	1	200000	200K	staple*	*: Booklet Stapler operation count ***NOTE:*** *For details, refer to the options manual.*

Table 3 Finisher Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
7	Finisher	957-806	Sub Paddle Clutch	Eject Assembly	PL 27.11 Item 6	1	2800000	2800K	PV*	*: Paper output to the Stacker Compiler section. ***NOTE:*** *Because Sub Paddle Clutch has no spare ID, it is managed by Eject Assembly which is High Assembly.* ***NOTE:*** *For details, refer to the options manual.*
8	Finisher	957-807	Eject Pinch Roll	Eject Pinch Roll	PL 27.11 Item 15	1	7000000	7000K	PV*	*: Paper output to the Stacker Compiler section. ***NOTE:*** *For details, refer to the options manual.*
9	Finisher	957-808	Puncher Life	• Punch Assembly 2H3H (Option) • Punch Assembly 2H4H (Option)	• PL 27.1 Item 10 • PL 27.1 Item 10	1	1000000	1000K	Punch*	*: Puncher operation count. ***NOTE:*** *For details, refer to the options manual.*
10	Finisher	957-809	S2 Gate Life (Top Path Gate Solenoid Assembly Life)	(SCC) Top Path Gate Solenoid Assembly	PL 27.18 Item 6	1	3000000	3000K	Times*	*: Top Path Gate Solenoid Assembly operation count. ***NOTE:*** *For details, refer to the options manual.*
11	Finisher (Folder)	957-810	Folder Motor Life	Folder Up Transport Motor	PL 50.5 Item8	1	18600000	18600K	PV*	*: PV of paper that had entered the Finisher. ***NOTE:*** *For details, refer to the options manual.*
12	Finisher (Puncher Unit)	957-811	Puncher Unit Life	Punch Assembly (2H/3H, 2H/4H)	PL 27.1 Item10	1	13500000	13500K	PV*	*: PV of paper that had entered the Finisher. ***NOTE:*** *For details, refer to the options manual.*
13	Finisher	957-812	Stacker Compile Life	Compile Assembly	PL 27.1 Item 6	1	12150000	12150K	PV*	*: Paper output to the Stacker Compiler section ***NOTE:*** *For details, refer to the options manual.*
14	Finisher (TCBM)	957-813	Trimmer Counter	Trimmer Regi. Chute Assembly	PL 47.20 Item 1	1	3000000	3000K	PV*	No. of sheets of paper that had passed through the TCB Exit Sensor Assembly when the Trimmer is used (A3 SEF Impressions). ***NOTE:*** *For details, refer to the options manual.*

Table 3 Finisher Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
15	Finisher (TCBM)	957-814	Crease Counter (TCBM Only)	• Upper Blade Assembly • Lower Blade Assembly	• PL 47.15 Item 1 • PL 47.15 Item 6	1 1	3000000	3000K	Times*	Upper Blade Assembly/Lower Blade Assembly is part for TCBM Only. *: No. of times the Creaser Home Position Sensor had turned ON (count only when operating with Plain paper) ***NOTE:*** *For details, refer to the options manual.*
16	Finisher (CDM 770)	959-800	C/D Decurler Belt	• Decurler Belt Kit (Upper) • Decurler Belt Kit (Lower)	• PL43.7 Item 1 • PL43.8 Item 1	6 6	6000000	6000K	Sheets*	*: Counts the number of sheets of paper that passed CDM Exit Sensor Assembly. ***NOTE:*** *For details, refer to the options manual.*
17	Finisher (Stacker)	959-801	RPM Cooling Belt	RPM Cooling Belt	PL44.12 Item1	1	6000000	6000K	Sheets*	*: Counts the number of sheets of paper that passed CDM Transport Sensor. ***NOTE:*** *For details, refer to the options manual.*
18	Finisher (Stacker)	959-802	I/P Roll Current Life	Feed Roll/Retard Roll/ Nudger Roll	PL46.13 Item12-14	1	300000	300K	FEED*	*: Counted when paper is fed from the Interposer. ***NOTE:*** *For details, refer to the options manual.*
19	Finisher (SEM)	959-810	SEM Ozon Filter Life 1	Ozon Filter	PL 75.8 Item13	1	200000	200K	Seconds*	*: Show replacement (filter usage period) ***NOTE:*** *For details, refer to the options manual.*
20	Finisher (SEM)	959-811	SEM Ozon Filter Life 2	Ozon Filter	PL 75.8 Item13	1	120000	120K	Seconds*	*: Show replacement (filter usage period) ***NOTE:*** *For details, refer to the options manual.*
21	Finisher (SEM)	959-812	SEM CC Life 1	CC	PL 75.4 Item11	1	102272	102K	Seconds*	*: Corotron Life (power-on time) ***NOTE:*** *For details, refer to the options manual.*
22	Finisher (SEM)	959-813	SEM CC Life 2	CC	PL 75.4 Item11	1	1000000	1000K	Seconds*	*: Corotron Life (number of sheets fed) ***NOTE:*** *For details, refer to the options manual.*

Table 3 Finisher Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
23	Finisher (SEM)	959-814	SEM BTR Life 1	BTR	PL 75.4 Item9	1	102272	102K	Seconds*	*: Roll Life (power-on time) ***NOTE:*** *For details, refer to the options manual.*
24	Finisher (SEM)	959-815	SEM BTR Life 2	BTR	PL 75.4 Item9	1	1000000	1000K	Seconds*	*: Roll Life (number of sheets fed) ***NOTE:*** *For details, refer to the options manual.*

ASF A3 & Chainned ASF A3

Table 4 ASF A3 & Chainned ASF A3 Feeder Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
1	Chainned ASF A3	951-807	HCF3.6 T3 FeedUnit	AirSuc Tray 3 Feeder	PL 81.26	1	3000000	3000K	PV	No. of sheets fed from Tray 3 Feeder Unit ***NOTE:*** *For details, refer to the options manual.*
2	Chainned ASF A3	951-808	HCF3.6 T4 FeedUnit	AirSuc Tray 4 Feeder	PL 81.26	1	3000000	3000K	PV	No. of sheets fed from Tray 4 Feeder Unit ***NOTE:*** *For details, refer to the options manual.*
3	Chainned ASF A3	951-810	HF3.6 T3 T/A Roll	Tray 3 Takeaway Roll	PL 81.40	1	8000000	8000K	PV	No. of sheets that passed through Tray 3 T/A Roll ***NOTE:*** *For details, refer to the options manual.*
4	Chainned ASF A3	951-811	HF3.6 T4 T/A Roll	Tray 4 Takeaway Roll	PL 81.40	1	8000000	8000K	PV	No. of sheets that passed through Tray 4 T/A Roll ***NOTE:*** *For details, refer to the options manual.*
5	Chainned ASF A3	951-812	HCF3.6 T-TMBT TARoll1	MBT Takeaway Roll Assembly	PL 81.40	1	1500000	1500K	PV	No. of sheets that passed through MBT Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*
6	Chainned ASF A3	951-814	HCF3.6 T-T TrnsRoll2	T-Tra Roll 2	PL 81.67	1	8000000	8000K	PV	No. of sheets that passed through T-Tra Roll 2 ***NOTE:*** *For details, refer to the options manual.*
7	Chainned ASF A3	951-816	HCF3.6 T-T Exit Roll	T-Tra Exit Roll	PL 81.67	1	8000000	8000K	PV	No. of sheets that passed through T-Tra Exit ***NOTE:*** *For details, refer to the options manual.*
8	Chainned ASF A3	951-871	HCF3.6 T-TMBT TARoll2	MBT Bearing Roll	PL 81.40	1	8000000	8000K	PV	No. of sheets that passed through MBT Bearing Roll ***NOTE:*** *For details, refer to the options manual.*

Table 4 ASF A3 & Chainned ASF A3 Feeder Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
9	Chainned ASF A3	951-872	HCF3.6 T-T TA Roll1	Tray 3 Takeaway Roll	PL 81.59	1	8000000	8000K	PV	No. of sheets that passed through Tray 3 Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*
10	Chainned ASF A3	951-873	HCF3.6 T-T TA Roll2	Tray 4 Takeaway Roll	PL 81.59	1	8000000	8000K	PV	No. of sheets that passed through Tray 4 Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*
11	Chainned ASF A3	951-875	HCF3.6 T-T TrnsRoll1	T-Tra Roll 1	PL 81.67	1	8000000	8000K	PV	No. of sheets that passed through T-Tra Roll 1 ***NOTE:*** *For details, refer to the options manual.*
12	Chainned ASF A3	951-876	HCF3.6 T-T TrnsRoll35	T-Tra Roll 3-5	PL 81.67	1	8000000	8000K	PV	No. of sheets that passed through T-Tra Roll 3- 5 ***NOTE:*** *For details, refer to the options manual.*
13	ASF A3	952-807	HCF3.6 T1 FeedUnit	AirSuc Tray 1 Feeder	PL 80.26	1	3000000	3000K	PV	No. of sheets fed from Tray 1 Feeder Unit ***NOTE:*** *For details, refer to the options manual.*
14	ASF A3	952-808	HCF3.6 T2 FeedUnit	AirSuc Tray 2 Feeder	PL 80.26	1	3000000	3000K	PV	No. of sheets fed from Tray 2 Feeder Unit ***NOTE:*** *For details, refer to the options manual.*
15	ASF A3	952-809	HCF3.6 MBT F/R/ NRoll	Feed Roll, Retard Roll, and Nudger Roll of MBT	PL 80.9	1	300000	300K	PV	No. of sheets that was fed through the Feed Roll, Retard Roll, and Nudger Roll of MBT. ***NOTE:*** *For details, refer to the options manual.*
16	ASF A3	952-810	HCF3.6 T1 T/A Roll	Tray 1 Takeaway Roll	PL 80.40	1	8000000	8000K	PV	No. of sheets that passed through Tray 1 Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*
17	ASF A3	952-811	HCF3.6 T2 T/A Roll	Tray 2 Takeaway Roll	PL 80.40	1	8000000	8000K	PV	No. of sheets that passed through Tray 2 Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*

Table 4 ASF A3 & Chainned ASF A3 Feeder Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
18	ASF A3	952-812	HCF3.6 J-TMBT TARoll1	MBT Takeaway Roll Assembly	PL 80.40	1	1500000	1500K	PV	No. of sheets that passed through MBT Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*
19	ASF A3	952-813	HCF3.6 J-T Trns1Clt	(SCC) J-Tra Trans Roll Clutch 1	PL 80.48	1	8000000	8000K	PV	Power-on count of J-Tra Trans Roll Clutch 1 ***NOTE:*** *For details, refer to the options manual.*
20	ASF A3	952-814	HCF3.6 J-T TrnsRoll23	J-Tra Roll 2, 3	PL 80.48	1	8000000	8000K	PV	No. of sheets that passed through J-Tra Roll 2, 3 ***NOTE:*** *For details, refer to the options manual.*
21	ASF A3	952-815	HCF3.6 J-T ExitClt	(SCC) J-Tra Exit Roll Clutch	PL 80.48	1	8000000	8000K	PV	Power-on count of J-Tra Exit Roll Clutch ***NOTE:*** *For details, refer to the options manual.*
22	ASF A3	952-816	HCF3.6 J-T ExitRoll	J-Tra Exit Roll	PL 80.48	1	8000000	8000K	PV	No. of sheets that passed through J-Tra Exit Roll ***NOTE:*** *For details, refer to the options manual.*
23	Chainned ASF A3	952-817	HCF3.6 F-T P/R-Roll	F-Tra Pre Regi Roll	PL 81.77	1	3000000	3000K	PV	No. of sheets that passed through F-Tra Pre Regi Roll ***NOTE:*** *For details, refer to the options manual.*
24	Chainned ASF A3	952-818	HCF3.6 F-T R-Roll	F-Tra Regi Roll	PL 81.77	1	3000000	3000K	PV	No. of sheets that passed through F-Tra Regi Roll ***NOTE:*** *For details, refer to the options manual.*
25	ASF A3	952-871	HCF3.6 J-TMBT TARoll2	MBT Bearing Roll	PL 80.40	1	8000000	8000K	PV	No. of sheets that passed through MBT Bearing Roll ***NOTE:*** *For details, refer to the options manual.*
26	ASF A3	952-872	HCF3.6 J-T TA Roll1	Tray 1 Takeaway Roll	PL 80.40	1	8000000	8000K	PV	No. of sheets that passed through Tray 1 Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*

Table 4 ASF A3 & Chainned ASF A3 Feeder Periodic Replacement Parts/Consumables List

No.	Sub Module Name	Chain-Link	HFSI Name	Part Name	PL No.	Qty	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impression)	Units	Description
27	ASF A3	952-873	HCF3.6 J-T TA Roll2	Tray 2 Takeaway Roll	PL 80.40	1	8000000	8000K	PV	No. of sheets that passed through Tray 2 Takeaway Roll ***NOTE:*** *For details, refer to the options manual.*
28	ASF A3	952-875	HCF3.6 J-T TrnsRoll1	J-Tra Roll 1	PL 80.48	1	8000000	8000K	PV	No. of sheets that passed through J-Tra Roll 1 ***NOTE:*** *For details, refer to the options manual.*
29	ASF A3	952-876	HCF3.6 J-T TrnsRoll45	J-Tra Roll 4, 5	PL 80.48	1	8000000	8000K	PV	No. of sheets that passed through J-Tra Roll 4, 5 ***NOTE:*** *For details, refer to the options manual.*
30	Chainned ASF A3	952-877	HCF3.6 F-T Ent Clt	(SCC) F-Tra Entrance Clutch	PL 81.75	1	8000000	8000K	PV	Power-on count of F-Tra Entrance Clutch ***NOTE:*** *For details, refer to the options manual.*
31	Chainned ASF A3	952-878	HCF3.6 F-T Mid Clt	(SCC) F-Tra Mid Clutch	PL 81.75	1	8000000	8000K	PV	Power-on count of F-Tra Mid Clutch ***NOTE:*** *For details, refer to the options manual.*
32	Chainned ASF A3	952-879	HCF3.6 F-T TrnsRoll14	F-Tra Roll 1-4	PL 81.75	1	8000000	8000K	PV	No. of sheets that passed through F-Tra Roll 1-4 ***NOTE:*** *For details, refer to the options manual.*

Chapter 2 Troubleshooting

2 Troubleshooting

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2.1.1 How to troubleshoot

Procedure

Troubleshooting procedures are conducted as follows:.

This is a diagnostic procedure of separating a problem by Fault Code, document/paper jam and other problematic symptoms. Performing a FIP or an appropriate procedure in the check out list enables you to discover causes of a problem in a short period of time.

- Fault Code: When a Fault Code alerts you to a machine failure, perform appropriate troubleshooting items, by referring to Level 2 Troubleshooting.

Other troubleshooting:

- Generic FIP: This is the generic check procedure for troubleshooting general electric parts such as Motor, Relay, Solenoid, Switch and Sensor etc.

Service Mode/PC Diagnostic Mode:

This shows the purposes and usage of the diagnostic program for the machine, and how to read diag data.

How to proceed troubleshooting and Cautions:

- First, perform xxx-xxx FIP to categorize a problem. Second, proceed to an appropriate BSD to resolve the problem. To find the causes of the problem using FIP or check chart etc., thoroughly read the instructions and follow the procedure properly. Sometimes, when two or more causes exist, they cannot be identified at once, so the same FIP should be repeated. In this case, pay attention to a different judgement made in the process of the same FIP.
- The generic check procedure for the general electric parts (Motor, Relay, Solenoid, Switch and Sensor etc.) is not shown in each troubleshooting for some cases. In such a case, only the causes of the troubles are shown using the expressions below. Therefore, if you do not know how to check, proceed to troubleshooting by referring to Generic FIP.

E.g. Enter DC330[xxx-xxx]. Insert paper from the tray side. Does the indication show "Low"?

Y N

Repair xxxxxx SENSOR using Sensor Failure FIP.

~

2.1.2 Glossary

Procedure

The following terminology are used throughout the troubleshooting section. The meaning of these terminology must be fully understood when performing problem analysis.
Common terms:

- Fault Code

  This 6-digit code appears when the machine found problems. The first 3 digits show the Chain No. that correspond with the Chain No. of BSD.
- Actuate (Deactuate)

  To mechanically push (release) the actuator of the switch or the connected mechanical linkage.
- Block

  To place a sheet of document or paper on the photo sensor surface for detection.
- Check

  To visually check for operation failure of parts such as relay or mechanical linkage, and the failure status of the parts.
- Enter the PC Diag. mode.

  To enter the PC Diag. mode by following the procedure described in Chapter 6 How to use the Service Mode.
- Check the wire for a short circuit.

  Turn the power OFF then ON. Measure the resistance between the wire and the frame using the ohm range of a tester.
- Check the wire for an open circuit.

  Turn the power OFF then ON. Measure the resistance between both ends of the wire using the ohm range of a tester.
- Select DC330[xxx-xxx].

  Enter DC330 Component Control by following the procedure described in the Service Mode section in Chapter 2. (Hereinafter for PC-Diag only) Then, either select the applicable parts from the desired module or enter Chain Link No. [xxx-xxx] by selecting [Direct Code Input].
- Check the voltage level.

Table 1

Voltage	Level	Range
+3.5VDC	(H) (L)	+3.33 ~ +3.68VDC 0.0 ~ +1.0VDC
+5VDC	(H) (L)	+4.85 ~ +5.36VDC 0.0 ~ +1.0VDC
+12VDC	(H) (L)	+11.4 ~ +12.6VDC 0.0 ~ +1.5VDC
+13.3VDC	(H) (L)	+12.64 ~ +13.97VDC 0.0 ~ +1.5VDC
+24VDC	(H) (L)	+23.28 ~ +25.73VDC 0.0 ~ +3.0VDC

- Exit the problem analysis procedure.

Mechanical problems: This phrase is used when moving to machine adjustment and parts replacement. Read all the items (describing the main causes) and find out the causes of a problem by comparing them with the symptoms shown by the machine.

- PL4.2: Refer to PL4.2 in Chapter 5 Parts List.
- CH 6.2 Zone J4: Refer to 6.2 Zone J4 in Chapter 7 BSD.
- REP4.1.3: Refer to REP4.1.3 in Chapter 4.
- ADJ4.1.3: Refer to ADJ4.1.3 in Chapter 4.
- Replace the parts in sequence: When it is impossible to analyze causes of a problem further, replace the parts in sequence. The part with a higher replacement frequency or higher possibility of causing a problem is listed first for replacement.

2.2.1 IOT PWB OK/NG Determination Information

CR which can determine the state of PWB visually is installed on each PWB. This information is described in order to grasp the state of PWB according to the lighting state of the CR.

Do not judge the PWB as defective because error is displayed but refer to BSD/WN, etc. for power supply to the PWB, etc. so as to detect the cause of error display and recover from the fault.

The target PWB name is as follows. When confirming the position of PWB, refer to 7.4.1 PWB Location (FRONT) and 7.4.2 PWB Location (REAR).

Table 1

Position Chart Name	Applicable PWB Name
7.4.1 PWB Location (FRONT)	• DST1 PWB • DST3 PWB • DST4 PWB • LED Power PWB • HalfTone PWB • FLY PWB (Except FLY2/FLY9)
7.4.2 PWB Location (REAR)	• IOT Main PWB • MK_Drive ADC PWB • MK_EPG ADC PWB • FSG ADC PWB • PH ADC PWB • CRUM PWB • Each CORE PWB • DST2 PWB • SYS PWB • FLY 2 PWB • FLY 9 PWB • Each SNR PWB

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
1	IOT Main PWB	CR1 (Red)	Print/Download	ON	Reset	CH3.2	• PWB: 7.4.2 Item 1 • PL: PL 18.14 • CR: CH1.68
				Flashing	Reset (Software does not clear watchdog)		
				OFF	OK		
		CR3 (Orange)	Print/Download	ON	CircLink Communicating	CH3.2	
				OFF	OK		
		CR4 (Green)	Print/Download	ON	Sending packets	CH3.2	
				OFF	OK		
		CR5 (Yellow)	Print/Download	ON	Receiving packets	CH3.2	
				OFF	OK		
		CR6 (Green)	Print	ON	CircLink receiving error detected	CH3.2	
			Print/Download	OFF	OK		
		CR7 (Yellow)	Print	ON	Communication Fail of IOT Main PWB detected	CH3.2	
			Download	ON	Erasing internal ROM		
			Print/Download	OFF	OK		
		CR8 (Green)	Print	ON	Communication Fail of FSR/INV_Core PWB detected	CH3.2	
			Download	ON	Erasing external ROM		
			Print/Download	OFF	OK		
		CR9 (Yellow)	Print	ON	Communication Fail of PH_Core PWB detected	CH3.2	
			Download	ON	Programing internal ROM		
			Print/Download	OFF	OK		
		CR10 (Green)	Print	ON	Communication Fail of MK EPG_Core PWB detected	CH3.2	
			Download	ON	Programing external ROM		
			Print/Download	OFF	OK		
		CR11 (Yellow)	Print	ON	Communication Fail of MK DRV_Core PWB detected	CH3.2	
			Download	ON	Download Mode in operation		
			Print/Download	OFF	OK		
		CR15 (Green)	Print/Download	ON	+12 V is Normal	CH1.12	
				OFF	+12 V is Abnormal		
		CR16 (Green)	Print/Download	ON	+3.3 V is Normal	CH1.12	
				OFF	+3.3 V is Abnormal		
		CR17 (Green)	Print/Download	ON	+5 V is Normal	CH1.12	
				OFF	+5 V is Abnormal		
		CR30 (Green)	Print/Download	ON	+12 V HT is Normal	CH1.12	
				OFF	+12 V is HT Abnormal		

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
		CR31 (Green)	Print/Download	ON	INTLK +24 V-1 is Normal	CH1.36	
				OFF	INTLK +24 V-1 is Abnormal		
		CR32 (Green)	Print/Download	ON	INTLK +24 V-2 is Normal	CH1.36	
				OFF	INTLK +24 V-2 is Abnormal		
		CR33 (Green)	Print/Download	ON	INTLK +24 V-3 is Normal	CH1.36	
				OFF	INTLK +24 V-3 is Abnormal		
		CR362 (Yellow)	Print/Download	ON	Sending packets from IOT to SYS	CH3.6	
				OFF	No communication from IOT to SYS		
		CR37 (Yellow)	Print/Download	ON	Sending packets from SYS to IOT	CH3.6	
				OFF	Not communicating from SYS to IOT		
2	MK_Drive ADC PWB	CR3 (Green)	-	ON	+5 V is Normal	CH1.9	• PWB: 7.4.2 Item 8 • PL: PL 18.3 • CR: CH1.72
				OFF	+5 V is Abnormal		
3	MK_EPG ADC PWB	CR2 (Green)	-	ON	AVREF +3.3 V Normal	CH1.13	• PWB: 7.4.2 Item 10 • PL: PL 18.3 • CR: CH1.72
				OFF	• +3.3 V is not supplied • Regulator U10 defective • +12 VDC is not supplied from CORE PWB		
4	FSG ADC PWB	CR4 (Green)	-	ON	One of the thermistors, I/R STS 3, E/R STS 3, or E/R STS 3 was disconnected	CH10.14	• PWB: 7.4.2 Item 33 • PL: PL 18.7 • CR: CH1.71
				OFF	OK		
		CR5 (Green)	-	ON	One of the thermistors, I/R STS 3, E/R STS 3, or E/R STS 3 was detected to be 230 degrees C or more	CH10.14	
				OFF	OK		
		CR12 (Green)	-	ON	+5 V is Normal	CH1.43	
				OFF	+5 V is Abnormal		
		CR13 (Green)	-	ON	AVREF +3.3 V Normal	CH1.43	
				OFF	• +3.3 V is not supplied • Regulator U10 defective • +12 VDC is not supplied from CORE PWB		
5	PH ADC PWB	CR1 (Green)	-	ON	+5 V is Normal	CH1.10	• PWB: 7.4.2 Item 4 • PL: PL 18.2 • CR: CH1.71
				OFF	+5 V is Abnormal		
6	CRUM PWB	CR1 (Green)	-	ON	+3.3 V Normal	• CH9.1 (DRUM) • CH9.5 (TONER)	• PWB:7.4.2 Item 1 • PL: – DRUM: PL 18.3 – TONER: PL 18.1 • CR: CH1.75
				OFF	+3.3 VDC is not supplied		

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
7	Each CORE PWB	CR1 (Red)	Print/Download	ON	Reset	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	[PH_CORE PWB] • PWB: 7.4.2 Item 3 • PL: PL 18.2 • CR: CH1.67 [MK_DRV_CORE PWB] • PWB: 7.4.2 Item 7 • PL: PL 18.3 • CR: CH1.67 [MK_EPG_CORE PWB] • PWB: 7.4.2 Item 9 • PL: PL 18.3 • CR: CH1.67 [FSR/INV CORE PWB] • PWB: 7.4.2 Item 32 • PL: PL 18.7 • CR: CH1.67
				Flashing	Reset (Software does not clear watchdog)		
				OFF	OK		
		CR3 (Orange)	Print/Download	ON	CircLink Communicating	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
				OFF	CircLink not communicating		
		CR4 (Green)	Print/Download	ON	Sending packets	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
				OFF	OK		
		CR5 (Yellow)	Print/Download	ON	Receiving packets	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
				OFF	OK		
		CR6 (Green)	Print	ON	CircLink receiving error detected	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
			Print/Download	OFF	OK		
		CR7 (Yellow)	Print	ON	Communication Fail of IOT Main PWB detected	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
			Download	ON	Erasing internal ROM		
			Print/Download	OFF	OK		
		CR8 (Green)	Print	ON	Communication Fail of FSR/INV_Core PWB detected	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
			Download	ON	Erasing external ROM		
			Print/Download	OFF	OK		

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
		CR9 (Yellow)	Print	ON	Communication Fail of PH_Core PWB detected	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
			Download	ON	Programing internal ROM		
			Print/Download	OFF	OK		
		CR10 (Green)	Print	ON	Communication Fail of MK EPG_Core PWB detected	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
			Download	ON	Programing external ROM		
			Print/Download	OFF	OK		
		CR11 (Yellow)	Print	ON	Communication Fail of MK DRV_Core PWB detected	• CH3.4 (PH) • CH3.5 (MK_DRV, MK_EPG) • CH3.3 (FSR/INV)	
			Download	ON	Download Mode in operation		
			Print/Download	OFF	OK		
		CR15 (Green)	Print/Download	ON	+12 V is applied normally	• CH1.13 (PH, MK_DRV, MK_EPG) • CH1.43 (FSR/INV)	
				OFF	+12 V is not applied normally		
		CR16 (Green)	Print/Download	OFF	+3.3 V is Normal	• CH1.13 (PH, MK_DRV, MK_EPG) • CH1.43 (FSR/INV)	
				OFF	+3.3 V is Abnormal		
		CR17 (Green)	Print/Download	ON	+5 V is Normal	• CH1.13 (PH, MK_DRV, MK_EPG) • CH1.43 (FSR/INV)	
				OFF	+5 V is Abnormal		
		CR34 (Yellow)	Print/Download	ON	FPGA Config is configured by ADC PWB (Normal)	CH3.15	
				OFF	Config of FPGA set by DIS SW (Error due to DIP SW not equipped)		

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
8	DST1 PWB	CR1 (Green)	-	ON	+24 V is supplied to P1100-1 Pin	CH1.36	• PWB: 7.4.1 Item 7 • PL: PL 18.11 • CR: CH1.64
				OFF	+24 V is not supplied to P1100-1 Pin		
		CR2 (Green)	-	ON	+24 V is supplied to P1100-2 Pin	CH1.30	
				OFF	+24 V is not supplied to P1100-2 Pin		
		CR3 (Green)	-	ON	+24 V is supplied to P1100-3 Pin	CH1.30	
				OFF	+24 V is not supplied to P1100-3 Pin		
		CR4 (Green)	-	ON	+24 V is supplied to P1101-1 Pin and 2 Pin	CH1.33	
				OFF	+24 V is not supplied to P1101-1 Pin and 2 Pin		
		CR5 (Green)	-	ON	+24 V is supplied to P1102-1 Pin	CH1.34	
				OFF	+24 V is not supplied to P1102-1 Pin		
		CR6 (Green)	-	ON	+24 V is supplied to P1102-2 Pin	CH1.35	
				OFF	+24 V is not supplied to P1102-2 Pin		
		CR7 (Green)	-	ON	+24 V is supplied to P1102-4 Pin	CH1.36	
				OFF	+24 V is not supplied to P1102-4 Pin		
		CR8 (Green)	-	ON	+24 V is supplied to P1104-1 Pin	CH1.38	
				OFF	+24 V is not supplied to P1104-1 Pin		
		CR9 (Green)	-	ON	+36 V is supplied to P1105-1 Pin and 2 Pin	CH1.37	
				OFF	+36 V is not supplied to P1105-1 Pin and 2 Pin		
		CR10 (Green)	-	ON	+24 V is supplied to P1106-9 Pin and 10 Pin	CH1.38	
				OFF	+24 V is not supplied to P1106-9 Pin and 10 Pin		
		CR11 (Green)	-	ON	+24 V is supplied to P1104-2 Pin	CH1.37	
				OFF	+24 V is not supplied to P1104-2 Pin		
9	DST2/3/4 PWB	CR1 (Green)	-	ON	+36 V is supplied to P1000-2 Pin	• CH1.42 (DTS2) • CH1.45 (DTS3) • CH1.47 (DTS4)	• PWB: – DTS2: 7.4.2 Item 27 – DTS3: 7.4.1 Item 6 – DTS4: 7.4.1 Item 2 • PL: – DTS2: PL 18.7 – DTS3: PL 18.13 – DTS4: PL 18.11 • CR: CH1.65
				OFF	+36 V is not supplied to P1000-2 Pin		
		CR2 (Green)	-	ON	+24 V is supplied to P1005-2 Pin	• CH1.41 (DTS2) • CH1.46 (DTS3)	
				OFF	+24 V is not supplied to P1005-2 Pin		
		CR3 (Green)	-	ON	+24 V is supplied to P1001-1 Pin and 2 Pin	• CH1.39 (DTS2) • CH1.44 (DTS3) • CH1.47 (DTS4)	
				OFF	+24 V is not supplied to P1001-1 Pin and 2 Pin		
		CR4 (Green)	-	ON	+24 V is supplied to P1002-5 Pin and 6 Pin	• CH1.41 (DTS2) • CH1.46 (DTS3)	
				OFF	+24 V is not supplied to P1002-5 Pin and 6 Pin		
		CR5 (Green)	-	ON	+5 V is supplied to P1006-4 Pin	CH1.43 (DTS2)	
				OFF	+5 V is not supplied to P1006-4 Pin		
		CR6 (Green)	-	ON	+12 V is supplied to P1006-2 Pin	CH1.43 (DTS2)	
				OFF	+12 V is not supplied to P1006-2 Pin		

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
10	SYS PWB	CR3 (Green)	Print/Download	Flashing	Soft operation is normal after turning ON red switch	CH3.2	• PWB: 7.4.2 Item 35 • PL: PL 18.14 • CR: CH1.69
				OFF	Soft operation is error after turning ON red switch		
		CR4 (Green)	Print/Download	Flashing	Soft operation is normal after turning ON white switch	CH3.2	
				OFF	Soft operation is error after turning ON white switch		
		CR13 (Green)	Print/Download	ON	+5 VDC to +3.3 VDC are generated on PWB	CH1.2	
				OFF	+5 VDC to +3.3 VDC are not generated on PWB		
		CR14 (Green)	Print/Download	ON	When communication is in full-duplex mode during Ethernet communication	CH3.16	
				OFF	When not in above state		
		CR15 (Green)	Print/Download	ON	• When the PHY is receivable in full duplex mode during Ethernet communication • When the PHY is receivable in non-full duplex mode during Ethernet communication	CH3.16	
				OFF	When not in above state		
		CR16 (Red)	Print/Download	ON	Reset	CH3.2	
				OFF	OK		
		CR17 (Green)	Print/Download	ON	When communication with CircLink is possible	CH3.2	
				OFF	When communication with CircLink is not possible		
11	FLY PWB	CR1 (Orange)	-	ON	+24 V Normal	• CH1.18 (FLY 6) • CH1.7 (FLY 11)	• PWB: – FLY 1: 7.4.1 Item 17 – FLY 2: 7.4.2 Item 28 – FLY 3 - 8: 7.4.1 Item 17 – FLY 9: 7.4.2 Item 29 – FLY 10 - 11: 7.4.1 Item 17 • PL: – FLY 1: PL 18.11 – FLY 2: PL 18.7 – FLY 3 - 8: PL 18.11 – FLY 9: PL 18.7 – FLY 10 - 11: PL 18.11 • CR: CH1.73
				OFF	• +24 VDC is not supplied • P618_1 - P618_4 poor connection • Relay K1 operation failure/poor contact • P620_4/ P618_2/ P618_4 poor connection		
		CR2 (Orange)	-	ON	Relay K1 driving voltage normal	• CH1.14 (FLY 1) • CH1.20 (FLY 2) • CH1.17 (FLY 3/5) • CH1.16 (FLY 4) • CH1.18 (FLY 6) • CH1.19 (FLY 7) • CH1.21 (FLY 8) • CH1.15 (FLY 9) • CH1.22 (FLY 10) • CH1.7 (FLY 11)	
				OFF	• Relay K1 driving voltage not applied. • P620_4/ P618_4 poor contact		

Table 2

No	PWB Name	CR No	Mode	State of PWB		Reference BSD	PWB Position CR Position
12	Each SNR PWB	CR1 (Green)	-	ON	+5V Normal	• CH1.9 (MK_DRV 1/2) • CH1.10 (PH_2) • CH1.43 (FSR/INV 1/2)	• PWB: – PH_1: 7.4.2 Item19 – PH_2: 7.4.2 Item2 – MK_DRV 1: 7.4.2 Item6 – MK_DRV 2: 7.4.2 Item5 – FSR/INV 1: 7.4.2 Item21 – FSR/INV 2: 7.4.2 Item22 • PL: – PH_1/2: PL 18.2 – MK_DRV 1/2: PL 18.3 – FSR/INV 1/2: PL 18.7 • CR: CH1.74
				OFF	• +5 VDC is not supplied. • PA595-1,3 (MK_DRV 1), PA595-1,3 (PH1), PA595-1,3 (FSR/INV1) not properly connected		
13	LED Power PWB	CR1 (Green)	-	ON	P5511+5 V is supplied to -1 Pin	CH1.11	• PWB: 7.4.1 Item17 • PL: PL 18.11 • CR: CH1.66
				OFF	P5511+5 V is not supplied to -1 Pin		
		CR2 (Green)	-	ON	P5511+5 V is supplied to -2 Pin	CH1.9	
				OFF	P5511+5 V is not supplied to -2 Pin		
		CR3 (Green)	-	ON	P5511+5 V is supplied to -3 Pin	CH1.10	
				OFF	P5511+5 V is not supplied to -3 Pin		
		CR4 (Green)	-	ON	P1211+12 V is supplied to -4 Pin	CH1.12	
				OFF	P1211+12 V is not supplied to -4 Pin		
		CR5 (Green)	-	ON	P1211+12 V is supplied to -5 Pin	CH1.12	
				OFF	P1211+12 V is not supplied to -5 Pin		
14	HalfTone PWB	CR1 (YellowGreen)	-	ON	ROS connector (PA764 (Y/C/#6)) is connected.	• CH6.4 (Y) • CH6.8 (C) • CH6.12 (#6)	• PWB: – CK: 7.4.1 Item3 – YM: 7.4.1 Item4 – SS: 7.4.1 Item5 • PL: – YM: PL 18.14 – CK: PL 18.14 – SS: PL 18.15 • CR: CH1.70
				OFF	ROS connector (PA764 (Y/C/#6)) is not connected		
		CR2 (YellowGreen)	-	ON	ROS connector (PB764 (M/K/#1)) is connected	• CH6.6 (M) • CH6.10 (K) • CH6.2 (#1)	
				OFF	ROS connector (PB764 (M/K/#1)) is not connected		
		CR25 (YellowGreen)	-	ON	CDI HSS I/F link up of the color is completed	• CH6.4 (Y), CH6.6 (M) • CH6.8 (C), CH6.10 (K) • CH6.2 (#1), CH6.12 (#6)	
				OFF	CDI HSS I/F link up of the color is not completed		
				Flashing	CDI HSS I/F error of the color is detected		
		CR37 (Red)	-	ON	Halftone PWB is reset	CH3.16	
				OFF	Reset of Halftone PWB is cancelled		

2.2.2 IOT & Option FIP

FIP concerning the FaultCode of the IOT is described in this Product FIP. Refer to separate service manuals in which FIP concerning the optional Finisher Group, HCF A3 and Air Suction Feeder are described.

002-400 Waiting for Sys

BSD-ON: -

During print operation, it was detected that a notification indicating the operation of the job or Print Engine is not transmitted to the UI for a certain period of time or longer.

Cause/Action

No action necessary.

010-300 Fusing Drawer Interlock Open

BSD-ON:CH1.25

Fusing Drawer is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Fusing Drawer Interlock Switch (Logic) (DC330 [004-308]) for operation failure and installation failure. (PL 7.15)
- Mechanical parts of Fusing Handle mechanism for load, damage, and installation failure.

If no problems are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

010-310 Fusing Belt Speed Sensor Fail

BSD-ON:CH10.7

The output of the Fusing Belt Speed Sensor does not change after the specified time has passed from turning the Fusing Motor On.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Fusing Belt Speed Sensor (DC330 [010-105]) for operation failure. (PL 7.13)
- The Fusing Motor (DC330 [010-001]) for operation failure. (PL 7.12)
- Encoder Roll and Belt Encoder for wear and damage.
- Wear and damage of the Fusing Belt. (PL 7.4)
- Wear, damage of the gear and gear blockage of the Fusing Unit Drive Gear Assembly. (PL 7.12)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV_1 SNR PWB (PL 18.7)

010-311 Refresh Roll Contact Fail

BSD-ON:CH10.17

The output of Refresh Roll Retract Sensor does not change within the specified time after starting Contact or Retract operation of Refresh Roll Retract Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Refresh Roll Retract Sensor (DC330 [010-106]) for operation failure. (PL 7.10)
- Refresh Roll Retract Motor (DC330 [010-007/008] (Contact/Initialize)) for operation failure. (PL 7.10)
- The Refresh Roll for contamination, wear or revolution failure.
- The Refresh Roll Retract Drive Gear for wear and damage.
- The Refresh Roll Retract Sensor Actuator (Retract Gear) for damage. (PL 7.10)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-312 Fusing Belt Fan 1 Fail

FIP

Refer to 010-CF-001 FIP.

010-313 P/R Fan 1 Fail

FIP

Refer to 010-CF-002 FIP.

010-314 Fusing Steering Position Sensor Fail

BSD-ON:CH10.16

The output of the Fusing Unit Steering Position Sensor does not change within the specified time after driving the Fusing Belt Walk Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Fusing Belt Steering Sensor (DC330 [010-101]) for operation failure. (PL 7.8)
- Fusing Belt Walk Motor (DC330 [010-003]) for operation failure. (PL 7.8)
- Mechanical parts (including gears) of I/R steering mechanism for wear and damage.
- The Fusing Belt Steering Sensor Actuator (Steering Lever) for damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-315 Fusing Belt Position Sensor Fail

BSD-ON:CH10.15

3 sensors (In Cont, Out Cont, Limit) for detecting Belt Position of the Fusing Unit are receiving light for 1000 ms at 10 ms cycle at the same time. Or the In Cont and Out Cont sensors are shielded from light for 1000 ms at 10 ms cycle at the same time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Belt Position In Cont Sensor (DC330 [010-102]) for operation failure and installation failure. (PL 7.13)
- Belt Position Out Cont Sensor (DC330 [010-103]) for operation failure and installation failure. (PL 7.13)
- Belt Position Limit Sensor (DC330 [010-104]) for operation failure and installation failure. (PL 7.13)
- Installation failure, damage (bent, deformed) of the Actuator.

If no problems are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

010-316 Fusing Belt In Limit Fail

BSD-ON:CH10.15, CH10.16

- By detecting Fusing Belt Position, the Fusing Belt has reached the In Limit position (Belt Position In Cont. Sensor OFF (Shielded), Belt Position Limit Sensor ON (Receives Light)).
- The Belt installation position is at the In Limit detection position immediately after replacing the Fusing Belt.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn the DC330 [010-102] (Belt Position In Cont Sensor), DC330 [010-103] (Belt Position Out Cont Sensor), DC330 [010-104] (Belt Position Limit Sensor) ON and check each Status Display. **Is DC330 [010-102] Low and DC330 [010-103] and DC330 [010-104] High?**

Y N

Turn OFF the power and check the following:

- Belt Position In Cont Sensor, Belt Position Out Cont Sensor, Belt Position Limit Sensor for installation failure and foreign substances. (PL 7.13)
- The connection between the FSR/INV_1 MD PWB J666_F1 and the Belt Position In Cont Sensor J238 for open circuit, short circuit, and poor contact.
- The connection between the FSR/INV_1 MD PWB J666_F1 and the Belt Position Out Cont Sensor J239 for open circuit, short circuit, and poor contact.
- The connection between the FSR/INV_1 MD PWB J666_F1 and the Belt Position Limit Sensor J240 for open circuit, short circuit, and poor contact.
- Poor Contact of the Drawer Connector (DP/DJ887) or foreign matter to the Connector.
- Falling off, damage of the Actuator of the Sensor.

If no problems are found, replace the FSR/INV_1 MD PWB (PL 18.7). If the problem persists, update the version of the IOT firmware.

Check the HFSI Counter Value (DC135 [010-802]) of the Fusing Belt Module. **Has it reached its Life?**

Y N

Replace the Fusing Belt Assembly. (PL 7.4)

Turn ON DC330 [010-003] (Fusing Belt Walk Motor). **Can you hear the Motor operating sound?**

Y N

Check the following:

- I/R steering mechanism inside the Fusing Belt Unit for foreign substances.
- Fusing Belt Walk Motor (DC330 [010-003]) for operation failure. (PL 7.8)

If no problems are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

Check the following:

- Installation failure of the Fusing Belt Unit.
- Fusing Belt Unit (I/R steering mechanism) spring for disengagement.
- The Drive Gear for wear and damage.

If no problem is found after checking, initialize the NVM. **Is the problem repaired?**

Y N

Replace the Fusing Assembly. (PL 7.2)

A

A

End

010-317 Fusing Belt Out Limit Fail

BSD-ON:CH10.15, CH10.16

- By detecting Fusing Belt Position, the Fusing Belt has reached the Out Limit position (Belt Position Out Cont. Sensor OFF (Shielded), Belt Position Limit Sensor ON (Receives Light)).
- The Belt installation position is at the Out Limit detection position immediately after replacing the Fusing Belt.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn the DC330 [010-102] (Belt Position In Cont Sensor), DC330 [010-103] (Belt Position Out Cont Sensor), DC330 [010-104] (Belt Position Limit Sensor) ON and check each Status Display. **Is DC330 [010-103] Low and DC330 [010-102] and DC330 [010-104] High?**

Y N

Turn OFF the power and check the following:

- Belt Position In Cont Sensor, Belt Position Out Cont Sensor, Belt Position Limit Sensor for installation failure and foreign substances. (PL 7.13)
- The connection between the FSR/INV_1 MD PWB J666_F1 and the Belt Position In Cont Sensor J238 for open circuit, short circuit, and poor contact.
- The connection between the FSR/INV_1 MD PWB J666_F1 and the Belt Position Out Cont Sensor J239 for open circuit, short circuit, and poor contact.
- The connection between the FSR/INV_1 MD PWB J666_F1 and the Belt Position Limit Sensor J240 for open circuit, short circuit, and poor contact.
- Poor Contact of the Drawer Connector (DP/DJ887) or foreign matter to the Connector.
- Falling off, damage of the Actuator of the Sensor.

If no problems are found, replace the FSR/INV_1 MD PWB (PL 18.7). If the problem persists, update the version of the IOT firmware.

Check the HFSI Counter Value (DC135 [010-802]) of the Fusing Belt Module. **Has it reached its Life?**

Y N

Replace the Fusing Belt Assembly. (PL 7.4)

Turn ON DC330 [010-003] (Fusing Belt Walk Motor). **Can you hear the Motor operating sound?**

Y N

Check the following:

- I/R steering mechanism inside the Fusing Belt Unit for foreign substances.
- Fusing Belt Walk Motor (DC330 [010-003]) for operation failure. (PL 7.8)

If no problems are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

Check the following:

- Installation failure of the Fusing Belt Unit.
- Fusing Belt Unit (I/R steering mechanism) spring for disengagement.
- The Drive Gear for wear and damage.

If no problem is found after checking, initialize the NVM. **Is the problem repaired?**

Y N

Replace the Fusing Assembly. (PL 7.2)

End

010-318 P/R Latch Up Fail

BSD-ON:CH10.9

For the Contact Operation of the Pressure Roll, the status of P/R Latch Sensor does not become Contact even after the specified time has passed from the Clk ON of the P/R Latch Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- P/R Latch Sensor (DC330 [010-100]) for operation failure and installation failure. (PL 7.12)
- Operation failure of P/R Latch Motor (DC330 [010-002]). (PL 7.12)
- Mechanical parts (including gears) of Pressure Roll Contact/Retract mechanism for wear and damage.
- Installation failure, damage (bent, deformed) of the Actuator.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-319 P/R Latch Down Fail

BSD-ON:CH10.9

For the Retract Operation of the Pressure Roll, the status of P/R Latch Sensor does not become Retract even after the specified time has passed from the Clk ON of the P/R Latch Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-318 (P/R Latch Up Fail) FIP.

010-321 P/R Latch Hold Fail

BSD-ON:CH10.9

During Hold operation of Pressure Roll, the status of P/R Latch Sensor became Retract.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-318 (P/R Latch Up Fail) FIP.

010-323 H/R Lamp Warmup ON Time Fail 1

BSD-ON:CH10.12, CH10.10, CH10.14

The ON state of Heat Roll Lamp lasted longer than the specified time after Fusing Unit warm-up operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)
- H/R STS 1/2/3 (DC140 [010-132/133/134]) for error. (PL 7.4)
- H/R STS 1/2/3 for falling off, contamination, foreign substances.
- The connection between the Fusing ADC PWB J740 and the H/R STS 1/2/3 P245 for open circuit, short circuit, and poor contact.
- Conduction of H/R Thermostat 1/2. (PL 7.4)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- TRIAC PWB (PL 18.8)
- Fusing ADC PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-324 E/R Lamp Warmup ON Time Fail 1

BSD-ON:CH10.13, CH10.10, CH10.14

The ON state of External Roll Lamp lasted longer than the specified time after Fusing Unit warm-up operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for error. (PL 7.7)
- E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)
- The connection between the Fusing ADC PWB J742 and the E/R STS 1/2/ P235 for open circuit, short circuit, and poor contact.
- The connection between the Fusing ADC PWB J740 and the E/R STS 3 P235 for open circuit, short circuit, and poor contact.
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- E/R STS 1/2/3 detector for contamination, paper pieces, and foreign substances.
- E/R STS 1/2/3 for installation status and abnormal appearance.

NOTE: *For E/R STS for installation status and abnormal appearance, check the following.*

- *If center of E/R STS tip comes into contact with E/R (Figure1)*
- *If there is disengagement of the E/R STS center section (tube) (Figure 1)*
- *If there is any break in the E/R STS root section (plate spring) (Figure 1)*
- *If there is paper caught between E/R and E/R STS and resistance*

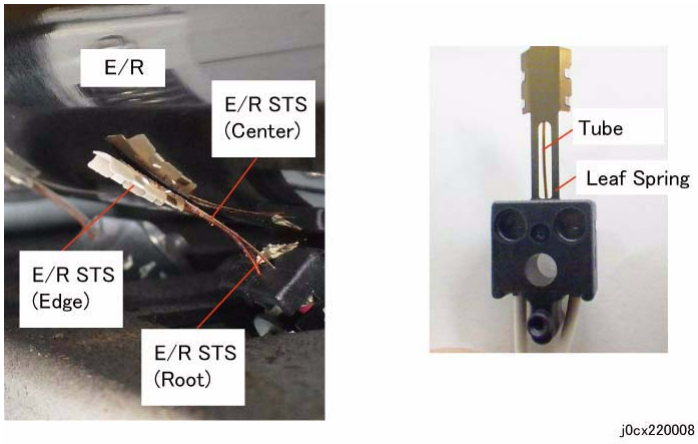


Figure 1 j0cx220008

NOTE: *After restoring E/R STS from error to normal state, recheck the following.*

The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)

The E/R Sub Lamp (DC330 [010-018]) for error. (PL 7.7)

E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- TRIAC PWB (PL 18.8)
- Fusing ADC PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-325 I/R Lamp Warmup ON Time Fail 1

BSD-ON:CH10.12, CH10.11, CH10.14

The ON state of Internal Roll Lamp lasted longer than the specified time after Fusing Unit warm-up operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for error. (PL 7.14)
- I/R STS 1/2/3 (DC140 [010-138/139/140]) for error. (PL 7.14)
- I/R STS 1/2/3 for falling off, contamination, foreign substances.
- The connection between the Fusing ADC PWB J740 and the I/R STS 1/2/3 P244 for open circuit, short circuit, and poor contact.
- Conduction of I/R Thermostat 1/2. (PL 7.14)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- TRIAC PWB (PL 18.8)
- Fusing ADC PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-326 H/R Lamp Standby ON Time Fail

BSD-ON:CH10.12

The ON state of Heat Roll Lamp lasted longer than the specified time after Fusing Unit standby operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-323 (H/R Lamp Warmup ON Time Fail 1) FIP.

010-327 E/R Lamp Standby ON Time Fail

BSD-ON:CH10.13

The ON state of External Roll Lamp lasted longer than the specified time after Fusing Unit standby operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-324 (E/R Lamp Warmup ON Time Fail 1) FIP.

010-328 I/R Lamp Standby ON Time Fail

BSD-ON:CH10.12

The ON state of Internal Roll Lamp lasted longer than the specified time after fusing standby operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-325 (I/R Lamp Warmup ON Time Fail 1) FIP.

010-329 Fusing Belt Speed Sensor Fail Low

BSD-ON:CH10.7

The output of the Fusing Belt Speed Sensor does not change after the specified time has passed from turning the Fusing Motor ON.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-310 (Fusing Belt Speed Sensor Fail) FIP.

010-330 Fusing Belt Speed Sensor Fail High

BSD-ON:CH10.7

The output of the Fusing Belt Speed Sensor does not change after the specified time has passed from turning the Fusing Motor ON.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-310 (Fusing Belt Speed Sensor Fail) FIP.

010-333 E/R STS 1 Over Heat Fail

BSD-ON:CH10.13, CH10.14, CH10.10

The system detected an abnormal high temperature of the External Roll STS 1.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)
- The connection between the Fusing ADC PWB J742 and the E/R STS 1 P235 for short circuit.
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for operation failure. (PL 7.7)
- E/R STS 2/3 detector for contamination, paper pieces, and foreign substances.
- E/R STS 2/3 for installation status and abnormal appearance.

NOTE: *For E/R STS for installation status and abnormal appearance, check the following.*

- *If center of E/R STS tip comes into contact with E/R (Figure1)*
- *If there is disengagement of the E/R STS center section (tube) (Figure 1)*
- *If there is any break in the E/R STS root section (plate spring) (Figure 1)*
- *If there is paper caught between E/R and E/R STS and resistance*

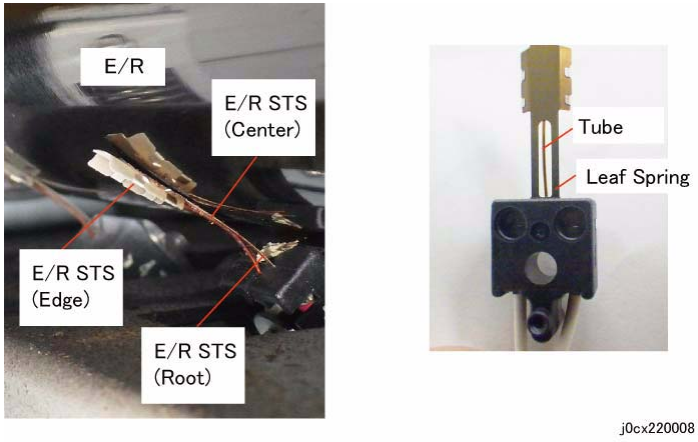


Figure 1 j0cx220008

NOTE: *After restoring E/R STS from error to normal state, recheck the following.*

The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)

The E/R Sub Lamp (DC330 [010-018]) for error. (PL 7.7)

E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- TRIAC PWB (PL 18.8)
- Fusing ADC PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-334 E/R STS 2 Over Heat Fail

BSD-ON:CH10.13, CH10.14, CH10.10

The system detected an abnormal high temperature of the External Roll STS 2.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)
- The connection between the Fusing ADC PWB J742 and the E/R STS 2 P235 for short circuit.
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for operation failure. (PL 7.7)
- E/R STS 1/3 detector for contamination, paper pieces, and foreign substances.
- E/R STS 1/3 for installation status and abnormal appearance.

  NOTE: *For E/R STS for installation status and abnormal appearance, check the following.*
  - *If center of E/R STS tip comes into contact with E/R (Figure1)*
  - *If there is disengagement of the E/R STS center section (tube) (Figure 1)*
  - *If there is any break in the E/R STS root section (plate spring) (Figure 1)*
  - *If there is paper caught between E/R and E/R STS and resistance*

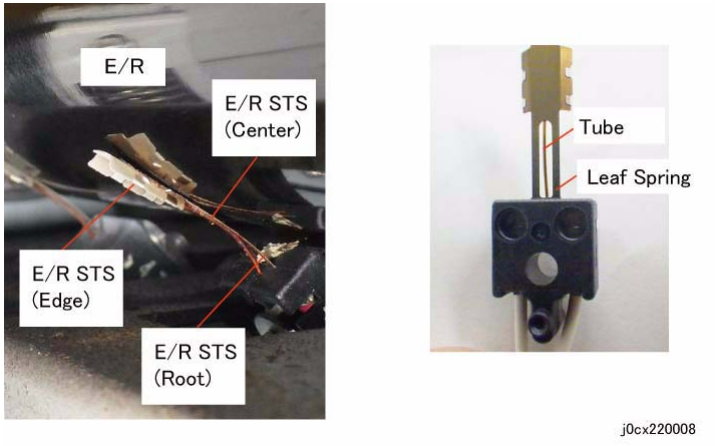


Figure 1 j0cx220008

NOTE: *After restoring E/R STS from error to normal state, recheck the following.*
The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
The E/R Sub Lamp (DC330 [010-018]) for error. (PL 7.7)
E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-335 H/R STS 1 Over Heat Fail

BSD-ON:CH10.12, CH10.14, CH10.10

The system detected an abnormal high temperature of the Heat Roll STS 1.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- H/R STS 1 (DC140 [010-132]) for error. (PL 7.4)
- H/R STS 2/3 (DC140 [010-133/134]) for error, or H/R STS 2/3 for falling off, contamination, foreign substances. (PL 7.4)
- The connection between the Fusing ADC PWB J740 and the H/R STS 1 P245 for short circuit.
- Conduction of H/R Thermostat 1/2. (PL 7.4)
- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-336 E/R STS 3 Over Heat Fail

BSD-ON:CH10.14, CH10.13, CH10.10

The system detected an abnormal high temperature of the External Roll STS 3.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)
- The connection between the Fusing ADC PWB J740 and the E/R STS 3 P235 for short circuit.
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for operation failure. (PL 7.7)
- E/R STS 1/2 detector for contamination, paper pieces, and foreign substances.
- E/R STS 1/2 for installation status and abnormal appearance.

NOTE: *For E/R STS for installation status and abnormal appearance, check the following.*

- *If center of E/R STS tip comes into contact with E/R (Figure1)*
- *If there is disengagement of the E/R STS center section (tube) (Figure 1)*
- *If there is any break in the E/R STS root section (plate spring) (Figure 1)*
- *If there is paper caught between E/R and E/R STS and resistance*

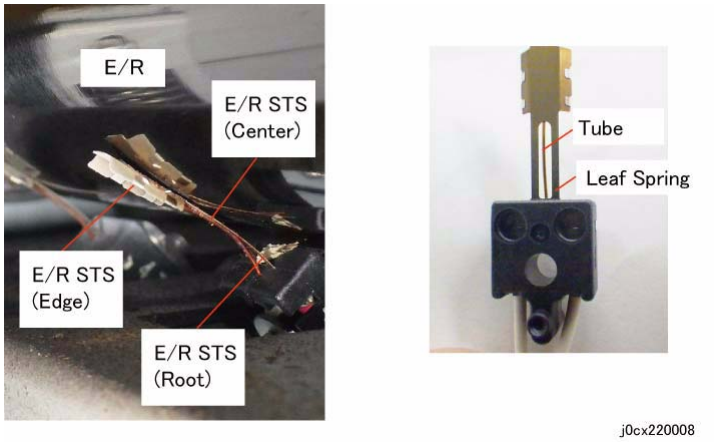


Figure 1 j0cx220008

NOTE: *After restoring E/R STS from error to normal state, recheck the following.*
The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
The E/R Sub Lamp (DC330 [010-018]) for error. (PL 7.7)
E/R STS 1/2/3 (DC140 [010-135/136/137]) for error. (PL 7.7)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-337 I/R STS 1 Over Heat Fail

BSD-ON:CH10.12, CH10.14, CH10.11

The system detected an abnormal high temperature of the Internal Roll STS 1.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- I/R STS 1 (DC140 [010-138]) for error. (PL 7.14)
- I/R STS 2/3 (DC140 [010-139/140]) for error, or I/R STS 2/3 for falling off, contamination, foreign substances. (PL 7.14)
- The connection between the Fusing ADC PWB J740 and the I/R STS 1 P244 for short circuit.
- Conduction of I/R Thermostat 1/2. (PL 7.14)
- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for operation failure. (PL 7.14)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-338 I/R STS 2 Over Heat Fail

BSD-ON:CH10.12, CH10.14, CH10.11

The system detected an abnormal high temperature of the Internal Roll STS 2.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- I/R STS 2 (DC140 [010-139]) for error. (PL 7.14)
- I/R STS 1/3 (DC140 [010-138/140]) for error, or I/R STS 1/3 for falling off, contamination, foreign substances. (PL 7.14)
- The connection between the Fusing ADC PWB J740 and the I/R STS 2 P244 for short circuit.
- Conduction of I/R Thermostat 1/2. (PL 7.14)
- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for operation failure. (PL 7.14)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-341 H/R STS 1 Disconnection Fail

BSD-ON:CH10.12

The AD value of Heat Roll STS 1 is equivalent to the open circuit AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- H/R STS 1 (DC140 [010-132]) for open circuit. (PL 7.4)
- Poor contact of Drawer Connector (DP/DJ887).
- The connection between the Fusing ADC PWB J740 and the H/R STS 1 P245 for open circuit or poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-342 E/R STS 1 Disconnection Fail

BSD-ON:CH10.13

The AD value of External Roll STS 1 is equivalent to the open circuit AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- E/R STS 1 (DC140 [010-135]) for open circuit. (PL 7.7)
- Poor contact of Drawer Connector (DP/DJ884).
- The connection between the Fusing ADC PWB J742 and the E/R STS 1 P235 for open circuit or poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-343 I/R STS 1 Disconnection Fail

BSD-ON:CH10.12

The AD value of Internal Roll STS 1 is equivalent to the open circuit AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- I/R STS 1 (DC140 [010-138]) for open circuit. (PL 7.14)
- Poor contact of Drawer Connector (DP/DJ888).
- The connection between the Fusing ADC PWB J740 and the I/R STS 1 P244 for open circuit or poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-344 I/R STS 2 Disconnection Fail

BSD-ON:CH10.12

The AD value of Internal Roll STS 2 is equivalent to the open circuit AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- I/R STS 2 (DC140 [010-139]) for open circuit. (PL 7.14)
- Poor contact of Drawer Connector (DP/DJ888).
- The connection between the Fusing ADC PWB J740 and the I/R STS 2 P244 for open circuit or poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-347 E/R STS 2 Disconnection Fail

BSD-ON:CH10.13

The AD value of External Roll STS 2 is equivalent to the open circuit AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- E/R STS 2 (DC140 [010-136]) for open circuit. (PL 7.7)
- Poor contact of Drawer Connector (DP/DJ884).
- The connection between the Fusing ADC PWB J742 and the E/R STS 2 P235 for open circuit or poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-348 P/R IRS 1 Disconnection Fail

BSD-ON:CH10.23

Detected input signal (open circuit AD value) of P/R IRS Sensor 1 is equivalent to the value of open circuit.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Open circuit of IRS Sensor 1 (Rear) (DC140 [010-130]). (PL 7.9)
- Poor contact of Drawer Connector (DP/DJ886).
- The connection between Fusing ADC PWB J740 and IRS Sensor 1 (Rear) J242_R1 for open circuit and poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-349 P/R IRS 2 Disconnection Fail

BSD-ON:CH10.23

Detected input signal (open circuit AD value) of P/R IRS Sensor 2 is equivalent to the value of open circuit.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Open circuit of IRS Sensor 2 (Front) (DC140 [010-131]). (PL 7.9)
- Poor contact of Drawer Connector (DP/DJ886).
- The connection between Fusing ADC PWB J740 and IRS Sensor 2 (Front) J242_R2 for open circuit and poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-350 Cooling Upper Motor Fail

BSD-ON:CH10.25

The Cooling Upper Motor rotation error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Cooling Upper Motor (DC330 [010-037]) for operation failure. (PL 16.27)
- The connection between the Cooling Upper Motor J420-6 and FSR/INV_2 MD PWB J666_F2-A2 for open circuit, short circuit, and poor contact.
- Cooling Upper Idler Roll rotation failure.
- Upper Cooling Belt damage
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-351 Cooling Lower Motor Fail

BSD-ON:CH10.27

The Cooling Lower Motor rotation error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Cooling Lower Motor (DC330 [010-038]) for operation failure. (PL 16.27)
- The connection between the Cooling Lower Motor J418-10 and FSR/INV_2 MD PWB J666_F2-A5 for open circuit, short circuit, and poor contact.
- Cooling Lower Idler Roll rotation failure.
- Lower Cooling Belt damage
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-352 Cooling Upper Belt Position Sensor In Limit Fail

BSD-ON:CH10.26, CH10.25

Detected abnormality of the Belt Position of the Cooling Upper Belt.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Do this Fail (Belt is toward the Rear side) Name and the Upper Cooling Belt position match?

Y N

Check the following:

- Cooling Upper Belt Position Sensor (DC140 [010-142]) for operation failure. (PL 16.6)
- Cooling Upper Steering Position Sensor (DC330 [010-109]) for operation failure. (PL 16.6)
- Cooling Upper Walk Motor (DC330 [010-035]) for operation failure. (PL 16.6)
- Cooling Upper Motor (DC330 [010-037]) for operation failure. (PL 16.27)
- Cooling Upper Belt Position Sensor for damage.
- Cooling Upper Steering Position Sensor Actuator for damage and installation failure.
- Upper Cooling Belt for wear and damage. (PL 16.5)
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

Perform the following:

- Replacement of Upper Cooling Belt.
- Cleaning or replacement of Upper Steering Roll
- Cleaning the heat sink that touches the Upper Cooling Belt.
- Cleaning of Upper Cooling Belt Drive Roll.
- Cleaning of Upper Cooling Belt Idler Roll.

010-353 Cooling Lower Belt Position Sensor In Limit Fail

BSD-ON:CH10.28, CH10.27

Detected abnormality of the Belt Position of the Cooling Lower Belt.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Do this Fail (Belt is toward the Rear side) Name and the Lower Cooling Belt position match?

Y N

Check the following:

- Cooling Lower Belt Position Sensor (DC140 [010-143]) for operation failure. (PL 16.7)
- Cooling Lower Steering Position Sensor (DC330 [010-110]) for operation failure. (PL 16.9)
- Cooling Lower Walk Motor (DC330 [010-036]) for operation failure. (PL 16.9)
- Cooling Lower Motor (DC330 [010-038]) for operation failure. (PL 16.27)
- Cooling Lower Belt Position Sensor for damage.
- Cooling Lower Steering Position Sensor Actuator for damage and installation failure.
- Lower Cooling Belt for wear and damage. (PL 16.7)
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

Perform the following:

- Replacement of Lower Cooling Belt.
- Cleaning or replacement of Lower Steering Roll.
- Cleaning of Lower Cooling Belt Drive Roll.
- Cleaning of Lower Cooling Belt Idler Roll.

010-354 Cooling Upper Belt Position Sensor Out Limit Fail

BSD-ON:CH10.26, CH10.25

Detected abnormality of the Belt Position of the Cooling Upper Belt.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Do this Fail (Belt is toward the Front side) Name and the Upper Cooling Belt position match?

Y N

Check the following:

- Cooling Upper Belt Position Sensor (DC140 [010-142]) for operation failure. (PL 16.6)
- Cooling Upper Steering Position Sensor (DC330 [010-109]) for operation failure. (PL 16.6)
- Cooling Upper Walk Motor (DC330 [010-035]) for operation failure. (PL 16.6)
- Cooling Upper Motor (DC330 [010-037]) for operation failure. (PL 16.27)
- Cooling Upper Belt Position Sensor for damage.
- Cooling Upper Steering Position Sensor Actuator for damage and installation failure.
- Upper Cooling Belt for wear and damage. (PL 16.5)
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

Perform the following:

- Replacement of Upper Cooling Belt.
- Cleaning or replacement of Upper Steering Roll
- Cleaning the heat sink that touches the Upper Cooling Belt.
- Cleaning of Upper Cooling Belt Drive Roll.
- Cleaning of Upper Cooling Belt Idler Roll.

010-355 Cooling Lower Belt Position Sensor Out Limit Fail

BSD-ON:CH10.28, CH10.27

Detected abnormality of the Belt Position of the Cooling Lower Belt.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Do this Fail (Belt is toward the Front side) Name and the Lower Cooling Belt position match?

Y N

Check the following:

- Cooling Lower Belt Position Sensor (DC140 [010-143]) for operation failure. (PL 16.7)
- Cooling Lower Steering Position Sensor (DC330 [010-110]) for operation failure. (PL 16.9)
- Cooling Lower Walk Motor (DC330 [010-036]) for operation failure. (PL 16.9)
- Cooling Lower Motor (DC330 [010-038]) for operation failure. (PL 16.27)
- Cooling Lower Belt Position Sensor for damage.
- Cooling Lower Steering Position Sensor Actuator for damage and installation failure.
- Lower Cooling Belt for wear and damage. (PL 16.7)
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

Perform the following:

- Replacement of Lower Cooling Belt.
- Cleaning or replacement of Lower Steering Roll.

- Cleaning of Lower Cooling Belt Drive Roll.
- Cleaning of Lower Cooling Belt Idler Roll.

010-356 Cooling Upper Belt Position Sensor Fail

BSD-ON:CH10.26

Detected abnormality of the Belt Position of the Cooling Upper Belt. After starting the operation of the Cooling Upper Motor, the output of the Cooling Upper Belt Position Sensor was monitored at a constant period and the value of the Sensor was an abnormal value (AD Value < 16 or 1015 < = AD Value) for 10 consecutive times.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Cooling Upper Belt Position Sensor (DC140 [010-142]) for operation failure. (PL 16.6)
- Cooling Upper Walk Motor (DC330 [010-035]) for operation failure. (PL 16.6)
- Cooling Upper Belt Position Sensor for damage.
- Cooling Upper Belt Position Sensor for installation failure.
- Upper Cooling Belt damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-357 Cooling Lower Belt Position Sensor Fail

BSD-ON:CH10.28

Detected abnormality of the Belt Position of the Cooling Lower Belt. After starting the operation of the Cooling Lower Motor, the output of the Cooling Lower Belt Position Sensor was monitored at a constant period and the value of the Sensor was an abnormal value (AD Value < 16 or 1015 < = AD Value) for 10 consecutive times.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Cooling Lower Belt Position Sensor (DC140 [010-143]) for operation failure. (PL 16.7)
- Cooling Lower Walk Motor (DC330 [010-036]) for operation failure. (PL 16.9)
- Cooling Lower Belt Position Sensor for damage.
- Cooling Lower Belt Position Sensor for installation failure.
- Lower Cooling Belt damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-360 Fusing Unit Over Heat Fail

BSD-ON:CH10.14, CH10.10, CH10.11

Either Heat Roll STS 3, External Roll STS 3, or Internal Roll STS 3 has an abnormally high temperature or open circuit.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- H/R STS 3 (DC140 [010-134]) for error. (PL 7.4)
- E/R STS 3 (DC140 [010-137]) for error. (PL 7.7)
- I/R STS 3 (DC140 [010-140]) for error. (PL 7.14)
- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)
- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for operation failure. (PL 7.7)
- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for operation failure. (PL 7.14)
- Conduction of H/R Thermostat 1/2. (PL 7.4)
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- Conduction of I/R Thermostat 1/2. (PL 7.14)
- Poor contact of the Drawer Connector (DP/DJ884, DP/DJ886, DP/DJ887, DP/DJ888).

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)

- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-362 Decurler Roll Drive Motor Fail

BSD-ON:CH10.30

A motor error was detected 5 consecutive times while driving the Decurler Roll Drive Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Decurler Roll Drive Motor (DC330 [010-043]) for operation failure. (PL 16.25)
- The connection between the Decurler Roll Drive Motor J415-8 and FSR/INV_1 MD PWB J666_F1-B8 for open circuit, short circuit, and poor contact.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-363 Decurler Belt Drive Motor Fail

BSD-ON:CH10.29

A motor error was detected 5 consecutive times while driving the Decurler Belt Drive Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Decurler Belt Drive Motor (DC330 [010-044]) for operation failure. (PL 16.27)
- The connection between the Decurler Belt Drive Motor J422-4 and FSR/INV_1 MD PWB J666_F1-B2 for open circuit, short circuit, and poor contact.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-364 Decurler Roll Initialize Fail

BSD-ON:CH10.32

Initialization of Decurler Roll did not complete within the specified time from Decurler Roll Pene Motor ON (the output of Decurler Cam Roll Sensor does not change).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Decurler Cam Roll Sensor (DC330 [010-113]). (PL 16.22)
- Decurler Roll Pene Motor (DC330 [010-045/046] (CCW/CW)) for operation failure. (PL 16.26)
- The Gear and Cam between Decurler Roll Pene Motor and Cam Shaft for wear and damage.
- The Decurler Cam Roll Sensor Actuator for installation failure and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)

010-365 Decurler Belt Initialize Fail

BSD-ON:CH10.31

Initialization of Decurler Belt did not complete within the specified time from Decurler Belt Pene Motor ON (the output of DCR Belt Cam Sensor does not change).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Decurler Belt Cam Sensor (DC330 [010-114]) for operation failure. (PL 16.22)
- Decurler Belt Pene Motor (DC330 [010-047/048] (CCW/CW)) for operation failure. (PL 16.26)
- The Gear and Bearing between Decurler Belt Pene Motor and Cam Shaft for wear and damage.
- The DCR Belt Cam Sensor Actuator for installation failure and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)

010-366 Burr Press Retract Motor Fail

BSD-ON:CH8.10

The output of the Burr Press Retract Sensor does not change after the specified time has passed from turning the Burr Press Retract Motor ON.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Burr Press Retract Sensor (DC330 [010-111]) for operation failure. (PL 12.4)
- Burr Press Retract Motor (DC330 [010-040] (Contact/Retract Cycle)) for operation failure. (PL 12.4)
- The Burr Press Retract Sensor Actuator for installation failure and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

010-367 Cooling Upper Steering Position Sensor Fail

BSD-ON:CH10.26

The slope of the Steering Roll changed due to the Cooling Upper Walk Motor during the Cooling Upper Belt Positioning Operation, but the output of the Upper Cooling Upper Steering Position Sensor remains unchanged.

NOTE: *If this Fail is occurring, do not execute DC330 [010-035/036] (Cooling Upper/Lower Walk Motor). This would lead to damage of the Upper/Lower Cooling Belt.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Cooling Upper Steering Position Sensor (DC330 [010-109]) for operation failure. (PL 16.6)
- Cooling Upper Walk Motor (DC330 [010-035]) for operation failure. (PL 16.6)
- Cooling Upper Steering Position Sensor Actuator (Gear) for damage and installation failure.
- The Upper Steering Roll Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-368 Cooling Lower Steering Position Sensor Fail

BSD-ON:CH10.28

The slope of the Steering Roll changed due to the Cooling Lower Walk Motor during the Cooling Lower Belt Positioning Operation, but the output of the Upper Cooling Lower Steering Position Sensor remains unchanged.

NOTE: *If this Fail is occurring, do not execute DC330 [010-035/036] (Cooling Upper/Lower Walk Motor). This would lead to damage of the Upper/Lower Cooling Belt.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Cooling Lower Steering Position Sensor (DC330 [010-110]) for operation failure. (PL 16.9)
- Cooling Lower Walk Motor (DC330 [010-036]) for operation failure. (PL 16.9)
- Cooling Lower Steering Position Sensor Actuator (Gear) for damage and installation failure.
- The Lower Steering Roll Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-369 I/R STS 3 Over Heat Fail

BSD-ON:CH10.14, CH10.12, CH10.11

The system detected an abnormal high temperature of the Internal Roll STS 3.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- I/R STS 3 (DC140 [010-140]) for error. (PL 7.14)
- I/R STS 1/2 (DC140 [010-138/139]) for error, or I/R STS 1/2 for falling off, contamination, foreign substances. (PL 7.14)
- The connection between the Fusing ADC PWB J740 and the I/R STS 3 P244 for short circuit.
- Conduction of I/R Thermostat 1/2. (PL 7.14)
- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for operation failure. (PL 7.14)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-370 H/R STS 2 Over Heat Fail

BSD-ON:CH10.12, CH10.14, CH10.10

The system detected an abnormal high temperature of the Heat Roll STS 2.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- H/R STS 2 (DC140 [010-133]) for error. (PL 7.4)
- H/R STS 1/3 (DC140 [010-132/134]) for error, or H/R STS 1/3 for falling off, contamination, foreign substances. (PL 7.4)
- The connection between the Fusing ADC PWB J740 and the H/R STS 2 P245 for short circuit.
- Conduction of H/R Thermostat 1/2. (PL 7.4)
- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-371 H/R STS 3 Over Heat Fail

BSD-ON:CH10.14, CH10.12, CH10.10

The system detected an abnormal high temperature of the Heat Roll STS 3.

NOTE: *To clear this Fail, first remove the cause, clear the value of NVM [741-816] (High Temperature Error Detection History) to '0', and then turn the power OFF and ON. The Fail will not be removed unless the value is cleared to [0].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- H/R STS 3 (DC140 [010-134]) for error. (PL 7.4)
- H/R STS 1/2 (DC140 [010-132/133]) for error, or H/R STS 1/2 for falling off, contamination, foreign substances. (PL 7.4)
- The connection between the Fusing ADC PWB J740 and the H/R STS 3 P245 for short circuit.
- Conduction of H/R Thermostat 1/2. (PL 7.4)
- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-374 H/R STS 2 Disconnection Fail

BSD-ON:CH10.12

The AD value of Heat Roll STS 2 is equivalent to the open circuit AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- H/R STS 2 (DC140 [010-133]) for open circuit. (PL 7.4)
- Poor contact of Drawer Connector (DP/DJ887).
- The connection between the Fusing ADC PWB J740 and the H/R STS 2 P245 for open circuit or poor contact.
- Fusing ADC PWB CR 13 (Green) is lit. (AVREF +3.3VDC)

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-379 Fusing Belt Fan 2 Fail

FIP

Refer to 010-CF-001 FIP.

010-380 Fusing Belt Fan 3 Fail

FIP

Refer to 010-CF-001 FIP.

010-381 P/R Fan 2 Fail

FIP

Refer to 010-CF-002 FIP.

010-382 P/R Fan 3 Fail

FIP

Refer to 010-CF-002 FIP.

010-386 Fusing Unit Transition 1 Fail

BSD-ON:CH10.12, CH10.10, CH10.11, CH10.13, CH10.23

The Fusing Unit did not switch to Ready state within the specified amount of time after Cold Not Ready (Waiting state to warm the parts when the temperature of the parts become lower that the specified temperature) has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)
- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for operation failure. (PL 7.7)
- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for operation failure. (PL 7.14)
- Conduction of H/R Thermostat 1/2. (PL 7.4)
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- Conduction of I/R Thermostat 1/2. (PL 7.14)
- Poor contact of the Drawer Connector (DP/DJ884, DP/DJ886, DP/DJ887, DP/DJ888).
- H/R STS 1 (DC140 [010-132]) for error. (PL 7.4)
- E/R STS 1 (DC140 [010-135]) for error. (PL 7.7)
- I/R STS 1 (DC140 [010-138]) for error. (PL 7.14)
- IRS Sensor 1 (Rear) (DC140 [010-130]) for operation failure. (PL 7.9)
- IRS Sensor 2 (Front) (DC140 [010-131]) for operation failure. (PL 7.9)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)

010-387 Fusing Unit Transition 2 Fail

BSD-ON:CH10.12, CH10.21, CH10.22, CH10.13, CH10.23

The Fusing Unit does not switch to Ready state within the specified amount of time after Hot Not Ready (Waiting state to cool the parts when the temperature of the parts become higher that the specified temperature) has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Fusing Belt Fan 1/2/3 (DC330 [010-009/010/011]) for operation failure. (PL 7.9)
- The Fusing P/R Fan 1/2/3 (DC330 [010-012/013/014]) for operation failure. (PL 7.9)
- H/R STS 1 (DC140 [010-132]) for error. (PL 7.4)
- E/R STS 1 (DC140 [010-135]) for error. (PL 7.7)
- I/R STS 1 (DC140 [010-138]) for error. (PL 7.14)
- IRS Sensor 1 (Rear) (DC140 [010-130]) for operation failure. (PL 7.9)
- IRS Sensor 2 (Front) (DC140 [010-131]) for operation failure. (PL 7.9)
- Poor contact of the Drawer Connector (DP/DJ884, DP/DJ886, DP/DJ887, DP/DJ888).

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- Fusing ADC PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-389 Fusing Transition 4 Fail

BSD-ON:CH10.12, CH10.10, CH10.11, CH10.13, CH10.21, CH10.22, CH10.23

The Fusing Unit does not go into Ready state within the specified time after Conditioning Wait (when adjusting parts temperature of the next Job) has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H/R Main Lamp 1/2 (DC330 [010-015/023]) for operation failure. (PL 7.4)
- The H/R Sub Lamp (DC330 [010-024]) for operation failure. (PL 7.4)
- The E/R Main Lamp 1/2 (DC330 [010-016/017]) for operation failure. (PL 7.7)
- The E/R Sub Lamp (DC330 [010-018]) for operation failure. (PL 7.7)
- The I/R Main Lamp 1/2 (DC330 [010-019/020]) for operation failure. (PL 7.14)
- The I/R Sub Lamp 1/2 (DC330 [010-021/022]) for operation failure. (PL 7.14)
- Conduction of H/R Thermostat 1/2. (PL 7.4)
- Conduction of E/R Thermostat 1/2. (PL 7.7)
- Conduction of I/R Thermostat 1/2. (PL 7.14)
- Poor contact of the Drawer Connector (DP/DJ884, DP/DJ886, DP/DJ887, DP/DJ888).
- The Fusing Belt Fan 1/2/3 (DC330 [010-009/010/011]) for operation failure. (PL 7.9)
- The Fusing P/R Fan 1/2/3 (DC330 [010-012/013/014]) for operation failure. (PL 7.9)
- H/R STS 1 (DC140 [010-132]) for error. (PL 7.4)
- E/R STS 1 (DC140 [010-135]) for error. (PL 7.7)
- I/R STS 1 (DC140 [010-138]) for error. (PL 7.14)
- IRS Sensor 1 (Rear) (DC140 [010-130]) for operation failure. (PL 7.9)
- IRS Sensor 2 (Front) (DC140 [010-131]) for operation failure. (PL 7.9)

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Fusing ADC PWB (PL 18.7)
- TRIAC PWB (PL 18.8)
- FSR/INV Core PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)

010-390 E/Roll Motor Faill

BSD-ON:CH10.8

The Fail signal indicating rotation/stoppage of the motor is in a state where the rotation is not stable (High) after the E/Roll Motor operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The E/R Motor (DC330 [010-061]) for operation failure. (PL 7.15)
- The connection between the E/R Motor J486-4 and FSR/INV_1 MD PWB J665_F1-A8 for open circuit, short circuit, and poor contact.
- The Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-391 H/R Lamp Warmup ON Time Fail 2

BSD-ON:CH10.12

The ON state of Heat Roll Lamp lasted longer than the specified time after Fusing Unit warm-up operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-323 (H/R Lamp Warmup ON Time Fail 1) FIP.

010-392 E/R Lamp Warmup ON Time Fail 2

BSD-ON:CH10.13

The ON state of External Roll Lamp lasted longer than the specified time after Fusing Unit warm-up operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-324 (E/R Lamp Warmup ON Time Fail 1) FIP.

010-393 I/R Lamp Warmup ON Time Fail 2

BSD-ON:CH10.12

The ON state of Internal Roll Lamp lasted longer than the specified time after Fusing Unit warm-up operation started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 010-325 (I/R Lamp Warmup ON Time Fail 1) FIP.

010-400 Fusing WEB Near End

BSD-ON:CH10.20

The Fusing WEB needs to be replaced soon.

Cause/Action

The WEB CRU needs to be replaced soon. Replace the WEB CRU as required. (PL 7.2)

NOTE: *After replacement, clear the counter value of DC135 [010-800] (WEB CRU).*

010-401 Fusing Unit Warm Up

BSD-ON:-

Warm Up Mode is activated as the following Fusing Wait occurred.

- At Job Start, any of H/R, E/R, I/R, or P/R is found to have a difference higher than the specified temperature.
- When Job In Progress, any of H/R, E/R, I/R, or P/R is found to be dropping below the specified temperature.
- When Job In Progress, any of H/R, E/R, I/R, or P/R is found to be rising above the specified temperature.
- During Cleaning Cycle after Fusing Jam.
- At Job Start, any of H/R, E/R, or I/R is found to be the same or higher than the specified temperature during cooling of the Fusing Belt.
- At Job Start, Pressure Roll is found to be the same or higher than the specified temperature during cooling of the Pressure Roll.

Cause/Action

1. Wait until exit of Warm Up Mode.
2. Start job after exit.

010-402 Web CRU Exchange

BSD-ON:CH10.20

The installation of an unused Web was detected.

Cause/Action

Follow the instructions on the UI.

010-405 Oil Wick Life Limit

BSD-ON:-

It is time to replace the Oil Wick.

Cause/Action

Replace the Oil Wick, and clear the counter value of DC135 [010-801] (Oil Wick). (PL 7.4)

010-406 Fusing Belt Life Limit

BSD-ON:-

It is time to replace the Fusing Belt.

Cause/Action

Replace the Fusing Belt, and clear the counter value of DC135 [010-803] (Fusing Belt). (PL 7.4)

010-407 P/Roll Life Limit

BSD-ON: -

It is time to replace the Pressure Roll.

Cause/Action

Replace the Pressure Roll, and clear the counter value of DC135 [010-804] (Pressure Roll). (PL 7.3)

010-408 Sheet Life Limit

BSD-ON: -

It is time to replace the Sheet (Pad Assembly).

Cause/Action

Replace the Sheet (Pad Assembly), and clear the counter value of DC135 [010-806] (Sheet). (PL 7.14)

010-409 P/R Finger Life Limit

BSD-ON: -

It is time to replace the Pressure Roll Finger.

Cause/Action

Replace the Pressure Roll Finger, and clear the counter value of DC135 [010-808] (Chute Assy-Finger PR). (PL 7.3)

010-410 Trim (V-Tra Belt Exit) Life Limit

BSD-ON: -

It is time to replace the Trim (V-Tra Belt Exit).

Cause/Action

Replace the Trim (V-Tra Belt Exit), and clear the counter value of DC135 [010-810] (Trim (V-Tra Belt Exit)). (PL 7.6)

010-412 Cooling Belt Upper Life Limit

BSD-ON: -

It is time to replace the Upper Cooling Belt.

Cause/Action

Replace the Upper Cooling Belt, and clear the counter value of DC135 [010-840] (Cooling Belt Upper). (PL 16.5)

010-413 Pene Roll Life Limit

BSD-ON: -

It is time to replace the Pene Roll Assembly.

Cause/Action

Replace the Pene Roll Assembly, and clear the counter value of DC135 [010-822] (Roll Assy-Lever Pene). (PL 16.23)

010-415 Trim (Cooling Belt) Life Limit

BSD-ON: -

It is time to replace the Trim (Cooling Belt).

Cause/Action

Replace the Trim (Cooling Belt), and clear the counter value of DC135 [010-848] (Trim (Cooling Belt)). (PL 16.5, PL 16.7)

010-416 Cooling Belt Lower Life Limit

BSD-ON: -

It is time to replace the Lower Cooling Belt.

Cause/Action

Replace the Lower Cooling Belt, and clear the counter value of DC135 [010-841] (Cooling Belt Lower). (PL 16.7)

010-600 Out Temperature Sensor Fail

BSD-ON:CH10.14

Out Env Sensor Error (output signal of the sensor is equivalent to the open circuit or short circuit error value) was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Out Env Sensor (DC140 [010-141]) error. (PL 16.19)
- Out Env Sensor for installation failure, contamination, and foreign substances.
- The connection between the Fusing ADC PWB J742 and Out Env Sensor J829 for open circuit, short circuit, and poor contact.

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-601 Out Temperature Fail

BSD-ON:CH10.14

The system detected that the machine use environment temperature is out of the specification range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Usage Environmental Temperature of the Machine.
- Out Env Sensor (DC140 [010-141]) error. (PL 16.19)
- Out Env Sensor for installation failure, contamination, and foreign substances.
- The connection between the Fusing ADC PWB J742 and Out Env Sensor J829 for open circuit, short circuit, and poor contact.

If no problem is found, replace Fusing ADC PWB. (PL 18.7)

010-606 Fusing Belt Walk Fail

BSD-ON:CH10.15, CH10.16

Fusing Belt does not move to In nor Out even when the specified time has elapsed during Fusing Belt steering operation (output of Fusing Belt Position Sensor (In Cont, Out Cont) does not change).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Fusing Belt Walk Motor (DC330 [010-003]) for operation failure. (PL 7.8)
- The Fusing Belt Steering Sensor (DC330 [010-101]) for operation failure. (PL 7.8)
- Gear of I/R steering mechanism for wear and damage.
- The Fusing Belt Steering Sensor Actuator (Steering Lever) for installation failure and damage.
- The Fusing Belt Steering Sensor for installation failure.
- The Fusing Belt for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-607 Cooling Upper Walk Motor Initial Position Warning

BSD-ON:CH10.26

Error in initial position value of Cooling Upper Walk Motor was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Perform the following:

- Cooling Upper Walk Motor (DC330 [010-035]) for operation failure. (PL 16.6)
- Cooling Upper Steering Position Sensor (DC330 [010-109]) for operation failure. (PL 16.6)
- Cooling Upper Steering Position Sensor Actuator (Gear) for damage and installation failure.
- The Upper Steering Roll Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-608 Cooling Lower Walk Motor Initial Position Warning

BSD-ON:CH10.28

Error in initial position value of Cooling Lower Walk Motor was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Perform the following:

- Cooling Lower Walk Motor (DC330 [010-036]) for operation failure. (PL 16.9)
- Cooling Lower Steering Position Sensor (DC330 [010-110]) for operation failure. (PL 16.9)
- Cooling Lower Steering Position Sensor Actuator (Gear) for damage and installation failure.
- The Lower Steering Roll Drive Gear for wear and damage.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

010-609 Cooling Upper Belt Position Sensor In Limit Edge Info

BSD-ON:CH10.26

Detected abnormality of the Belt Position of the Cooling Upper Belt.

Cause/Action

Refer to 010-352 (Cooling Upper Belt Position Sensor In Limit Fail) FIP.

010-610 Cooling Lower Belt Position Sensor In Limit Edge Info

BSD-ON:CH10.28

Detected abnormality of the Belt Position of the Cooling Lower Belt.

Cause/Action

Refer to 010-353 (Cooling Lower Belt Position Sensor In Limit Fail) FIP.

010-611 Cooling Upper Belt Position Sensor In Limit Center Info

BSD-ON:CH10.26

Detected abnormality of the Belt Position of the Cooling Upper Belt.

Cause/Action

Refer to 010-352 (Cooling Upper Belt Position Sensor In Limit Fail) FIP.

010-612 Cooling Lower Belt Position Sensor In Limit Center Info

BSD-ON:CH10.28

Detected abnormality of the Belt Position of the Cooling Lower Belt.

Cause/Action

Refer to 010-353 (Cooling Lower Belt Position Sensor In Limit Fail) FIP.

010-613 Cooling Upper Belt Position Sensor Out Limit Edge Info

BSD-ON:CH10.26

Detected abnormality of the Belt Position of the Cooling Upper Belt.

Cause/Action

Refer to 010-352 (Cooling Upper Belt Position Sensor In Limit Fail) FIP.

010-614 Cooling Lower Belt Position Sensor Out Limit Edge Info

BSD-ON:CH10.28

Detected abnormality of the Belt Position of the Cooling Lower Belt.

Cause/Action

Refer to 010-353 (Cooling Lower Belt Position Sensor In Limit Fail) FIP.

010-615 Cooling Upper Belt Position Sensor Out Limit Center Info

BSD-ON:CH10.26

Detected abnormality of the Belt Position of the Cooling Upper Belt.

Cause/Action

Refer to 010-352 (Cooling Upper Belt Position Sensor In Limit Fail) FIP.

010-616 Cooling Lower Belt Position Sensor Out Limit Center Info

BSD-ON:CH10.28

Detected abnormality of the Belt Position of the Cooling Lower Belt.

Cause/Action

Refer to 010-353 (Cooling Lower Belt Position Sensor In Limit Fail) FIP.

010-618 Fusing Belt Speed Sensor Fail Warning Print

BSD-ON:CH10.7

The output of the Fusing Belt Speed Sensor does not change after the specified time has passed from turning the Fusing Motor ON.

Cause/Action

Refer to 010-310 (Fusing Belt Speed Sensor Fail) FIP.

010-619 Fusing Belt Speed Sensor Fail Warning Low

BSD-ON:CH10.7

The output of the Fusing Belt Speed Sensor does not change after the specified time has passed from turning the Fusing Motor ON.

Cause/Action

Refer to 010-310 (Fusing Belt Speed Sensor Fail) FIP.

010-620 Fusing Belt Speed Sensor Fail Warning High

BSD-ON:CH10.7

The output of the Fusing Belt Speed Sensor does not change after the specified time has passed from turning the Fusing Motor ON.

Cause/Action

Refer to 010-310 (Fusing Belt Speed Sensor Fail) FIP.

010-910 Fusing WEB End

BSD-ON:CH10.20

The WEB of the WEB CRU needs to be replaced as it has completely ran out.

Cause/Action

Replace the WEB CRU, and clear the counter value of DC135 [010-800] (WEB CRU). (PL 7.2)

010-911 WEB CRU Not Ready

BSD-ON:CH10.20

The WEB CRU is not set properly.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check whether the WEB CRU is set correctly.
2. Check contamination and deformation of WEB CRU terminal.
3. Check the connection between the Fusing ADC PWB J740 and WEB CRU P911, P908 for open circuit, short circuit, and poor contact.
4. If no problem is found, replace the Fusing ADC PWB. (PL 18.7)

024-310 Engine Replacement Fail - Read #1 Clr

FIP

Refer to 024-CF-001 FIP.

024-312 Engine Replacement Fail - Read #1 Gld

FIP

Refer to 024-CF-001 FIP.

024-313 Engine Replacement Fail - Read #1 Slv

FIP

Refer to 024-CF-001 FIP.

024-314 Engine Replacement Fail - Read #1 Wht

FIP

Refer to 024-CF-001 FIP.

024-315 Engine Replacement Fail - Read #6 Gld

FIP

Refer to 024-CF-001 FIP.

024-316 Engine Replacement Fail - Read #6 Slv

FIP

Refer to 024-CF-001 FIP.

024-317 Engine Replacement Fail - Read #6 Wht

FIP

Refer to 024-CF-001 FIP.

024-318 Engine Replacement Fail - Read #1 TX

FIP

Refer to 024-CF-001 FIP.

024-320 Engine Replacement Fail - Write #1 Clr

FIP

Refer to 024-CF-002 FIP.

024-322 Engine Replacement Fail - Write #1 Gld

FIP

Refer to 024-CF-002 FIP.

024-323 Engine Replacement Fail - Write #1 Slv

FIP

Refer to 024-CF-002 FIP.

024-324 Engine Replacement Fail - Write #1 Wht

FIP

Refer to 024-CF-002 FIP.

024-325 Engine Replacement Fail - Write #6 Gld

FIP

Refer to 024-CF-002 FIP.

024-326 Engine Replacement Fail - Write #6 Slv

FIP

Refer to 024-CF-002 FIP.

024-327 Engine Replacement Fail - Write #6 Wht

FIP

Refer to 024-CF-002 FIP.

024-328 Engine Replacement Fail - Write #1 TX

FIP

Refer to 024-CF-002 FIP.

024-330 Engine Replacement Fail - Read #1 P

FIP

Refer to 024-CF-004 FIP.

024-331 Engine Replacement Fail - Write #1 P

FIP

Refer to 024-CF-005 FIP.

024-332 Engine Replacement Fail - Read #6 P

FIP

Refer to 024-CF-004 FIP.

024-333 Engine Replacement Fail - Write #6 P

FIP

Refer to 024-CF-005 FIP.

024-334 Engine Replacement Fail - Read #1 SP1
FIP
Refer to 024-CF-004 FIP.

024-335 Engine Replacement Fail - Write #1 SP1
FIP
Refer to 024-CF-005 FIP.

024-336 Engine Replacement Fail - Read #6 SP1
FIP
Refer to 024-CF-004 FIP.

024-337 Engine Replacement Fail - Write #6 SP1
FIP
Refer to 024-CF-005 FIP.

024-338 Engine Replacement Fail - Read #1 SP2
FIP
Refer to 024-CF-004 FIP.

024-339 Engine Replacement Fail - Write #1 SP2
FIP
Refer to 024-CF-005 FIP.

024-340 Engine Replacement Fail - Read #6 SP2
FIP
Refer to 024-CF-004 FIP.

024-341 Engine Replacement Fail - Write #6 SP2
FIP
Refer to 024-CF-005 FIP.

024-342 Engine Replacement Fail - Read #1 SP3
FIP
Refer to 024-CF-004 FIP.

024-343 Engine Replacement Fail - Write #1 SP3
FIP
Refer to 024-CF-005 FIP.

024-344 Engine Replacement Fail - Read #6 SP3
FIP
Refer to 024-CF-004 FIP.

024-345 Engine Replacement Fail - Write #6 SP3
FIP
Refer to 024-CF-005 FIP.

024-346 Engine Replacement Fail - Read #1 SP4
FIP
Refer to 024-CF-004 FIP.

024-347 Engine Replacement Fail - Write #1 SP4
FIP
Refer to 024-CF-005 FIP.

024-348 Engine Replacement Fail - Read #6 SP4
FIP
Refer to 024-CF-004 FIP.

024-349 Engine Replacement Fail - Write #6 SP4
FIP
Refer to 024-CF-005 FIP.

024-350 Engine Replacement Fail - Read #1 SP5
FIP
Refer to 024-CF-004 FIP.

024-351 Engine Replacement Fail - Write #1 SP5
FIP
Refer to 024-CF-005 FIP.

024-352 Engine Replacement Fail - Read #6 SP5
FIP
Refer to 024-CF-004 FIP.

024-353 Engine Replacement Fail - Write #6 SP5
FIP
Refer to 024-CF-005 FIP.

024-354 Engine Replacement Fail - Read #1 SP6

FIP

Refer to 024-CF-004 FIP.

024-355 Engine Replacement Fail - Write #1 SP6

FIP

Refer to 024-CF-005 FIP.

024-356 Engine Replacement Fail - Read #6 SP6

FIP

Refer to 024-CF-004 FIP.

024-357 Engine Replacement Fail - Write #6 SP6

FIP

Refer to 024-CF-005 FIP.

024-358 Engine Replacement Fail - Read #1 SP7

FIP

Refer to 024-CF-004 FIP.

024-359 Engine Replacement Fail - Write #1 SP7

FIP

Refer to 024-CF-005 FIP.

024-360 Engine Replacement Fail - Read #6 SP7

FIP

Refer to 024-CF-004 FIP.

024-361 Engine Replacement Fail - Write #6 SP7

FIP

Refer to 024-CF-005 FIP.

024-362 Engine Replacement Fail - Read #1 SP8

FIP

Refer to 024-CF-004 FIP.

024-363 Engine Replacement Fail - Write #1 SP8

FIP

Refer to 024-CF-005 FIP.

024-364 Engine Replacement Fail - Read #6 SP8

FIP

Refer to 024-CF-004 FIP.

024-365 Engine Replacement Fail - Write #6 SP8

FIP

Refer to 024-CF-005 FIP.

024-366 Engine Replacement Fail - Read #1 SP9

FIP

Refer to 024-CF-004 FIP.

024-367 Engine Replacement Fail - Write #1 SP9

FIP

Refer to 024-CF-005 FIP.

024-368 Engine Replacement Fail - Read #6 SP9

FIP

Refer to 024-CF-004 FIP.

024-369 Engine Replacement Fail - Write #6 SP9

FIP

Refer to 024-CF-005 FIP.

024-370 Engine Replacement Fail - Read #1 SP10

FIP

Refer to 024-CF-004 FIP.

024-371 Engine Replacement Fail - Write #1 SP10

FIP

Refer to 024-CF-005 FIP.

024-372 Engine Replacement Fail - Read #6 SP10

FIP

Refer to 024-CF-004 FIP.

024-373 Engine Replacement Fail - Write #6 SP10

FIP

Refer to 024-CF-005 FIP.

024-374 Engine Replacement Fail - Read #1 SP11
FIP
Refer to 024-CF-004 FIP.

024-375 Engine Replacement Fail - Write #1 SP11
FIP
Refer to 024-CF-005 FIP.

024-376 Engine Replacement Fail - Read #6 SP11
FIP
Refer to 024-CF-004 FIP.

024-377 Engine Replacement Fail - Write #6 SP11
FIP
Refer to 024-CF-005 FIP.

024-378 Engine Replacement Fail - Read #1 SP12
FIP
Refer to 024-CF-004 FIP.

024-379 Engine Replacement Fail - Write #1 SP12
FIP
Refer to 024-CF-005 FIP.

024-380 Engine Replacement Fail - Read #6 SP12
FIP
Refer to 024-CF-004 FIP.

024-381 Engine Replacement Fail - Write #6 SP12
FIP
Refer to 024-CF-005 FIP.

024-382 Engine Replacement Fail - Read #1 SP13
FIP
Refer to 024-CF-004 FIP.

024-383 Engine Replacement Fail - Write #1 SP13
FIP
Refer to 024-CF-005 FIP.

024-384 Engine Replacement Fail - Read #6 SP13
FIP
Refer to 024-CF-004 FIP.

024-385 Engine Replacement Fail - Write #6 SP13
FIP
Refer to 024-CF-005 FIP.

024-386 Engine Replacement Fail - Read #1 SP14
FIP
Refer to 024-CF-004 FIP.

024-387 Engine Replacement Fail - Write #1 SP14
FIP
Refer to 024-CF-005 FIP.

024-388 Engine Replacement Fail - Read #6 SP14
FIP
Refer to 024-CF-004 FIP.

024-389 Engine Replacement Fail - Write #6 SP14
FIP
Refer to 024-CF-005 FIP.

024-390 Engine Replacement Fail - Read #1 SP15
FIP
Refer to 024-CF-004 FIP.

024-391 Engine Replacement Fail - Write #1 SP15
FIP
Refer to 024-CF-005 FIP.

024-392 Engine Replacement Fail - Read #6 SP15
FIP
Refer to 024-CF-004 FIP.

024-393 Engine Replacement Fail - Write #6 SP15
FIP
Refer to 024-CF-005 FIP.

024-394 Engine Replacement Fail - Read #1 SP16

FIP

Refer to 024-CF-004 FIP.

024-395 Engine Replacement Fail - Write #1 SP16

FIP

Refer to 024-CF-005 FIP.

024-396 Engine Replacement Fail - Read #6 SP16

FIP

Refer to 024-CF-004 FIP.

024-397 Engine Replacement Fail - Write #6 SP16

FIP

Refer to 024-CF-005 FIP.

024-402 Finisher Under Initialization

BSD-ON:-

Job was started during initialization of Finisher.

Cause/Action

1. Turn the power OFF and ON.

024-403 Output Device - Waiting for the next Sheet

BSD-ON:-

The time until the next paper can be accepted exceeded the allowable idle time of the Print Engine in output device processing.

Cause/Action

1. Turn the power OFF and ON.

024-404 Waiting for Server

BSD-ON:-

Without receiving job end notification from Print Server by the IOT System, and based on the information received from Print Server, output of all sheets was completed successfully and transition to Standby occurred.

Cause/Action

No action necessary.

024-911 Media File Name NG

BSD-ON:-

A Media file not registered in the IOT System was instructed from Print Server.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, check if the Media file information of UI matches the Media file information of Print Server.

024-912 Tray Unselected

BSD-ON:-

There is no Media file specified by Print Server and Tray assigned with the size.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, check if the size specified by the Media file matches the paper size of the Tray.

024-913 Media File NG

BSD-ON:-

- There is a discrepancy in which control is not valid for the parameters of the Media file specified by the job when a job is received and executed.
- The Media file assigned to the Tray which is in use by the job has been changed by a method other than the feature provided by the UI, and job control is no longer valid.
- Tray #N to which the Media file is assigned was specified from Print Server, but the instruction of Print Server and the paper attributes are different.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, check the method of using operator.

024-914 Sheet Queue Full (Job Cancel)

BSD-ON:-

Sheet (job information) queue received from Print Server was detected to be full.

Cause/Action

1. Turn the power OFF and ON.

024-915 Select Stop Button

BSD-ON:-

Stop was instructed by the user on the IOT UI during the job.

Cause/Action

1. Resume the job from IOT UI.

024-916 Select Delete Button

BSD-ON:-

Delete was instructed by the user on the IOT UI or Print Server UI during the job.

Cause/Action

1. No action necessary.

024-918 AOS NG

BSD-ON:-

When a Job whose output destination is [Auto] is sent from Print Server, the following IOT System state was detected.

- Output to HCS Tray of HCS 1 or HCS 2 is not possible when automatic output destination switching is [Allow].
- Automatic output destination switching is set to [Disallow].

Cause/Action

1. Turn the power OFF and ON.
2. If the problem still persists, check the following items.
   - HCS 2 is installed properly.
   - Automatic output destination switching is set to [Allow]. (NVM DC131 [700-009])

024-919 HCS Mixed Size Stack Unavailable

BSD-ON:-

Paper which is different from paper to be output to the HCS Tray was detected to be remaining in the HCS Tray when Mixed Stack unavailable setting is set.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, check that Mixed Stack is set to [Allow]. (NVM DC131 [720-037])
3. Check that there are different paper remaining in HCS Tray, and remove them.

024-920 HCS-2 Mixed Size Stack Unavailable

BSD-ON:-

Paper which is different from paper to be output to the HCS Tray (Duplex) was detected to be remaining in the HCS Tray (Duplex) when Mixed Stack unavailable setting is set.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, check that Mixed Stack is set to [Allow]. (NVM DC131 [720-037])
3. Check that there are different paper remaining in HCS Tray, and remove them.

024-921 Color Mode Mismatch

BSD-ON:-

- A combination of Engine Action and color mode can not be realized.
- It can not be realized by the engine, in which the specified Engine Action is actually installed.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, check engine settings and color mode of the executed job, and check if it can be performed by the installed Engine.

024-922 Job Start Adjustment Ended Halfway

BSD-ON:-

All the adjustment functions that should be executed in ILS job start adjustment did not end successfully.

Cause/Action

1. Continue or cancel Job.
2. Turn the power OFF and ON.

024-923 Downloading Fault

BSD-ON:-

The Diag function (NVM Read/Write/Initialize) was executed in a series of Auto Download operations.

Cause/Action

Let Auto Download complete.

NOTE: *Execution of the Diag function other than with the Auto Download Tool is prohibited during this fault occurrence.*

024-924 KO NVM Write Fail

BSD-ON:-

Failed to write to NVM with the KO NVM Read/Write function.

Cause/Action

1. Follow the instructions on the UI.
2. If the problem persists, take note of the affected NVM Chain-Link No. and, after obtaining the log, request the Development Team to check.

   NOTE: *Check that the affected NVM is not write-protected.*

024-940 Fusing Web Type Mismatch

BSD-ON:CH10.20

The installed Fusing Web is not suitable for job execution.

Cause/Action

Check the Fusing Web type and install a correct Fusing Web.

024-942 IP Parameter Setting in Process

BSD-ON:-

Interposer in Tray setting was specified from Print Server.

Cause/Action

1. Cancel the job.
2. Turn the power OFF and ON.

024-945 EDI Profile NG 1

FIP

Refer to 024-CF-003 FIP.

024-946 EDI Profile NG 2

FIP

Refer to 024-CF-003 FIP.

024-947 EDI Profile NG 3

FIP

Refer to 024-CF-003 FIP.

024-948 EDI Profile NG 4

FIP

Refer to 024-CF-003 FIP.

024-949 EDI Profile NG 5

FIP

Refer to 024-CF-003 FIP.

024-950 EDI Profile NG 6

FIP

Refer to 024-CF-003 FIP.

024-951 EDI Profile NG 7

FIP

Refer to 024-CF-003 FIP.

024-952 EDI Profile NG 8

FIP

Refer to 024-CF-003 FIP.

024-953 EDI Profile NG 9

FIP

Refer to 024-CF-003 FIP.

024-954 EDI Profile NG 10

FIP

Refer to 024-CF-003 FIP.

024-955 EDI Profile NG 11

FIP

Refer to 024-CF-003 FIP.

024-956 EDI Profile NG 12

FIP

Refer to 024-CF-003 FIP.

027-310 Server Logic Fail Sys Command

BSD-ON: -

Command sent to Print Server is notified to be error.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn Print Server OFF then ON.
2. Turn OFF the power and check the following:
   - Contamination, poor contact of connector between Print Server and IOT
   - Pin damage of connector between Print Server and IOT
   - Connection cable damage between Print Server and IOT
3. When the problem persists, refer to service manual of the Print Server used in the system to isolate the fault.

027-311 Server Broken

BSD-ON: -

Occurrence of Fail, in which it is impossible for Print Server-PRINT to continue is notified by Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 027-310 (Server Logic Fail Sys Command) FIP.

027-314 Communication Fail Sys - Server

BSD-ON: -

Communication error has occurred between PC Sys - Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 027-310 (Server Logic Fail Sys Command) FIP.

027-315 Server Logic Fail Server Command

BSD-ON: -

Command received by Print Server is an error.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 027-310 (Server Logic Fail Sys Command) FIP.

027-322 Initialize Request From Server

BSD-ON: -

Received initialization instruction of Data Link from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 027-310 (Server Logic Fail Sys Command) FIP.

027-940 Server Job Parameter NG

BSD-ON: -

There is an error in the job parameters received from Print Server.

Cause/Action

1. Turn Print Server OFF then ON.
2. When the problem persists, refer to service manual of the Print Server used in the system to isolate the fault.

027-941 Stop From Server

BSD-ON: -

There is a stop instruction from Print Server during Print Server-PRINT.

Cause/Action

1. Resume the job from Print Server.

027-942 Clearing Fault Before Machine Stops

BSD-ON: -

Device started to stop because of a fault, but it was detected before stopping that the fault had been cleared.

Cause/Action

Turn the power OFF and ON.

041-391 Finisher Logic Fail

BSD-ON: -

Finisher software control error was detected.

Cause/Action

Refer to 047-310 (Output Device Comm Fail) FIP.

029-210 Communication Fail SYS - Attention Light

BSD-ON:CH3.21

Communication error between SYS PWB and Attention Light detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Attention light (DC330 [003-001] (Green)) operation failure. (PL 19.2)
- Check the connection between the Attention Light PWB P/J606 and SYS PWB J649 for open circuit, short circuit, and poor contact.

If no problem is found, replace the SYS PWB. (PL 18.14)

029-211 Attention Light Broken

BSD-ON:CH3.21

Attention Light failure detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Attention light (DC330 [003-001] (Green)) operation failure. (PL 19.2)
- Power supply voltage (+24VDC, +5VDC) to Attention Light PWB.
- Check the connection between the Attention Light PWB P/J606 and SYS PWB J649 for open circuit, short circuit, and poor contact.

If no problem is found, replace the SYS PWB. (PL 18.14)

029-320 Communication Fail Comm - Server

BSD-ON:CH3.6

Communication error between SYS PWB and Print Server detected.

Cause/Action

Turn OFF the power and check the following:

- Check the CDI Cable between Print Server and Half Tone PWB YM for open circuit and poor contact.
- Check the connector (P/J7681) between Half Tone PWB YM and IOT Main PWB for poor contact, damage, and foreign substances.
- Check the connection between the IOT Main PWB J635 and SYS PWB J647 for open circuit, short circuit, and poor contact.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- SYS PWB (PL 18.14)
- Half Tone PWB YM (PL 18.14)
- IOT Main PWB (PL 18.14)
- Print Server (See Print Server manual)

029-321 Comm Logic Fail

BSD-ON:CH3.6

Logic error due to internal cause of SYS PWB detected.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the SYS PWB. (PL 18.14)

029-322 Comm Command Error

BSD-ON:CH3.6

An undefined command was received from the communication destination.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.
   - Print Server (See Print Server manual)
   - SYS PWB (PL 18.14)

029-323 Comm Status Error

BSD-ON:CH3.6

An unexpected command in some internal state was received.

Cause/Action

1. Turn the power OFF and ON.

2. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.
   - Print Server (See Print Server manual)
   - SYS PWB (PL 18.14)

029-324 Comm Watch Dog Reset

BSD-ON:CH3.6

Watch Dog Reset occurred.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the SYS PWB. (PL 18.14)

029-604 Communication Fail CircLink

BSD-ON:CH3.2, CH3.3, CH3.4, CH3.5

CircLink communication error between SYS PWB and IOT detected.

Cause/Action

1. Turn the power off, and check the presence of terminal resistor of MK_DRV Core PWB J643_D.
2. Check the following connections for open circuits, short circuits, and poor contacts.
   - Between SYS PWB J644 and IOT Main PWB J630
   - Between IOT Main PWB J630 and FSR/INV Core PWB J642_F
   - Between FSR/INV Core PWB J642_F and ILS DC PWB J1_ID
   - Between ILS DC PWB J1_ID and PH_Core PWB J642_H
   - Between PH_Core PWB J642_H and MK_EPG Core PWB J642_X
   - Between MK_EPG Core PWB J642_X and MK_DRV Core PWB J642_D
3. If no problem is found, replace the SYS PWB. (PL 18.14)

029-605 Comm NVM Error

BSD-ON:CH3.2

NVM error of SYS PWB detected.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the SYS PWB. (PL 18.14)

042-310 Drum Motor Speed Fail #1

FIP

Refer to 042-CF-001 FIP.

042-311 Drum Motor Speed Fail #2

FIP

Refer to 042-CF-001 FIP.

042-312 Drum Motor Speed Fail #3

FIP

Refer to 042-CF-001 FIP.

042-313 Drum Motor Speed Fail #4

FIP

Refer to 042-CF-001 FIP.

042-314 Drum Motor Speed Fail #5

FIP

Refer to 042-CF-001 FIP.

042-315 Drum Motor Speed Fail #6

FIP

Refer to 042-CF-001 FIP.

042-316 IBT Drive Motor Fail

BSD-ON:CH9.47, CH9.48

The IBT Drive Motor speed error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter Diag, and turned ON DC330 [009-432/434/436/438] (1st BTR Retract #1/#2,#3,#4/#5/#6), and put 1st BTR of all colors in the Retract state.
Turn ON DC330 [004-008] (IBT Drive Motor FWD), and rotate IBT Belt. **Is the IBT Belt rotating?**

Y **N**

Set the value of NVM [749-005] (IBT Drive Motor FB Mode SW) to [0]. Turn ON DC330 [004-008] (IBT Drive Motor FWD), and rotate IBT Belt. **Is the IBT Belt rotating?**

Y **N**

It seems to be IBT Drive Motor failure. Return the value of NVM (749-005) to [1].
Turn OFF the power and check the following:

- Operation failure of IBT Drive Motor (DC330 [004-008]). (PL 6.5)

A **B**

- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV MD PWB (PL 18.3)
- MK_DRV Core PWB (PL 18.3)

It seems to be poor feedback control due to garbled NVM data or input error. Confirm NVM or initialize NVM as necessary, and return the value of NVM [749-005] to [1]. Or check that the value is [1].

It seems to be caused by load increase due to curl, etc. of IBT Cleaning Blade. Replace the IBT Belt Cleaner Assembly (PL 6.2). **Does the Fail occur?**

Y **N**

End

Turn OFF the power. Refer to BSD, and check the connection between the MK_DRV Core PWB J651_D and Belt Encoder Sensor Assembly for open circuits, short circuits, and poor contacts.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- IBT Drive Motor Assembly (PL 6.5)
- MK_DRV MD PWB (PL 18.3)
- MK_DRV Core PWB (PL 18.3)

042-317 Drum Motor Phase A Fail #1

FIP

Refer to 042-CF-002 FIP.

042-318 Drum Motor Phase B Fail #1

FIP

Refer to 042-CF-003 FIP.

042-319 Drum Motor Phase AB Fail #1

FIP

Refer to 042-CF-004 FIP.

042-320 Drum Motor Phase A Fail #2

FIP

Refer to 042-CF-002 FIP.

042-321 Drum Motor Phase B Fail #2

FIP

Refer to 042-CF-003 FIP.

042-322 Drum Motor Phase AB Fail #2

FIP

Refer to 042-CF-004 FIP.

042-323 Drum Motor Phase A Fail #3

FIP

Refer to 042-CF-002 FIP.

042-324 Drum Motor Phase B Fail #3

FIP

Refer to 042-CF-003 FIP.

042-325 Drum Motor Phase AB Fail #3

FIP

Refer to 042-CF-004 FIP.

042-326 Drum Motor Phase A Fail #4

FIP

Refer to 042-CF-002 FIP.

042-327 Drum Motor Phase B Fail #4

FIP

Refer to 042-CF-003 FIP.

042-328 Drum Motor Phase AB Fail #4

FIP

Refer to 042-CF-004 FIP.

042-329 Drum Motor Phase A Fail #5

FIP

Refer to 042-CF-002 FIP.

042-330 Drum Motor Phase B Fail #5

FIP

Refer to 042-CF-003 FIP.

042-331 Drum Motor Phase AB Fail #5

FIP

Refer to 042-CF-004 FIP.

042-332 Drum Motor Phase A Fail #6

FIP

Refer to 042-CF-002 FIP.

042-333 Drum Motor Phase B Fail #6

FIP

Refer to 042-CF-003 FIP.

042-334 Drum Motor Phase AB Fail #6

FIP

Refer to 042-CF-004 FIP.

042-335 IBT Drive Motor Phase A Fail

BSD-ON:CH9.47, CH9.48

The IBT Drive Motor Phase A signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn OFF the power and check the following:

- Belt Encoder Sensor A J142 partially connected, poor contact.
- The connection between the Belt Encoder Sensor A J142 and MK_DRV Core PWB J651_D for open circuit, short circuit, and poor contact.
- Contamination of Belt Encoder Sensor A detector or foreign substances on the detector.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- IBT Drive Motor Assembly (PL 6.5)
- MK_DRV Core PWB (PL 18.3)

042-336 Belt Position Fail

BSD-ON:CH9.49

The Belt Edge Detection Value (monitors the Output Value of Belt Edge Sensor 1) is out of the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the operation position of the IBT Belt. **Is the IBT Belt towards the Front or the Rear Side?**

Y **N**

Perform the following:

1. Check if the following NVM Value is normal.
   - NVM [749-162] (Position Fail Threshold1): 375
   - NVM [749-163] (Position Fail Threshold2): -465
2. Perform [DC956: Belt Edge Run] and check if it finishes successfully.

Perform the following:

- Rewrite the NVM [749-256] (Angle Data Default Value) Value to [0] and return the IBT Belt to the center.
- Check IBT Steering Motor (DC330 [004-010] (6C)) for operation failure. (PL 6.4)
- Check the Belt Edge Sensor 1 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9)

Perform [DC956: Belt Edge Run] after performing the above. **Can the Belt Edge Run be performed?**

Y **N**

Turn OFF the power and replace the MK_DRV Core PWB (PL 18.3). After replacement, perform [DC956: Belt Edge Run] and check if it finishes successfully.

If the problem persists, perform the following to perform the [DC956: Belt Edge Run].

- Check for contamination of the Belt Home Position Sensor 1/2. If it is contaminated, clean or replace the Sensor. (PL 6.5)
- Check for contamination of the Home Position Sticker of the IBT Belt. If it is contaminated, clean the sticker or replace the IBT Belt. (PL 6.3)
- Check for deflection of the IBT Belt (riding on the Belt Edge Sensor 1 Actuator).

Check if finishes correctly.

042-337 Belt Edge Sensor 1 Fail

BSD-ON:CH9.49

Output level of the Belt Edge Sensor 1 does not change.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the operation position of the IBT Belt. **Is the IBT Belt towards the Front or the Rear Side?**

Y **N**

Perform the following:

- Check the Belt Edge Sensor 1 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9)
- Check if there is no clawing in the Actuator of the Belt Edge Sensor 1.
- Check IBT Steering Motor (DC330 [004-010] (6C)) for operation failure. (PL 6.4)

Perform the following:

- Rewrite the NVM [749-256] (Angle Data Default Value) Value to [0] and return the IBT Belt to the center.
- Check IBT Steering Motor (DC330 [004-010] (6C)) for operation failure. (PL 6.4)
- Check the Belt Edge Sensor 1 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9)

Perform [DC956: Belt Edge Run] after performing the above. **Can the Belt Edge Run be performed?**

Y **N**

Turn OFF the power and replace the MK_DRV Core PWB (PL 18.3). After replacement, perform [DC956: Belt Edge Run] and check if it finishes successfully.

If the problem persists, perform the following to perform the [DC956: Belt Edge Run].

- Check for contamination of the Belt Home Position Sensor 1/2. If it is contaminated, clean or replace the Sensor. (PL 6.5)
- Check for contamination of the Home Position Sticker of the IBT Belt. If it is contaminated, clean the sticker or replace the IBT Belt. (PL 6.3)
- Check for deflection of the IBT Belt (riding on the Belt Edge Sensor 1 Actuator).

Check if finishes correctly.

042-338 Fusing Exhaust Fan Fail 1

BSD-ON:CH10.24

Fusing Exhaust Fan 1 failure. When the Fusing Exhaust Fan 1 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Fusing Exhaust Fan 1 (DC330 [004-085]) for operation failure. (PL 4.6)
2. Check the Fusing Exhaust Fan 1 for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-339 Fusing Exhaust Fan Fail 2

BSD-ON:CH10.24

Fusing Exhaust Fan 2 failure. When the Fusing Exhaust Fan 2 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Fusing Exhaust Fan 2 (DC330 [004-087]) for operation failure. (PL 4.6)
2. Check the Fusing Exhaust Fan 2 for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-340 Heat Sink Fan 1 Fail

BSD-ON:CH10.46

Heat Sink Fan 1 failure. When the Heat Sink Fan 1 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Heat Sink Fan 1 (DC330 [004-089]) for operation failure. (PL 4.5)
2. Check the Heat Sink Fan 1 for foreign substances.
3. If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

042-341 Heat Sink Fan 2 Fail

BSD-ON:CH10.46

Heat Sink Fan 2 failure. When the Heat Sink Fan 2 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Heat Sink Fan 2 (DC330 [004-089]) for operation failure. (PL 4.5)
2. Check the Heat Sink Fan 2 for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-342 IOT-R Rear Fan Fail

BSD-ON:CH10.46

IOT-R Rear Cooling Fan failure. When the IOT-R Rear Cooling Fan Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the IOT-R Rear Cooling Fan (DC330 [004-091]) for operation failure. (PL 4.5)
2. Check the IOT-R Rear Cooling Fan for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-343 Fusing Waste Fan Fail

BSD-ON:CH10.24

Fusing Waste Fan failure. When the Fusing Waste Fan Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Fusing Waste Fan (DC330 [004-093]) for operation failure. (PL 4.6)
2. Check the Fusing Waste Fan for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-344 Fusing Lower Fan Fail

BSD-ON:CH10.24

Fusing Lower Fan failure. When the Fusing Lower Fan Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Fusing Lower Fan (DC330 [004-095]) for operation failure. (PL 4.6)
2. Check the Fusing Lower Fan for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-347 CC Fan Fail #1

FIP

Refer to 042-CF-005 FIP.

042-348 CC Fan Fail #2

FIP

Refer to 042-CF-005 FIP.

042-349 CC Fan Fail #3

FIP

Refer to 042-CF-005 FIP.

042-350 CC Fan Fail #4

FIP

Refer to 042-CF-005 FIP.

042-351 CC Fan Fail #5

FIP

Refer to 042-CF-005 FIP.

042-352 CC Fan Fail #6

FIP

Refer to 042-CF-005 FIP.

042-361 Rear Cooling Fan Fail 9

BSD-ON:CH9.83

Rear Cooling Fan 9 failure. When the Rear Cooling Fan 9 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Rear Cooling Fan 9 (DC330 [004-060]) for operation failure. (PL 18.1)
2. Check the Rear Cooling Fan 9 for foreign substances.
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

042-362 Rear Cooling Fan Fail 10

BSD-ON:CH9.83

Rear Cooling Fan 10 failure. When the Rear Cooling Fan 10 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Rear Cooling Fan 10 (DC330 [004-061]) for operation failure. (PL 5.5)
2. Check the Rear Cooling Fan 10 for foreign substances.
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

042-363 ROS Fan 1 Fail

BSD-ON:CH6.17

ROS Fan 1 failure. When the ROS Fan 1 Fail signal indicating an abnormality of the Fan was monitored, and it was found to be Fail (High) the specified number of times or higher in a row.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the ROS Fan 1 (DC330 [004-062]) for operation failure. (PL 4.3)
2. Check the ROS Fan 1 for foreign substances.
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

042-366 Blower Fan Fail #1

FIP

Refer to 042-CF-006 FIP.

042-367 Blower Fan Fail #2

FIP

Refer to 042-CF-006 FIP.

042-368 Blower Fan Fail #3

FIP

Refer to 042-CF-006 FIP.

042-369 Blower Fan Fail #4

FIP

Refer to 042-CF-006 FIP.

042-370 Blower Fan Fail #5

FIP

Refer to 042-CF-006 FIP.

042-371 Blower Fan Fail #6

FIP

Refer to 042-CF-006 FIP.

042-372 Rear Drive Fan Fail #1

FIP

Refer to 042-CF-007 FIP.

042-373 Rear Drive Fan Fail #2

FIP

Refer to 042-CF-007 FIP.

042-374 Rear Drive Fan Fail #3

FIP

Refer to 042-CF-007 FIP.

042-375 Rear Drive Fan Fail #4

FIP

Refer to 042-CF-007 FIP.

042-376 Rear Drive Fan Fail #5

FIP

Refer to 042-CF-007 FIP.

042-377 Rear Drive Fan Fail #6

FIP

Refer to 042-CF-007 FIP.

042-378 LVPS Fan Fail 1

FIP

Refer to 042-CF-008 FIP.

042-379 TRIAC Fan Fail

BSD-ON:CH1.4

TRIAC Fan failure. TRIAC Fan Fail signal was monitored 3 times at 1-second intervals after 5 seconds from the start of Fusing Unit operation, and all 3 times were Fail (High).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the TRIAC Fan (DC330 [004-036]) for operation failure. (PL 18.8)
2. Check the TRIAC Fan for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

042-380 LVPS Fan Fail 2

FIP

Refer to 042-CF-008 FIP.

042-381 LVPS Fan Fail 3

FIP

Refer to 042-CF-008 FIP.

042-382 Drum Motor Encoder Z Fail #1

FIP

Refer to 042-CF-009 FIP.

042-383 Drum Motor Encoder Z Fail #2

FIP

Refer to 042-CF-009 FIP.

042-384 Drum Motor Encoder Z Fail #3

FIP

Refer to 042-CF-009 FIP.

042-385 Drum Motor Encoder Z Fail #4

FIP

Refer to 042-CF-009 FIP.

042-386 Drum Motor Encoder Z Fail #5

FIP

Refer to 042-CF-009 FIP.

042-387 Drum Motor Encoder Z Fail #6

FIP

Refer to 042-CF-009 FIP.

042-388 LVPS Fan Fail 4

FIP

Refer to 042-CF-008 FIP.

042-392 Video Box Fan Fail

BSD-ON:CH6.18, CH1.12

Video Box Fan failure was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Video Box Fan for operation failure. (PL 18.13)
2. Check the Video Box Fan for foreign substances.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - LED Power PWB (PL 18.11)
   - IOT Main PWB (PL 18.14)

042-394 IBT Drive Motor Phase B Fail

BSD-ON:CH9.47, CH9.48

The IBT Drive Motor Phase B signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn OFF the power and check the following:

- Belt Encoder Sensor B J144 partially connected, poor contact.
- The connection between the Belt Encoder Sensor B J144 and MK_DRV Core PWB J651_D for open circuit, short circuit, and poor contact.
- Contamination of Belt Encoder Sensor B detector or foreign substances on the detector.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- IBT Drive Motor Assembly (PL 6.5)
- MK_DRV Core PWB (PL 18.3)

042-395 IBT Drive Motor Phase AB Fail

BSD-ON:CH9.47, CH9.48

The IBT Drive Motor Phase AB signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 042-316 (IBT Drive Motor Fail) FIP.

042-400 Suction Filter #1 Life Limit

BSD-ON:CH3.12

The Suction Filter #1 must be replaced.

Cause/Action

Replace the Suction Filter #1. After replacement, clear the counter value of HFSI [004-810] (Suction Filter #1).

042-401 Suction Filter #6 Life Limit

BSD-ON:CH3.12

The Suction Filter #6 must be replaced.

Cause/Action

Replace the Suction Filter #6. After replacement, clear the counter value of HFSI [004-811] (Suction Filter #6).

042-402 Suction Filter #2/#3/#4 Life Limit

BSD-ON:CH3.12

The Suction Filter Y/M/C must be replaced.

Cause/Action

Replace the Suction Filter #2/#3/#4. After replacement, clear the counter value of HFSI [004-812] (Suction Filter #2/#3/#4).

042-403 Suction Filter #5 Life Limit

BSD-ON:CH3.12

The Suction Filter K must be replaced.

Cause/Action

Replace the Suction Filter #5. After replacement, clear the counter value of HFSI [004-813] (Suction Filter #5).

042-410 VOC Filter Life Limit

BSD-ON:CH3.12

The VOC Filter must be replaced.

Cause/Action

Replace the VOC Filter. After replacement, clear the counter value of HFSI [004-820] (VOC Filter). (PL 19.9)

042-600 Drum Motor Phase A Warning #1

FIP

Refer to 042-CF-002 FIP.

042-601 Drum Motor Phase B Warning #1

FIP

Refer to 042-CF-003 FIP.

042-602 Drum Motor Phase A Warning #2

FIP

Refer to 042-CF-002 FIP.

042-603 Drum Motor Phase B Warning #2

FIP

Refer to 042-CF-003 FIP.

042-604 Drum Motor Phase A Warning #3

FIP

Refer to 042-CF-002 FIP.

042-605 Drum Motor Phase B Warning #3

FIP

Refer to 042-CF-003 FIP.

042-606 Drum Motor Phase A Warning #4

FIP

Refer to 042-CF-002 FIP.

042-607 Drum Motor Phase B Warning #4

FIP

Refer to 042-CF-003 FIP.

042-608 Drum Motor Phase A Warning #5

FIP

Refer to 042-CF-002 FIP.

042-609 Drum Motor Phase B Warning #5

FIP

Refer to 042-CF-003 FIP.

042-610 Drum Motor Phase A Warning #6

FIP

Refer to 042-CF-002 FIP.

042-611 Drum Motor Phase B Warning #6

FIP

Refer to 042-CF-003 FIP.

042-619 Synchro Drum Home Fail

BSD-ON:CH3.22

Synchro Drum Home error was detected. Bit of [FPGA], [APDD Done] was monitored at the cycle of 100 ms or less, and it does not become [1] even when 3 seconds or more have elapsed since the [APDD Done] signal of all the motors that drive it has detected the [EPG Patch Ready] signal.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn the power OFF and check the connection between the MK_DRV Core PWB J655_D and IOT Main PWB J633 for open circuit, short circuit, and poor contact.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV Core PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

042-620 Belt Edge Sensor 3 Fail

BSD-ON:CH9.49

Output level of the Belt Edge Sensor 3 does not change.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the operation position of the IBT Belt. **Is the IBT Belt towards the Front or the Rear Side?**

Y **N**

Perform the following:

- Check the Belt Edge Sensor 3 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.5)
- Check if there is no clawing in the Actuator of the Belt Edge Sensor 3.
- Check IBT Steering Motor (DC330 [004-010] (6C)) for operation failure. (PL 6.4)

Perform the following:

- Rewrite the NVM [749-256] (Angle Data Default Value) Value to [0] and return the IBT Belt to the center.
- Check IBT Steering Motor (DC330 [004-010] (6C)) for operation failure. (PL 6.4)
- Check the Belt Edge Sensor 3 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.5)

Perform [DC956: Belt Edge Run] after performing the above. **Can the Belt Edge Run be performed?**

Y **N**

Turn OFF the power and replace the MK_DRV Core PWB (PL 18.3). After replacement, perform [DC956: Belt Edge Run] and check if it finishes successfully.
If the problem persists, perform the following to perform the [DC956: Belt Edge Run].

A

A

- Check for contamination of the Belt Home Position Sensor 1/2. If it is contaminated, clean or replace the Sensor. (PL 6.5)
- Check for contamination of the Home Position Sticker of the IBT Belt. If it is contaminated, clean the sticker or replace the IBT Belt. (PL 6.3)
- Check for deflection of the IBT Belt (riding on the Belt Edge Sensor 3 Actuator).

Check if finishes correctly.

042-622 B_POSI regi Data Abnormal #1

FIP

Refer to 042-CF-010 FIP.

042-623 B_POSI regi Data Abnormal #2

FIP

Refer to 042-CF-010 FIP.

042-624 B_POSI regi Data Abnormal #3

FIP

Refer to 042-CF-010 FIP.

042-625 B_POSI regi Data Abnormal #4

FIP

Refer to 042-CF-010 FIP.

042-626 B_POSI regi Data Abnormal #5

FIP

Refer to 042-CF-010 FIP.

042-627 SR Belt Skew Data Abnormal #1

FIP

Refer to 042-CF-011 FIP.

042-628 SR Belt Skew Data Abnormal #2

FIP

Refer to 042-CF-011 FIP.

042-629 SR Belt Skew Data Abnormal #3

FIP

Refer to 042-CF-011 FIP.

042-630 SR Belt Skew Data Abnormal #4

FIP

Refer to 042-CF-011 FIP.

042-631 SR Belt Skew Data Abnormal #5

FIP

Refer to 042-CF-011 FIP.

042-632 Side Regi Belt Edge Sensor Fail

BSD-ON:CH9.50, CH9.51, CH9.47

In Belt 1 cycle sampling, the difference between Min and Max of Belt Edge Sensor 2 output value is less than 10 (equivalent of 50 micrometers) in AD value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

NOTE: *When the IBT Belt Assembly or IBT Belt is replaced, set NVM [749-405] (Belt STD Value) to [0] and obtain the reference position of the Belt position after that.*

Cause/Action

Check the following:

- The Belt Edge Sensor 2 for installation failure and contamination. (PL 6.5)
- The Belt Home Position Sensor 1 (DC330 [009-200]) for operation failure. (PL 6.5)
- The Belt Home Position Sensor 2 (DC330 [009-201]) for operation failure. (PL 6.5)
- Operation failure of IBT Drive Motor (DC330 [004-008]). (PL 6.5)
- Mechanical part (including Steering Roll) of IBT steering mechanism for wear and damage.
- The IBT Belt for contamination, damage, and deformation. (PL 6.3)

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV Core PWB (PL 18.3)
- MK_DRV ADC PWB (PL 18.3)
- MK_DRV MD PWB (PL 18.3)

042-633 Side Regi Belt Position Fail

BSD-ON:CH9.50

In Belt 1 cycle sampling, the output value (Belt Edge detection position) of Belt Edge Sensor 2 has been continuously out of range of the specified value (AD value) 12 times.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 042-632 (Side Regi Belt Edge Sensor Fail) FIP.

042-634 Belt Walk Warning

BSD-ON:CH9.49

The Belt Walk Amount in the specified time interval is larger than the specified amount during Belt Walk Mode.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Perform the following:

- Check the Belt Edge Sensor 1/3 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9, PL 6.5)
- Check IBT Steering Motor (DC330 [004-010] (6C)) for operation failure. (PL 6.4)
- Check the IBT Belt for damage and deformation. (PL 6.3)
- Check the mechanical part (including Steering Roll) of IBT steering mechanism for wear and damage.
- Check the IBT Belt Drive Roll for wear and damage. (PL 6.5)
- Check the 2nd BTB In-Out for poor balance.
  - Visually check the movement of the IBT Steering Cam and if the Steering Cam is moving too far, replace the 2nd Belt Assembly. (PL 6.26)

Perform [DC956: Belt Edge Run] after performing the above and check if it finishes successfully.

042-635 Belt Edge Learn Warning

BSD-ON:CH9.49

During Belt Edge Learn Mode, the Belt Walk amount between the specified lap count is larger than the specified amount and the average position of 1 lap of the Belt is out of the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 042-634 (Belt Walk Warning) FIP.

042-636 B_POSI regi Data Abnormal #6

FIP

Refer to 042-CF-010 FIP.

042-637 SR Belt Skew Data Abnormal #6

FIP

Refer to 042-CF-011 FIP.

042-638 IBT Drive Motor Phase A Warning

BSD-ON:CH9.48

The IBT Drive Motor Phase A signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 042-335 (IBT Drive Motor Phase A Fail) FIP.

042-639 IBT Drive Motor Phase B Warning

BSD-ON:CH9.48

The IBT Drive Motor Phase B signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 042-394 (IBT Drive Motor Phase B Fail) FIP.

042-640 IBT Drive Motor Encoder Z Fail

BSD-ON:CH9.48

The IBT Drive Motor Encoder signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn OFF the power and check the following:

- Belt Encoder Sensor Z J144Z partially connected, poor contact.
- The connection between the Belt Encoder Sensor Z J144Z and MK_DRV Core PWB J651_D for open circuit, short circuit, and poor contact.
- Contamination of Belt Encoder Sensor Z detector or foreign substances on the detector.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- IBT Drive Motor Assembly (PL 6.5)
- MK_DRV Core PWB (PL 18.3)

042-641 Belt FF Learn Fail

BSD-ON:CH9.48

Belt FF Learn Cycle (operation to create FF-Table for IBT Drive Motors Feedforward control) did not complete successfully.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check that there is no error in the IBT Drive Motor (DC330 [004-008]) operation.
3. Check the connection between the Belt Encoder Sensor Assembly P806 and MK_DRV Core PWB J651_D for open circuit, short circuit, and poor contact.
4. If the problem persists with the above, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

    - Belt Encoder Sensor Assembly (PL 6.5)
    - MK_DRV Core PWB (PL 18.3)

044-310 FPGA WR/RD Check Err (YM)

FIP

Refer to 044-CF-001 FIP.

044-311 FPGA WR/RD Check Err (CK)

FIP

Refer to 044-CF-001 FIP.

044-312 FPGA WR/RD Check Err (S2S1)

FIP

Refer to 044-CF-001 FIP.

044-313 EQ WR Err (YM)

FIP

Refer to 044-CF-002 FIP.

044-314 EQ WR Err (CK)

FIP

Refer to 044-CF-002 FIP.

044-315 EQ WR Err (S2S1)

FIP

Refer to 044-CF-002 FIP.

044-316 Link Up Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected communication can not be synchronized with Print Server by CDI HSS cable (YM).

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

From the value (decimal) of DC131 [759-649], check the values from bit 0 to bit 5 (binary), and judge whether they are all [1]. **Are the values of bit 0 to bit 5 all [1]?**

Y N

YM color transmission path may be faulty. Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

YM color transmission path not likely to be faulty. Turn Print Server/IOT power OFF then ON. **Does the Fail occur?**

Y N

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-317 Link Up Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected communication can not be synchronized with Print Server by CDI HSS cable (CK).

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

From the value (decimal) of DC131 [759-650], check the values from bit 0 to bit 5 (binary), and judge whether they are all [1]. **Are the values of bit 0 to bit 5 all [1]?**

Y N

CK color transmission path may be faulty. Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

CK color transmission path not likely to be faulty. Turn Print Server/IOT power OFF then ON. **Does the Fail occur?**

Y N

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-318 Link Up Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected communication can not be synchronized with Print Server by CDI HSS cable (S2S1).

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

From the value (decimal) of DC131 [759-651], check the values from bit 0 to bit 5 (binary), and judge whether they are all [1]. **Are the values of bit 0 to bit 5 all [1]?**

Y N

S2S1 color transmission path may be faulty. Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

S2S1 color transmission path not likely to be faulty. Turn Print Server/IOT power OFF then ON. **Does the Fail occur?**

Y N

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-319 Cable Connection Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected an error in color information of CDI HSS cable (YM) during link up. Or, disconnection of CDI HSS cable (YM) during standby was detected.

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check whether problem occurrence timing is [Power ON] or [Standby]. **Occurs at [Power ON]**

Y **N**

There may be poor connection or connection failure. Check connector for connection failure at Print Server/IOT side. **Is there poor connection?**

Y **N**

Connect the connector properly.

Replace the CDI HSS cable (YM) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y **N**

Replace CDI HSS cable (YM).

Replace the Printer Interface board. [See Print Server manual] **Does the Fail occur?**

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-724: LINK_8b10b_CODE_ERR_CNT0_YM
- 759-727: LINK_8b10b_CODE_ERR_CNT1_YM
- 759-730: LINK_8b10b_CODE_ERR_CNT2_YM
- 759-733: LINK_8b10b_CODE_ERR_CNT3_YM

There may be poor connection. Check connector for connection failure at Print Server/IOT side. **Is there poor connection?**

Y **N**

Connect the connector properly.

Check if the CDI HSS cable color connection is correct. **Is it connected properly?**

Y **N**

Connect the CDI HSS cable properly.

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-320 Cable Connection Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected an error in color information of CDI HSS cable (CK) during link up. Or, disconnection of CDI HSS cable (CK) during standby was detected.

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check whether problem occurrence timing is [Power ON] or [Standby]. **Occurs at [Power ON]**

Y **N**

There may be poor connection or connection failure. Check connector for connection failure at Print Server/IOT side. **Is there poor connection?**

Y **N**

Connect the connector properly.

Replace the CDI HSS cable (CK) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y **N**

Replace CDI HSS cable (CK).

Replace the Printer Interface board. [See Print Server manual] **Does the Fail occur?**

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-725: LINK_8b10b_CODE_ERR_CNT0_CK
- 759-728: LINK_8b10b_CODE_ERR_CNT1_CK
- 759-731: LINK_8b10b_CODE_ERR_CNT2_CK
- 759-734: LINK_8b10b_CODE_ERR_CNT3_CK

There may be poor connection. Check connector for connection failure at Print Server/IOT side. **Is there poor connection?**

Y **N**

Connect the connector properly.

Check if the CDI HSS cable color connection is correct. **Is it connected properly?**

Y **N**

Connect the CDI HSS cable properly.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-321 Cable Connection Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected an error in color information of CDI HSS cable (S2S1) during link up. Or, disconnection of CDI HSS cable (S2S1) during standby was detected.

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check whether problem occurrence timing is [Power ON] or [Standby]. **Occurs at [Power ON]**

Y **N**

There may be poor connection or connection failure. Check connector for connection failure at Print Server/IOT side. **Is there poor connection?**

Y **N**

Connect the connector properly.

Replace the CDI HSS cable (S2S1) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y **N**

Replace CDI HSS cable (S2S1).

Replace the Printer Interface board. [See Print Server manual] **Does the Fail occur?**

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-726: LINK_8b10b_CODE_ERR_CNT0_S2S1
- 759-729: LINK_8b10b_CODE_ERR_CNT1_S2S1
- 759-732: LINK_8b10b_CODE_ERR_CNT2_S2S1
- 759-735: LINK_8b10b_CODE_ERR_CNT3_S2S1

There may be poor connection. Check connector for connection failure at Print Server/IOT side. **Is there poor connection?**

Y **N**

Connect the connector properly.

Check if the CDI HSS cable color connection is correct. **Is it connected properly?**

Y **N**

Connect the CDI HSS cable properly.

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-322 FPGA Config Err (YM)

FIP

Refer to 044-CF-003 FIP.

044-323 FPGA Config Err (CK)

FIP

Refer to 044-CF-003 FIP.

044-324 FPGA Config Err (S2S1)

FIP

Refer to 044-CF-003 FIP.

044-325 Fan Fail (YM)

BSD-ON:CH3.20

Error in Haftone PWB Fan (YM) cooling the FPGA was detected.

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

1. Halftone PWB FAN (YM) operation failure. (PL 18.14)
2. Check the Halftone PWB FAN (YM) for foreign substances.
3. If no problem is found, replace the Halftone PWB (YM). (PL 18.14)

044-326 Fan Fail (CK)

BSD-ON:CH3.20

Error in Haftone PWB Fan (CK) cooling the FPGA was detected.

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

1. Halftone PWB FAN (CK) operation failure. (PL 18.14)
2. Check the Halftone PWB FAN (CK) for foreign substances.
3. If no problem is found, replace the Halftone PWB (CK). (PL 18.14)

044-327 Fan Fail (S2S1)

BSD-ON:CH3.20

Error in Haftone PWB Fan (SS) cooling the FPGA was detected.

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

1. Halftone PWB FAN (SS) operation failure. (PL 18.13)
2. Check the Halftone PWB FAN (SS) for foreign substances.
3. If no problem is found, replace the Halftone PWB (SS). (PL 18.13)

044-328 Elastic Buf_S Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (YM).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

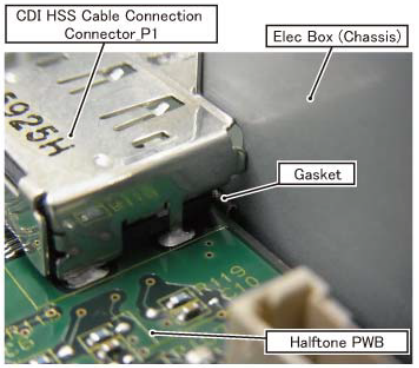
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

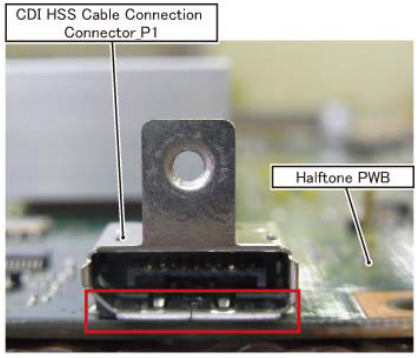
Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

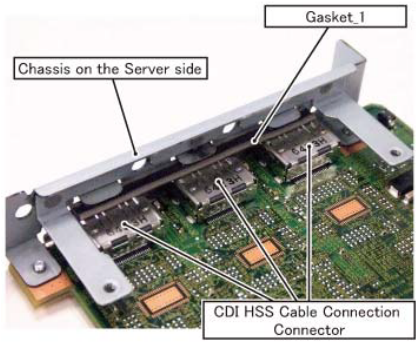
Is it installed properly?

Y N

Install the part properly.

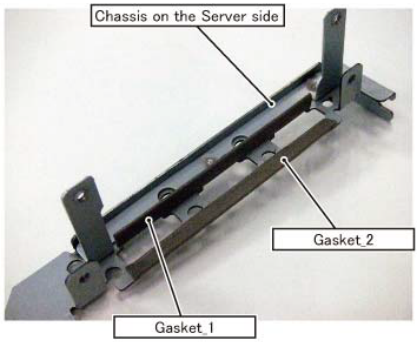
Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the CDI HSS cable (YM) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y N

Replace CDI HSS cable (YM).

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-724: LINK_8b10b_CODE_ERR_CNT0_YM
- 759-727: LINK_8b10b_CODE_ERR_CNT1_YM
- 759-730: LINK_8b10b_CODE_ERR_CNT2_YM
- 759-733: LINK_8b10b_CODE_ERR_CNT3_YM
- 759-739: LINK_8B10B_RD_ERR_CNT0_YM
- 759-742: LINK_8B10B_RD_ERR_CNT1_YM
- 759-745: LINK_8B10B_RD_ERR_CNT2_YM
- 759-748: LINK_8B10B_RD_ERR_CNT3_YM
- 759-754: LINK_8B10B_INHI_K_ERR_CNT0_YM
- 759-757: LINK_8B10B_INHI_K_ERR_CNT1_YM

- 759-760: LINK_8B10B_INHI_K_ERR_CNT2_YM
- 759-763: LINK_8B10B_INHI_K_ERR_CNT3_YM

044-329 Elastic Buf_S Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (CK).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

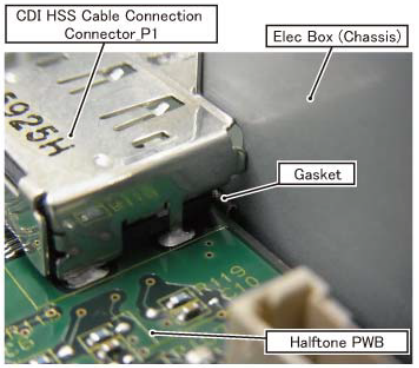
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

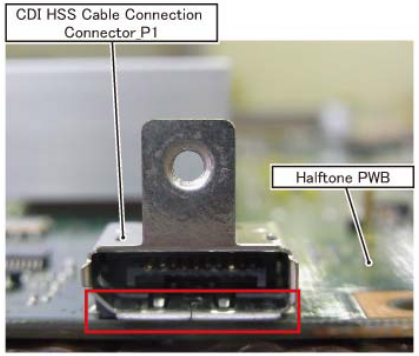
Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

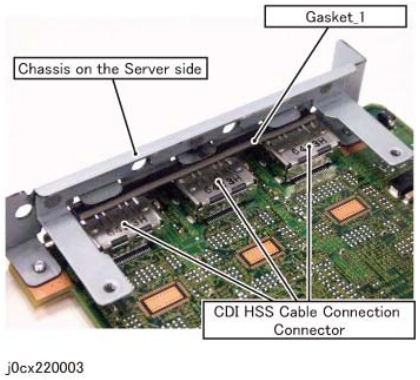
Is it installed properly?

Y N

Install the part properly.

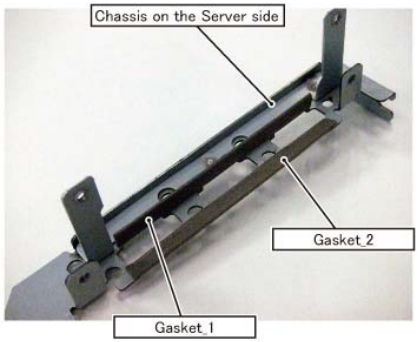
Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the CDI HSS cable (CK) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y N

Replace CDI HSS cable (CK).

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-725: LINK_8b10b_CODE_ERR_CNT0_CK
- 759-728: LINK_8b10b_CODE_ERR_CNT1_CK
- 759-731: LINK_8b10b_CODE_ERR_CNT2_CK
- 759-734: LINK_8b10b_CODE_ERR_CNT3_CK
- 759-740: LINK_8B10B_RD_ERR_CNT0_CK
- 759-743: LINK_8B10B_RD_ERR_CNT1_CK
- 759-746: LINK_8B10B_RD_ERR_CNT2_CK
- 759-749: LINK_8B10B_RD_ERR_CNT3_CK
- 759-755: LINK_8B10B_INHI_K_ERR_CNT0_CK
- 759-758: LINK_8B10B_INHI_K_ERR_CNT1_CK

- 759-761: LINK_8B10B_INHI_K_ERR_CNT2_CK
- 759-764: LINK_8B10B_INHI_K_ERR_CNT3_CK

044-330 Elastic Buf_S Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (S2S1).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON).*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.).*

Procedure

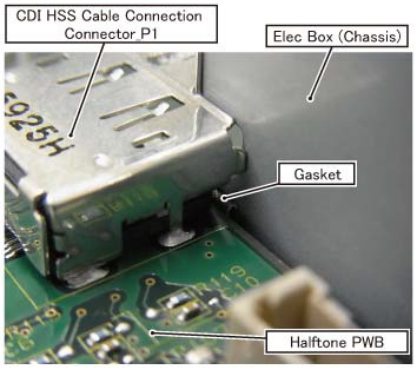
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001

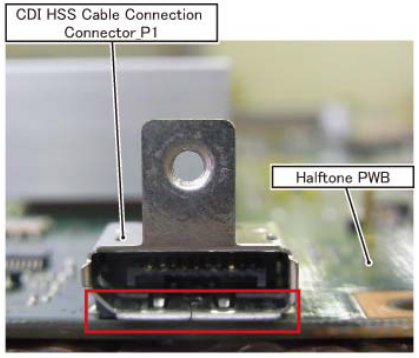


Figure 2 j0cx220002

Is it installed properly?

Y N

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

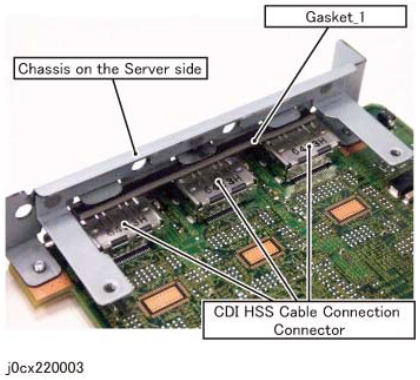


Figure 3 j0cx220003

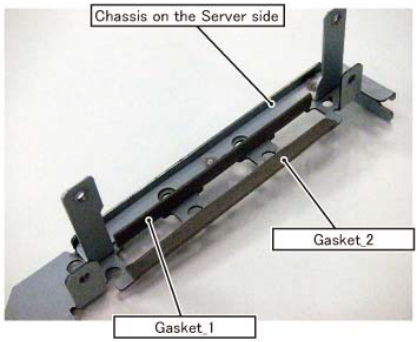


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the CDI HSS cable (S2S1) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y N

Replace CDI HSS cable (S2S1).

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-726: LINK_8b10b_CODE_ERR_CNT0_S2S1
- 759-729: LINK_8b10b_CODE_ERR_CNT1_S2S1
- 759-732: LINK_8b10b_CODE_ERR_CNT2_S2S1
- 759-735: LINK_8b10b_CODE_ERR_CNT3_S2S1
- 759-741: LINK_8B10B_RD_ERR_CNT0_S2S1
- 759-744: LINK_8B10B_RD_ERR_CNT1_S2S1
- 759-747: LINK_8B10B_RD_ERR_CNT2_S2S1
- 759-750: LINK_8B10B_RD_ERR_CNT3_S2S1
- 759-756: LINK_8B10B_INHI_K_ERR_CNT0_S2S1
- 759-759: LINK_8B10B_INHI_K_ERR_CNT1_S2S1

- 759-762: LINK_8B10B_INHI_K_ERR_CNT2_S2S1
- 759-765: LINK_8B10B_INHI_K_ERR_CNT3_S2S1

044-331 8b10b Code_S Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related errors with CDI HSS cable (YM).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

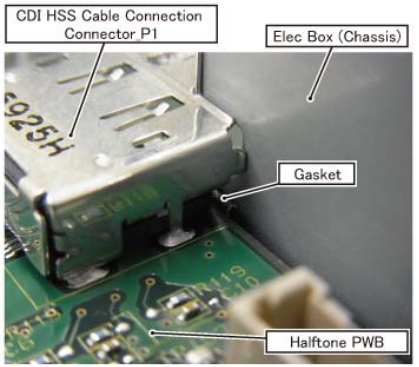
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

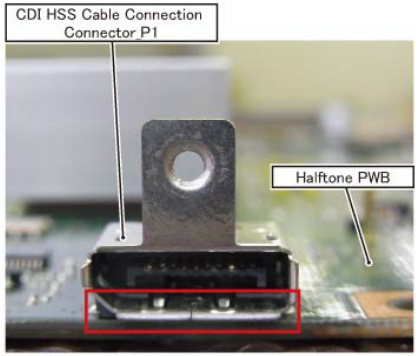
Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

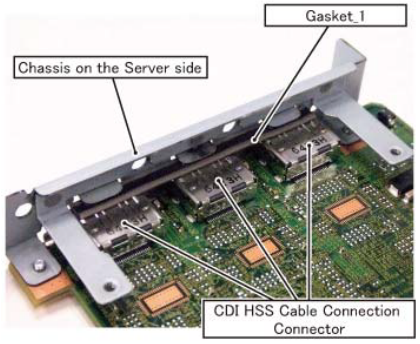
Is it installed properly?

Y N

Install the part properly.

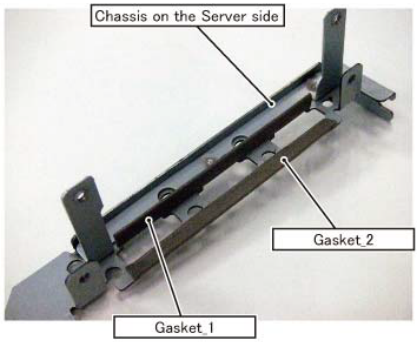
Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-332 8b10b Code_S Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related errors with CDI HSS cable (CK).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)

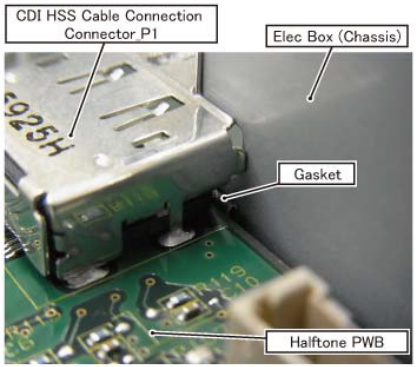


Figure 1 j0cx220001

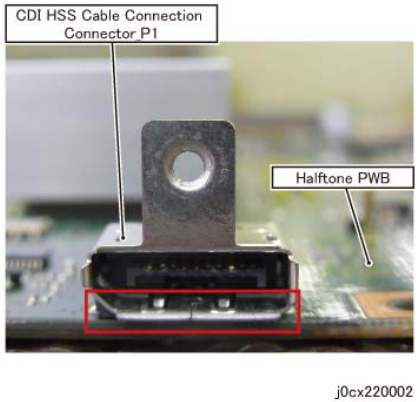


Figure 2 j0cx220002

Is it installed properly?

Y N

Install the part properly.

Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

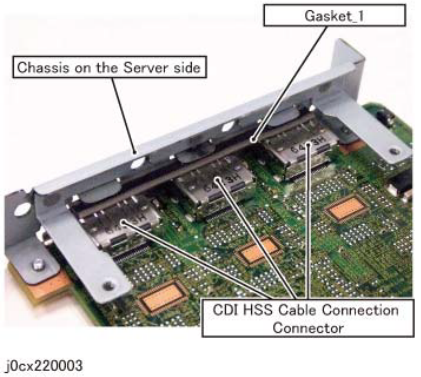


Figure 3 j0cx220003

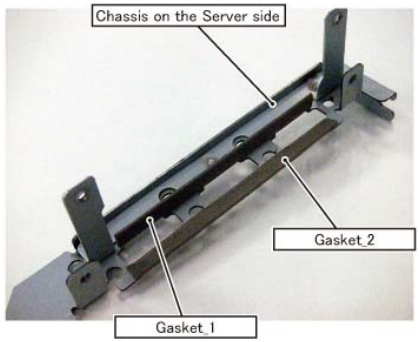


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-333 8b10b Code_S Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related errors with CDI HSS cable (S2S1).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)

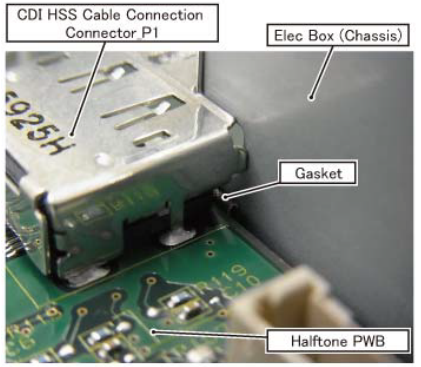


Figure 1 j0cx220001

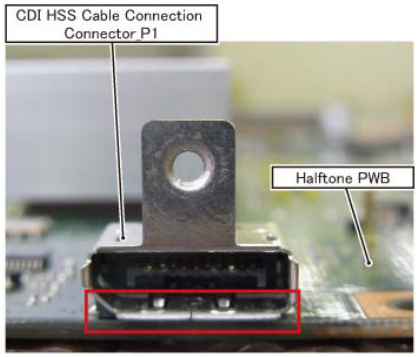


Figure 2 j0cx220002

Is it installed properly?

Y N

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

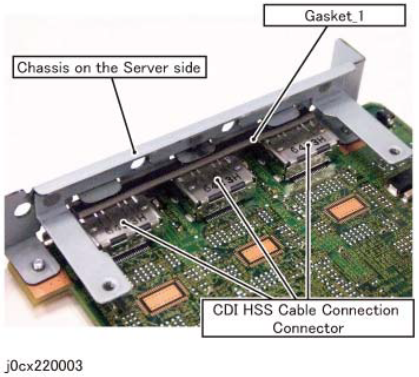


Figure 3 j0cx220003

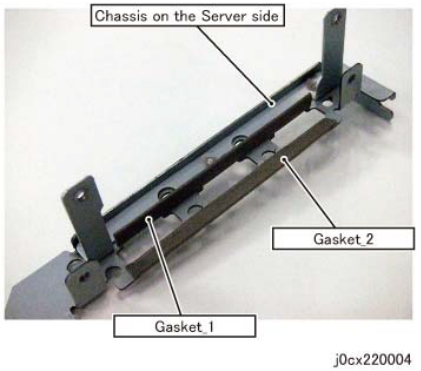


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-334 Interleave Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected that packet numbers received from Print Server by CDI HSS cable (YM) are not continuous.

NOTE: *Check the values (binary) of bit 0 and bit 1 from the value (decimal) of DC131 [759-667], and if bit 0 = [1], packets of Y color image data can not be received in order. Also, if bit 1 = [1], packets of M color image data can not be received in order.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Make a note of the following NVM values in advance.

- 759-724: LINK_8b10b_CODE_ERR_CNT0_YM
- 759-727: LINK_8b10b_CODE_ERR_CNT1_YM
- 759-730: LINK_8b10b_CODE_ERR_CNT2_YM
- 759-733: LINK_8b10b_CODE_ERR_CNT3_YM
- 759-739: LINK_8B10B_RD_ERR_CNT0_YM
- 759-742: LINK_8B10B_RD_ERR_CNT1_YM
- 759-745: LINK_8B10B_RD_ERR_CNT2_YM
- 759-748: LINK_8B10B_RD_ERR_CNT3_YM
- 759-754: LINK_8B10B_INHI_K_ERR_CNT0_YM
- 759-757: LINK_8B10B_INHI_K_ERR_CNT1_YM
- 759-760: LINK_8B10B_INHI_K_ERR_CNT2_YM
- 759-763: LINK_8B10B_INHI_K_ERR_CNT3_YM

Enter [Shutdown History] and check the Fail count. **Does it occur only 1 time?**

Y **N**

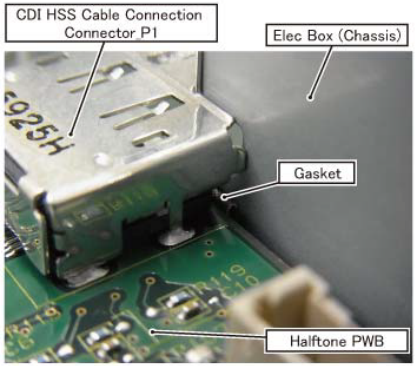
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

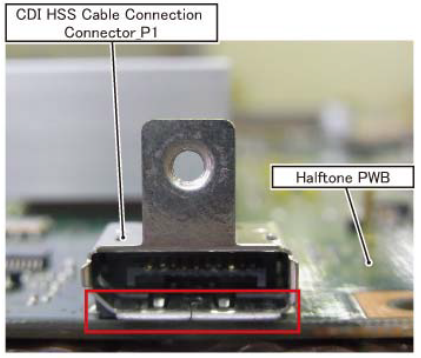
Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

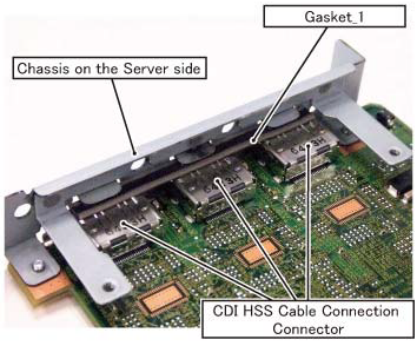


Figure 3 j0cx220003

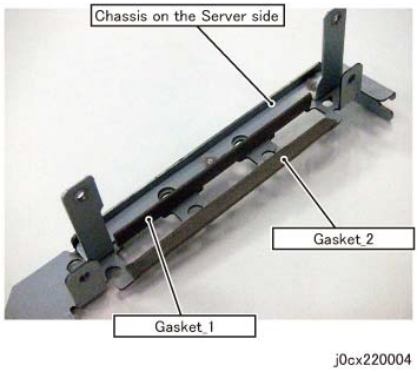


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Does the Fail occur?

Y N

Corrective action complete.

Replace the CDI HSS cable (YM) with that of another color, and check whether there is failure.

Does the Fail occur?

Y N

Replace CDI HSS cable (YM).

Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y N

Replace the Printer Interface board. [See Fiery Server manual]

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 5)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 6)

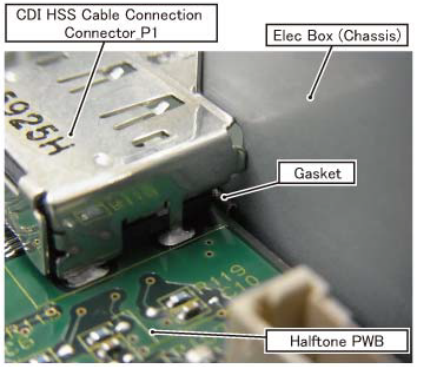
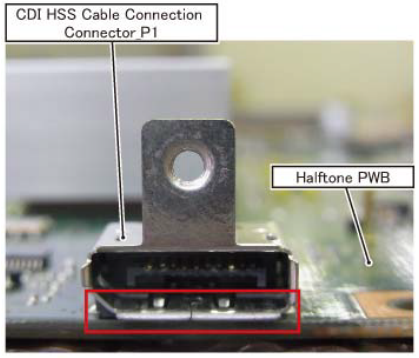
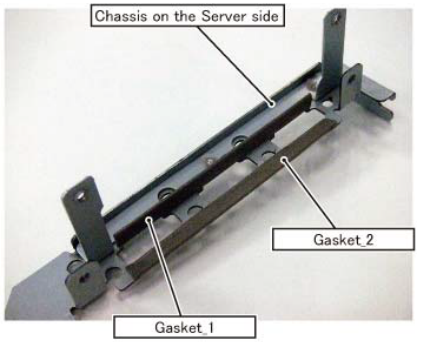


Figure 5 j0cx220001



j0cx220002

Figure 6 j0cx220002

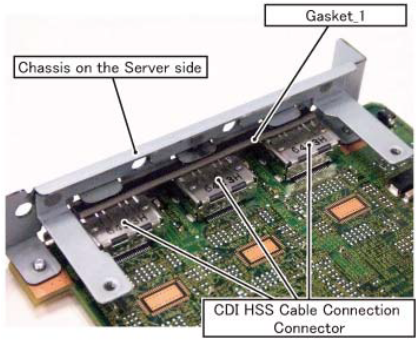


j0cx220004

Figure 8 j0cx220004

Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 7)
- Make sure the gasket is properly attached to the server side chassis. (Figure 8)



j0cx220003

Figure 7 j0cx220003

044-335 Interleave Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected that packet numbers received from Print Server by CDI HSS cable (CK) are not continuous.

NOTE: *Check the values (binary) of bit 0 and bit 1 from the value (decimal) of DC131 [759-668], and if bit 0 = [1], packets of C color image data can not be received in order. Also, if bit 1 = [1], packets of K color image data can not be received in order.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Make a note of the following NVM values in advance.

- 759-725: LINK_8b10b_CODE_ERR_CNT0_CK
- 759-728: LINK_8b10b_CODE_ERR_CNT1_CK
- 759-731: LINK_8b10b_CODE_ERR_CNT2_CK
- 759-734: LINK_8b10b_CODE_ERR_CNT3_CK
- 759-740: LINK_8B10B_RD_ERR_CNT0_CK
- 759-743: LINK_8B10B_RD_ERR_CNT1_CK
- 759-746: LINK_8B10B_RD_ERR_CNT2_CK
- 759-749: LINK_8B10B_RD_ERR_CNT3_CK
- 759-755: LINK_8B10B_INHI_K_ERR_CNT0_CK
- 759-758: LINK_8B10B_INHI_K_ERR_CNT1_CK
- 759-761: LINK_8B10B_INHI_K_ERR_CNT2_CK
- 759-764: LINK_8B10B_INHI_K_ERR_CNT3_CK

Enter [Shutdown History] and check the Fail count. **Does it occur only 1 time?**

Y **N**

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)

A

A

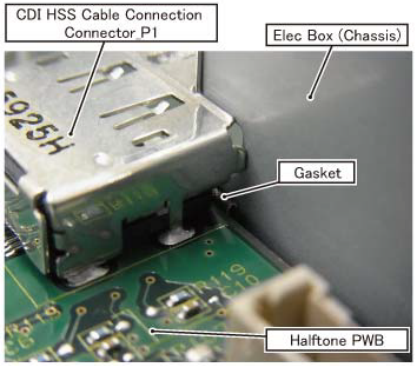


Figure 1 j0cx220001

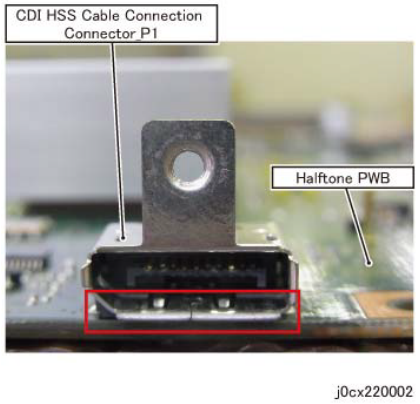


Figure 2 j0cx220002

Is it installed properly?

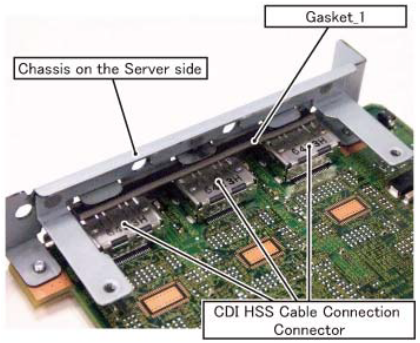
Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

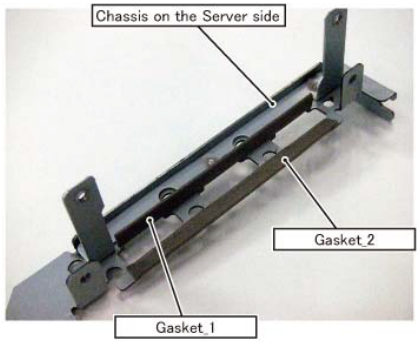
- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

A



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Does the Fail occur?

Y **N**

Corrective action complete.

Replace the CDI HSS cable (CK) with that of another color, and check whether there is failure.

Does the Fail occur?

Y **N**

Replace CDI HSS cable (CK).

Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Replace the Printer Interface board. [See Fiery Server manual]

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

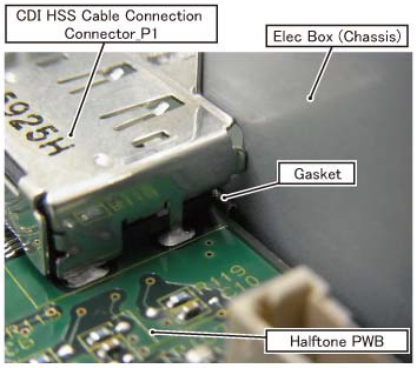
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 5)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 6)



j0cx220001

Figure 5 j0cx220001

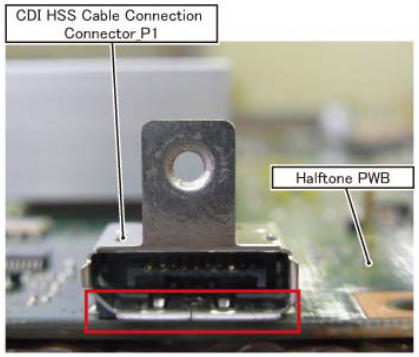


Figure 6 j0cx220002

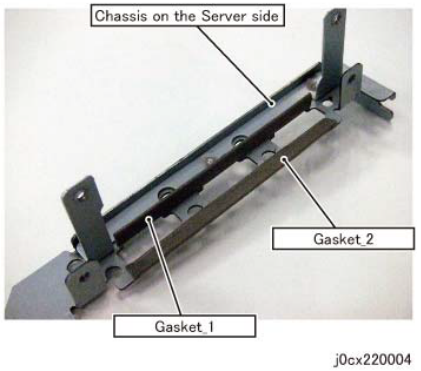


Figure 8 j0cx220004

Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 7)
- Make sure the gasket is properly attached to the server side chassis. (Figure 8)

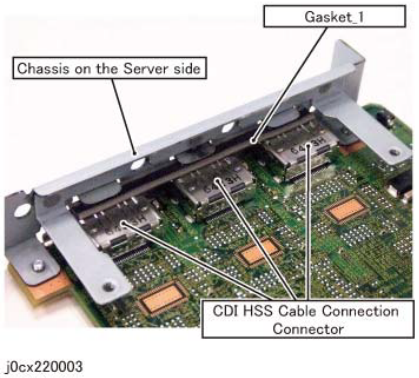


Figure 7 j0cx220003

044-336 Interleave Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected that packet numbers received from Print Server by CDI HSS cable (S2S1) are not continuous.

NOTE: *Check the values (binary) of bit 0 and bit 1 from the value (decimal) of DC131 [759-669], and if bit 0 = [1], packets of S2 color image data can not be received in order. Also, if bit 1 = [1], packets of S1 color image data can not be received in order.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Make a note of the following NVM values in advance.

- 759-726: LINK_8b10b_CODE_ERR_CNT0_S2S1
- 759-729: LINK_8b10b_CODE_ERR_CNT1_S2S1
- 759-732: LINK_8b10b_CODE_ERR_CNT2_S2S1
- 759-735: LINK_8b10b_CODE_ERR_CNT3_S2S1
- 759-741: LINK_8B10B_RD_ERR_CNT0_S2S1
- 759-744: LINK_8B10B_RD_ERR_CNT1_S2S1
- 759-747: LINK_8B10B_RD_ERR_CNT2_S2S1
- 759-750: LINK_8B10B_RD_ERR_CNT3_S2S1
- 759-756: LINK_8B10B_INHI_K_ERR_CNT0_S2S1
- 759-759: LINK_8B10B_INHI_K_ERR_CNT1_S2S1
- 759-762: LINK_8B10B_INHI_K_ERR_CNT2_S2S1
- 759-765: LINK_8B10B_INHI_K_ERR_CNT3_S2S1

Enter [Shutdown History] and check the Fail count. **Does it occur only 1 time?**

Y **N**

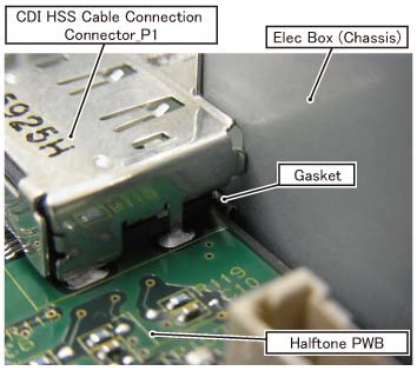
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

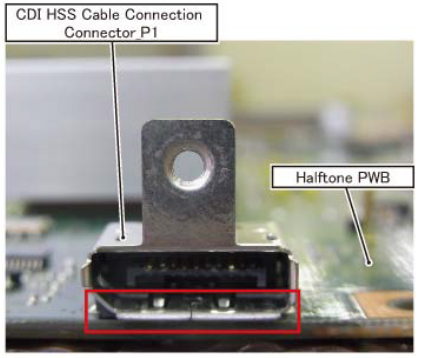
Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

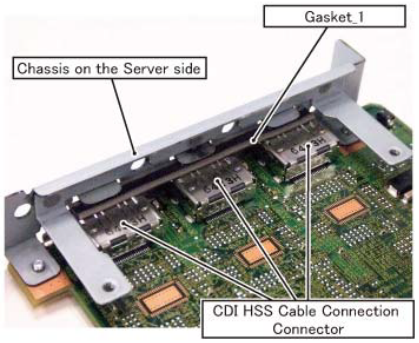


Figure 3 j0cx220003

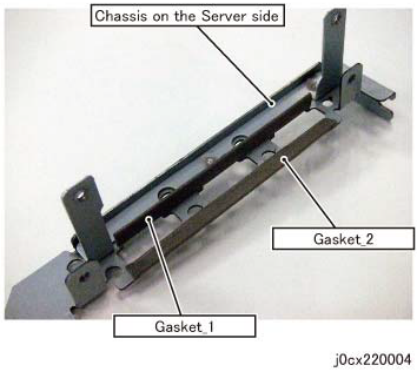


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Does the Fail occur?

Y N

Corrective action complete.

Replace the CDI HSS cable (S2S1) with that of another color, and check whether there is failure.

Does the Fail occur?

Y N

Replace CDI HSS cable (S2S1).

Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y N

Replace the Printer Interface board. [See Fiery Server manual]

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 5)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 6)

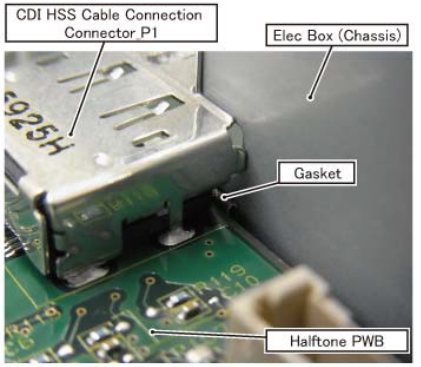
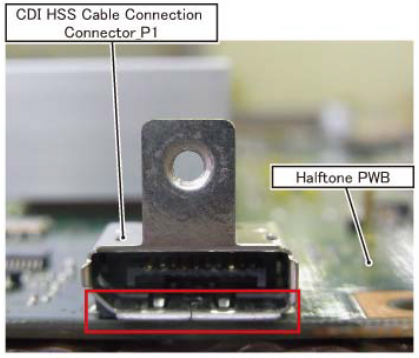
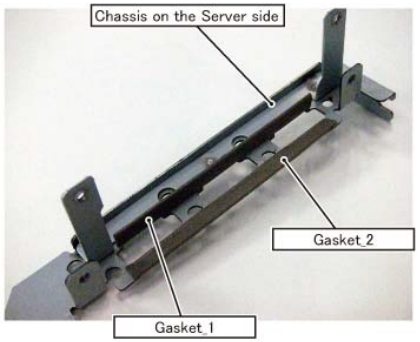


Figure 5 j0cx220001



j0cx220002

Figure 6 j0cx220002

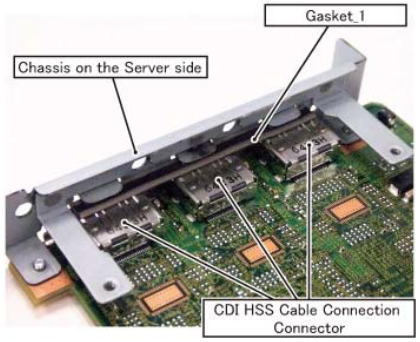


j0cx220004

Figure 8 j0cx220004

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 7)
- Make sure the gasket is properly attached to the server side chassis. (Figure 8)



j0cx220003

Figure 7 j0cx220003

044-600 Elastic Buf_H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-601 Elastic Buf_H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-602 Elastic Buf_H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-603 SOP H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected packet failure-related errors with CDI HSS cable (YM).

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-604 SOP H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected packet failure-related errors in CDI HSS cable (CK).

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-605 SOP H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected packet failure-related errors in CDI HSS cable (S2S1).

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-606 ECC H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related errors with CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-607 ECC H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related errors with CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-608 ECC H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related errors with CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-609 8b10b Code_H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related errors with CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-610 8b10b Code_H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related errors with CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-611 8b10b Code_H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related errors with CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-612 Tx PKTBuf UDF H Err (YM)

BSD-ON:CH3.20

An underflow error was detected in the transmission packet buffer of Halftone PWB (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the Halftone PWB (YM). (PL 18.14)

044-613 Tx PKTBuf UDF H Err (CK)

BSD-ON:CH3.20

An underflow error was detected in the transmission packet buffer of Halftone PWB (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the Halftone PWB (CK). (PL 18.14)

044-614 Tx PKTBuf UDF H Err (S2S1)

BSD-ON:CH3.20

An underflow error was detected in the transmission packet buffer of Halftone PWB (SS).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the Halftone PWB (SS). (PL 18.13)

044-615 Rx PKT Buf OVF H Err (YM)

BSD-ON:CH3.20

An overflow error was detected in the reception packet buffer of Halftone PWB (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-616 Rx PKT Buf OVF H Err (CK)

BSD-ON:CH3.20

An overflow error was detected in the reception packet buffer of Halftone PWB (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-617 Rx PKT Buf OVF H Err (S2S1)

BSD-ON:CH3.20

An overflow error was detected in the reception packet buffer of Halftone PWB (SS).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-618 IMG info H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected error, in which image information packet sent from Print Server can not be correctly received with the CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-619 IMG info H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected error, in which image information packet sent from Print Server can not be correctly received with the CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-620 IMG info H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected error, in which image information packet sent from Print Server can not be correctly received with the CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-621 PKT Num Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected the error that packets received from Print Server by CDI HSS cable (YM) are not the specified quantity.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-622 PKT Num Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected the error that packets received from Print Server by CDI HSS cable (CK) are not the specified quantity.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-623 PKT Num Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected the error that packets received from Print Server by CDI HSS cable (S2S1) are not the specified quantity.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-624 LINE Buf H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected an error in Line Buffer which stores image data sent from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-625 LINE Buf H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected an error in Line Buffer which stores image data sent from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-626 LINE Buf H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected an error in Line Buffer which stores image data sent from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-627 IMGST2Preq T H Err (YM)

FIP

Refer to 044-CF-004 FIP.

044-628 IMGST2Preq T H Err (CK)

FIP

Refer to 044-CF-004 FIP.

044-629 IMGST2Preq T H Err (S2S1)

FIP

Refer to 044-CF-004 FIP.

044-630 Preq2 PEND H Err (YM)

BSD-ON:CH3.20

When the Halftone PWB (YM) negated the image processing ASIC Page Request signal with the CDI HSS cable (YM), it detected that the Page END Packet was not received from the Print Server.

FIP

Refer to 044-961 (Preq 2PEND Err (YM)) FIP.

044-631 Preq2 PEND H Err (CK)

BSD-ON:CH3.20

When the Halftone PWB (CK) negated the image processing ASIC Page Request signal with the CDI HSS cable (CK), it detected that the Page END Packet was not received from the Print Server.

FIP

Refer to 044-962 (Preq 2PEND Err (CK)) FIP.

044-632 Preq2 PEND H Err (S2S1)

BSD-ON:CH3.20

When the Halftone PWB (SS) negated the image processing ASIC Page Request signal with the CDI HSS cable (S2S1), it detected that the Page END Packet was not received from the Print Server.

FIP

Refer to 044-963 (Preq 2PEND Err (S2S1)) FIP.

044-633 Acum ECC H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-634 Acum ECC H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-635 Acum ECC H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-636 Acum 8b10b Code H Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-637 Acum 8b10b Code H Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-638 Acum 8b10b Code H Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-940 8b10b Code Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related errors with CDI HSS cable (CK).

FIP

Refer to 044-332 (8b10b Code_S Err (CK)) FIP.

044-941 8b10b Code Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related errors with CDI HSS cable (YM).

FIP

Refer to 044-331 (8b10b Code_S Err (YM)) FIP.

044-942 8b10b Code Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related errors with CDI HSS cable (S2S1).

FIP

Refer to 044-333 (8b10b Code_S Err (S2S1)) FIP.

044-943 ECC Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related errors with CDI HSS cable (YM).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)

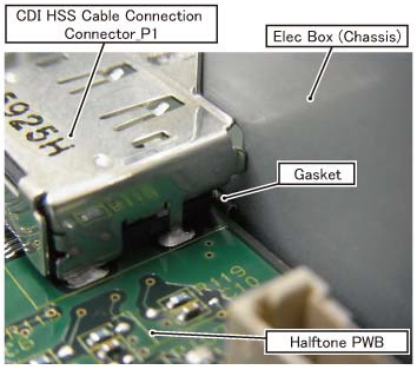


Figure 1 j0cx220001

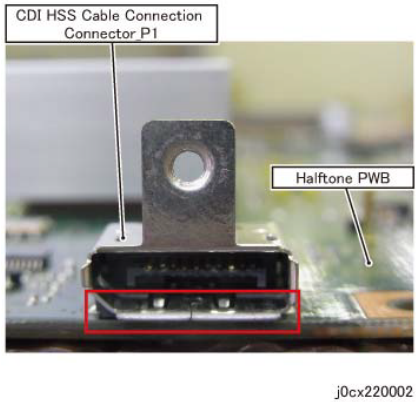


Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

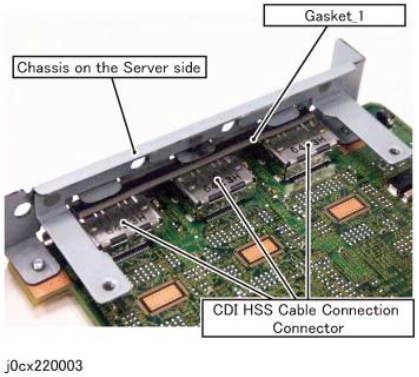


Figure 3 j0cx220003

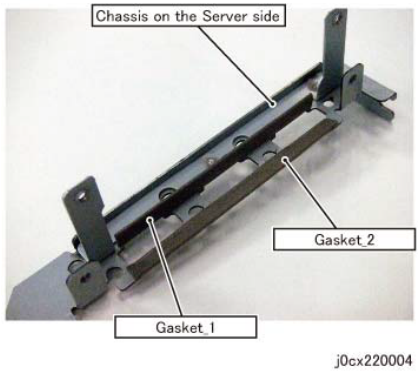


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the CDI HSS cable (YM) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y N

Replace CDI HSS cable (YM).

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Halftone PWB (YM) (PL 18.14)
- Printer Interface board [See Print Server manual]

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-724: LINK_8b10b_CODE_ERR_CNT0_YM
- 759-727: LINK_8b10b_CODE_ERR_CNT1_YM
- 759-730: LINK_8b10b_CODE_ERR_CNT2_YM
- 759-733: LINK_8b10b_CODE_ERR_CNT3_YM
- 759-739: LINK_8B10B_RD_ERR_CNT0_YM
- 759-742: LINK_8B10B_RD_ERR_CNT1_YM
- 759-745: LINK_8B10B_RD_ERR_CNT2_YM
- 759-748: LINK_8B10B_RD_ERR_CNT3_YM
- 759-754: LINK_8B10B_INHI_K_ERR_CNT0_YM
- 759-757: LINK_8B10B_INHI_K_ERR_CNT1_YM
- 759-760: LINK_8B10B_INHI_K_ERR_CNT2_YM
- 759-763: LINK_8B10B_INHI_K_ERR_CNT3_YM

044-944 ECC Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related errors with CDI HSS cable (CK).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)

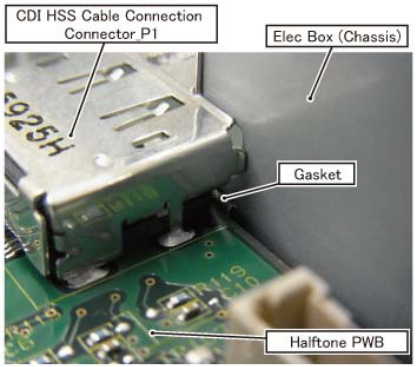


Figure 1 j0cx220001

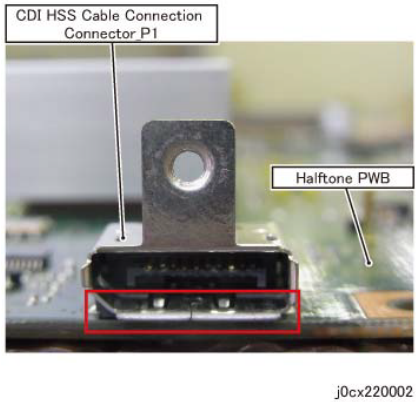


Figure 2 j0cx220002

Is it installed properly?

Y N

Install the part properly.

Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

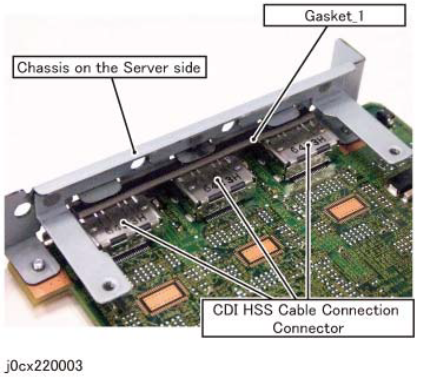


Figure 3 j0cx220003

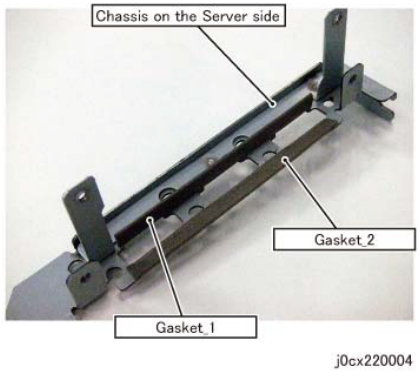


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the CDI HSS cable (CK) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y N

Replace CDI HSS cable (CK).

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-725: LINK_8b10b_CODE_ERR_CNT0_CK
- 759-728: LINK_8b10b_CODE_ERR_CNT1_CK
- 759-731: LINK_8b10b_CODE_ERR_CNT2_CK
- 759-734: LINK_8b10b_CODE_ERR_CNT3_CK
- 759-740: LINK_8B10B_RD_ERR_CNT0_CK
- 759-743: LINK_8B10B_RD_ERR_CNT1_CK
- 759-746: LINK_8B10B_RD_ERR_CNT2_CK
- 759-749: LINK_8B10B_RD_ERR_CNT3_CK
- 759-755: LINK_8B10B_INHI_K_ERR_CNT0_CK
- 759-758: LINK_8B10B_INHI_K_ERR_CNT1_CK
- 759-761: LINK_8B10B_INHI_K_ERR_CNT2_CK
- 759-764: LINK_8B10B_INHI_K_ERR_CNT3_CK

044-945 ECC Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related errors with CDI HSS cable (S2S1).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)

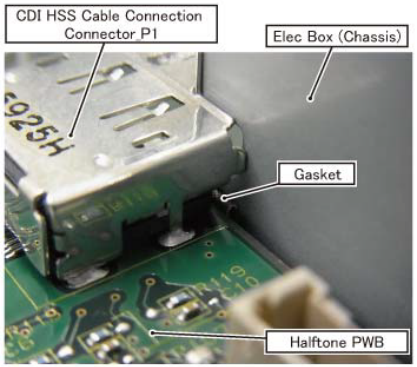


Figure 1 j0cx220001

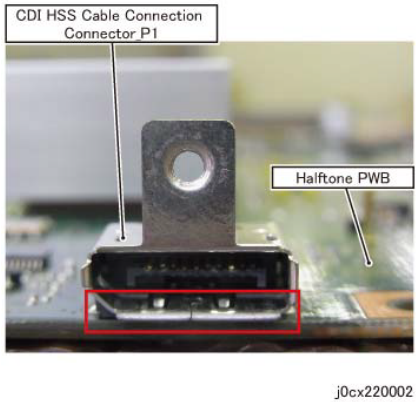


Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

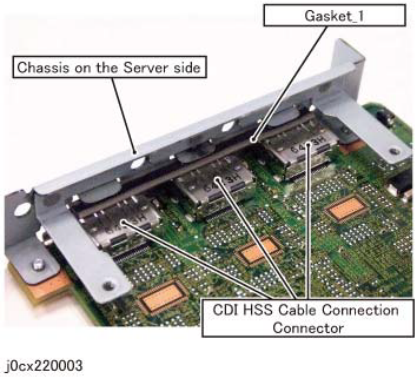


Figure 3 j0cx220003

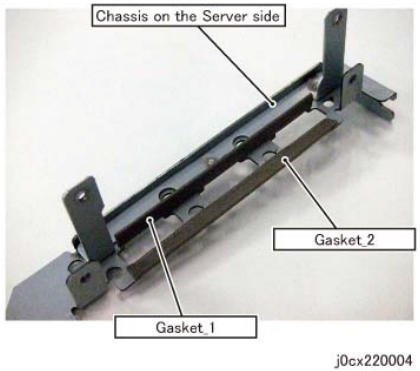


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the CDI HSS cable (S2S1) with that of another color, and check whether there is failure. **Does the Fail occur?**

Y N

Replace CDI HSS cable (S2S1).

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-726: LINK_8b10b_CODE_ERR_CNT0_S2S1
- 759-729: LINK_8b10b_CODE_ERR_CNT1_S2S1
- 759-732: LINK_8b10b_CODE_ERR_CNT2_S2S1
- 759-735: LINK_8b10b_CODE_ERR_CNT3_S2S1
- 759-741: LINK_8B10B_RD_ERR_CNT0_S2S1
- 759-744: LINK_8B10B_RD_ERR_CNT1_S2S1
- 759-747: LINK_8B10B_RD_ERR_CNT2_S2S1
- 759-750: LINK_8B10B_RD_ERR_CNT3_S2S1
- 759-756: LINK_8B10B_INHI_K_ERR_CNT0_S2S1
- 759-759: LINK_8B10B_INHI_K_ERR_CNT1_S2S1
- 759-762: LINK_8B10B_INHI_K_ERR_CNT2_S2S1
- 759-765: LINK_8B10B_INHI_K_ERR_CNT3_S2S1

044-946 Elastic Buf Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (YM).

FIP

Refer to 044-328 (Elastic Buf_S Err (YM)) FIP.

044-947 Elastic Buf Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (CK).

FIP

Refer to 044-329 (Elastic Buf_S Err (CK)) FIP.

044-948 Elastic Buf Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected error, in which skip pattern sent from Print Server can not be received for a certain period with the CDI HSS cable (S2S1).

FIP

Refer to 044-330 (Elastic Buf_S Err (S2S1)) FIP.

044-949 IMG info Err (YM)

FIP

Refer to 044-CF-005 FIP.

044-950 IMG info Err (CK)

FIP

Refer to 044-CF-005 FIP.

044-951 IMG info Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected error, in which image information packet sent from Print Server can not be correctly received with the CDI HSS cable (S2S1).

FIP

Refer to 044-CF-005 FIP.

044-952 LINE Buf Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected an error in Line Buffer which stores image data sent from Print Server.

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-670], check the following bit value (binary) and grasp the phenomenon.

- bit 0 = [1] -> Y color overflow occurred
- bit 1 = [1] -> M color overflow occurred
- bit 4 = [1] -> Y color underflow occurred
- bit 5 = [1] -> M color underflow occurred
- bit 8 = [1] -> Y color underflow occurred at beginning of page
- bit 9 = [1] -> M color underflow occurred at beginning of page

Is the value of bit 0 or bit 1 [1]?

Y **N**

Is the value of bit 4 or bit 5 [1]?

Y **N**

Replace the Printer Interface board. [See Fiery Server manual]

From the value (decimal) of DC131 [759-870], check the following bit value and grasp the phenomenon.

- bit 0 = [1] -> Y color image processing ASIC detected stop of Lreq output
- bit 1 = [1] -> N color image processing ASIC detected stop of Lreq output
- bit 5 to 4 = [01] or [10] -> Y color ImageStart was issued 2 times in 1 page to Print Server
- bit 7 to 6 = [01] or [10] -> M color ImageStart was issued 2 times in 1 page to Print Server
- bit 5, bit 4, bit 0 = [0] -> No error has occurred in the IOT of Y color
- bit 7, bit 6, bit 1 = [0] -> No error has occurred in the IOT of M color

Is the value of bit 5, bit 4, bit 0 or bit 7, bit 6, bit 1 [0]?

Y **N**

Replace the Halftone PWB (YM). (PL 18.14)

From the value (decimal) of DC131 [759-873], check the following bit value (binary) and grasp the phenomenon.

- bit 1 to 0 = [00] -> Y color MEMFULL (empty) has not been issued
- bit 3 to 2 = [00] -> M color MEMFULL (empty) has not been issued
- bit 1 to 0 = [01] -> Y color MEMFULL_ON_PKT has been issued

A

- bit 3 to 2 = [01] -> M color MEMFULL_ON_PKT has been issued
- bit 1 to 0 = [10] -> Y color MEMFULL_OFF_PKT has been issued
- bit 3 to 2 = [10] -> M color MEMFULL_OFF_PKT has been issued

Is the value of bits 1 to 0 or bits 3 to 2 [00]?

Y **N**

Is the value of bits 1 to 0 or bits 3 to 2 [01]?

Y **N**

Replace the Halftone PWB (YM). (PL 18.14)

Replace the Printer Interface board. [See Fiery Server manual]

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (YM) (PL 18.14)

From the value (decimal) of DC131 [759-873], check the following bit value (binary) and grasp the phenomenon.

- bit 1 to 0 = [00] -> Y color MEMFULL (empty) has not been issued
- bit 3 to 2 = [00] -> M color MEMFULL (empty) has not been issued
- bit 1 to 0 = [01] -> Y color MEMFULL_ON_PKT has been issued
- bit 3 to 2 = [01] -> M color MEMFULL_ON_PKT has been issued
- bit 1 to 0 = [10] -> Y color MEMFULL_OFF_PKT has been issued
- bit 3 to 2 = [10] -> M color MEMFULL_OFF_PKT has been issued

Is the value of bits 1 to 0 or bits 3 to 2 [01]?

Y **N**

Replace the Halftone PWB (YM). (PL 18.14)

Replace the Printer Interface board. [See Fiery Server manual]

A

044-953 LINE Buf Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected an error in Line Buffer which stores image data sent from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-671], check the following bit value (binary) and grasp the phenomenon.

- bit 0 = [1] -> C color overflow occurred
- bit 1 = [1] -> K color overflow occurred
- bit 4 = [1] -> C color underflow occurred
- bit 5 = [1] -> M color underflow occurred
- bit 8 = [1] -> C color underflow occurred at beginning of page
- bit 9 = [1] -> K color underflow occurred at beginning of page

Is the value of bit 0 or bit 1 [1]?

Y **N**

Is the value of bit 4 or bit 5 [1]?

Y **N**

Replace the Printer Interface board. [See Fiery Server manual]

From the value (decimal) of DC131 [759-871], check the following bit value and grasp the phenomenon.

- bit 0 = [1] -> C color image processing ASIC detected stop of Lreq output
- bit 1 = [1] -> K color image processing ASIC detected stop of Lreq output
- bit 5 to 4 = [01] or [10] -> C color ImageStart was issued 2 times in 1 page to Print Server
- bit 7 to 6 = [01] or [10] -> K color ImageStart was issued 2 times in 1 page to Print Server
- bit 5, bit 4, bit 0 = [0] -> No error has occurred in the IOT of C color
- bit 7, bit 6, bit 1 = [0] -> No error has occurred in the IOT of K color

Is the value of bit 5, bit 4, bit 0 or bit 7, bit 6, bit 1 [0]?

Y **N**

Replace the Halftone PWB (CK). (PL 18.14)

From the value (decimal) of DC131 [759-874], check the following bit value (binary) and grasp the phenomenon.

- bit 1 to 0 = [00] -> C color MEMFULL (empty) has not been issued
- bit 3 to 2 = [00] -> K color MEMFULL (empty) has not been issued
- bit 1 to 0 = [01] -> C color MEMFULL_ON_PKT has been issued
- bit 3 to 2 = [01] -> K color MEMFULL_ON_PKT has been issued
- bit 1 to 0 = [10] -> C color MEMFULL_OFF_PKT has been issued
- bit 3 to 2 = [10] -> K color MEMFULL_OFF_PKT has been issued

Is the value of bits 1 to 0 or bits 3 to 2 [00]?

Y **N**

Is the value of bits 1 to 0 or bits 3 to 2 [01]?

Y **N**

Replace the Halftone PWB (CK). (PL 18.14)

Replace the Printer Interface board. [See Fiery Server manual]

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (CK) (PL 18.14)

From the value (decimal) of DC131 [759-874], check the following bit value (binary) and grasp the phenomenon.

- bit 1 to 0 = [00] -> C color MEMFULL (empty) has not been issued
- bit 3 to 2 = [00] -> K color MEMFULL (empty) has not been issued
- bit 1 to 0 = [01] -> C color MEMFULL_ON_PKT has been issued
- bit 3 to 2 = [01] -> K color MEMFULL_ON_PKT has been issued
- bit 1 to 0 = [10] -> C color MEMFULL_OFF_PKT has been issued
- bit 3 to 2 = [10] -> K color MEMFULL_OFF_PKT has been issued

Is the value of bits 1 to 0 or bits 3 to 2 [01]?

Y **N**

Replace the Halftone PWB (CK). (PL 18.14)

Replace the Printer Interface board. [See Fiery Server manual]

044-954 LINE Buf Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected an error in Line Buffer which stores image data sent from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-672], check the following bit value (binary) and grasp the phenomenon.

- bit 0 = [1] -> S2 color overflow occurred
- bit 1 = [1] -> S1 color overflow occurred
- bit 4 = [1] -> S2 color underflow occurred
- bit 5 = [1] -> S1 color underflow occurred
- bit 8 = [1] -> S2 color underflow occurred at beginning of page
- bit 9 = [1] -> S1 color underflow occurred at beginning of page

Is the value of bit 0 or bit 1 [1]?

Y N

Is the value of bit 4 or bit 5 [1]?

Y N

Replace the Printer Interface board. [See Fiery Server manual]

From the value (decimal) of DC131 [759-872], check the following bit value and grasp the phenomenon.

- bit 0 = [1] -> S2 color image processing ASIC detected stop of Lreq output
- bit 1 = [1] -> S1 color image processing ASIC detected stop of Lreq output
- bit 5 to 4 = [01] or [10] -> S2 color ImageStart was issued 2 times in 1 page to Print Server
- bit 7 to 6 = [01] or [10] -> S1 color ImageStart was issued 2 times in 1 page to Print Server
- bit 5, bit 4, bit 0 = [0] -> No error has occurred in the IOT of S2 color
- bit 7, bit 6, bit 1 = [0] -> No error has occurred in the IOT of S1 color

Is the value of bit 5, bit 4, bit 0 or bit 7, bit 6, bit 1 [0]?

Y N

Replace the Halftone PWB (SS). (PL 18.13)

From the value (decimal) of DC131 [759-875], check the following bit value (binary) and grasp the phenomenon.

- bit 1 to 0 = [00] -> S2 color MEMFULL (empty) has not been issued
- bit 3 to 2 = [00] -> S1 color MEMFULL (empty) has not been issued
- bit 1 to 0 = [01] -> S2 color MEMFULL_ON_PKT has been issued

A

- bit 3 to 2 = [01] -> S1 color MEMFULL_ON_PKT has been issued
- bit 1 to 0 = [10] -> S2 color MEMFULL_OFF_PKT has been issued
- bit 3 to 2 = [10] -> S1 color MEMFULL_OFF_PKT has been issued

Is the value of bits 1 to 0 or bits 3 to 2 [00]?

Y N

Is the value of bits 1 to 0 or bits 3 to 2 [01]?

Y N

Replace the Halftone PWB (SS). (PL 18.13)

Replace the Printer Interface board. [See Fiery Server manual]

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (SS) (PL 18.13)

From the value (decimal) of DC131 [759-875], check the following bit value (binary) and grasp the phenomenon.

- bit 1 to 0 = [00] -> S2 color MEMFULL (empty) has not been issued
- bit 3 to 2 = [00] -> S1 color MEMFULL (empty) has not been issued
- bit 1 to 0 = [01] -> S2 color MEMFULL_ON_PKT has been issued
- bit 3 to 2 = [01] -> S1 color MEMFULL_ON_PKT has been issued
- bit 1 to 0 = [10] -> S2 color MEMFULL_OFF_PKT has been issued
- bit 3 to 2 = [10] -> S1 color MEMFULL_OFF_PKT has been issued

Is the value of bits 1 to 0 or bits 3 to 2 [01]?

Y N

Replace the Halftone PWB (SS). (PL 18.13)

Replace the Printer Interface board. [See Fiery Server manual]

A

044-958 PKT Num Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected the error that packets received from Print Server by CDI HSS cable (YM) are not the specified quantity.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-667], check the bit 4 = [1] and bit 5 = [1] (binary) to determine which one is applicable. **Is the value of bit 4 [1]?**

Y **N**

The number of packets of M color image data is different from the notified quantity. Turn Print Server OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (YM) (PL 18.14)

Does the Fail occur?

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-775: IF_IMG_FS_PIX_IN_E0
- 759-778: IF_IMG_SS_PIX_L_IN_E0
- 759-781: IF_IMG_SS_PIX_H_IN_E0
- 759-790: IF_IMG_PKT_L_IN_E0
- 759-793: IF_IMG_PKT_M_IN_E0
- 759-796: IF_IMG_PKT_H_IN_E0
- 759-826: IMG_PKT_RECV_LOW_E0
- 759-829: IMG_PKT_RECV_MID_E0
- 759-832: IMG_PKT_RECV_HIGH_E0

The number of packets of Y color image data is different from the notified quantity. Turn Print Server OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (YM) (PL 18.14)

Does the Fail occur?

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-799: IF_IMG_FS_PIX_IN_E1
- 759-802: IF_IMG_SS_PIX_L_IN_E1
- 759-805: IF_IMG_SS_PIX_H_IN_E1
- 759-814: IF_IMG_PKT_L_IN_E1
- 759-817: IF_IMG_PKT_M_IN_E1
- 759-820: IF_IMG_PKT_H_IN_E1
- 759-835: IMG_PKT_RECV_LOW_E1
- 759-838: IMG_PKT_RECV_MID_E1
- 759-841: IMG_PKT_RECV_HIGH_E1

044-959 PKT Num Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected the error that packets received from Print Server by CDI HSS cable (CK) are not the specified quantity.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-668], check the bit 4 = [1] and bit 5 = [1] (binary) to determine which one is applicable. **Is the value of bit 4 [1]?**

Y **N**

The number of packets of K color image data is different from the notified quantity. Turn Print Server OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (CK) (PL 18.14)

Does the Fail occur?

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-776: IF_IMG_FS_PIX_IN_E0
- 759-779: IF_IMG_SS_PIX_L_IN_E0
- 759-782: IF_IMG_SS_PIX_H_IN_E0
- 759-791: IF_IMG_PKT_L_IN_E0
- 759-794: IF_IMG_PKT_M_IN_E0
- 759-797: IF_IMG_PKT_H_IN_E0
- 759-827: IMG_PKT_RECV_LOW_E0
- 759-830: IMG_PKT_RECV_MID_E0
- 759-833: IMG_PKT_RECV_HIGH_E0

The number of packets of C color image data is different from the notified quantity. Turn Print Server OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (CK) (PL 18.14)

Does the Fail occur?

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-799: IF_IMG_FS_PIX_IN_E1
- 759-802: IF_IMG_SS_PIX_L_IN_E1
- 759-805: IF_IMG_SS_PIX_H_IN_E1
- 759-814: IF_IMG_PKT_L_IN_E1
- 759-817: IF_IMG_PKT_M_IN_E1
- 759-820: IF_IMG_PKT_H_IN_E1
- 759-835: IMG_PKT_RECV_LOW_E1
- 759-838: IMG_PKT_RECV_MID_E1
- 759-841: IMG_PKT_RECV_HIGH_E1

044-960 PKT Num Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected the error that packets received from Print Server by CDI HSS cable (S2S1) are not the specified quantity.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-669], check the bit 4 = [1] and bit 5 = [1] (binary) to determine which one is applicable. **Is the value of bit 4 [1]?**

Y **N**

The number of packets of S1 color image data is different from the notified quantity. Turn Print Server OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (SS) (PL 18.13)

Does the Fail occur?

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-777: IF_IMG_FS_PIX_IN_E0
- 759-780: IF_IMG_SS_PIX_L_IN_E0
- 759-783: IF_IMG_SS_PIX_H_IN_E0
- 759-792: IF_IMG_PKT_L_IN_E0
- 759-795: IF_IMG_PKT_M_IN_E0
- 759-798: IF_IMG_PKT_H_IN_E0
- 759-828: IMG_PKT_RECV_LOW_E0
- 759-831: IMG_PKT_RECV_MID_E0
- 759-834: IMG_PKT_RECV_HIGH_E0

The number of packets of S2 color image data is different from the notified quantity. Turn Print Server OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

A

A

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (SS) (PL 18.13)

Does the Fail occur?

Y **N**

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-801: IF_IMG_FS_PIX_IN_E1
- 759-804: IF_IMG_SS_PIX_L_IN_E1
- 759-807: IF_IMG_SS_PIX_H_IN_E1
- 759-816: IF_IMG_PKT_L_IN_E1
- 759-819: IF_IMG_PKT_M_IN_E1
- 759-822: IF_IMG_PKT_H_IN_E1
- 759-837: IMG_PKT_RECV_LOW_E1
- 759-840: IMG_PKT_RECV_MID_E1
- 759-843: IMG_PKT_RECV_HIGH_E1

044-961 Preq 2PEND Err (YM)

BSD-ON:CH3.20

When the Halftone PWB (YM) negated the image processing ASIC Page Request signal with the CDI HSS cable (YM), it detected that the Page END Packet was not received from the Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-823], check the values from bit 0 and bit 1 (binary), and judge which one is [1]. **Is the value of bit 0 [1]?**

Y **N**

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[M color image size notified by Print Server]

- 759-799: IF_IMG_FS_PIX_IN_E1_YM
- 759-802: IF_IMG_SS_PIX_L_IN_E1_YM
- 759-805: IF_IMG_SS_PIX_H_IN_E1_YM
- 759-808: IF_IMG_RESOLUTION_IN_E1_YM

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-808] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200

A

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (YM) (PL 18.14)

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[Y color image size notified by Print Server]

- 759-775: IF_IMG_FS_PIX_IN_E0_YM
- 759-778: IF_IMG_SS_PIX_L_IN_E0_YM
- 759-781: IF_IMG_SS_PIX_H_IN_E0_YM
- 759-784: IF_IMG_RESOLUTION_IN_E0_YM

A

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-784] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 2

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

B

B

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (YM) (PL 18.14)

044-962 Preq 2PEND Err (CK)

BSD-ON:CH3.20

When the Halftone PWB (CK) negated the image processing ASIC Page Request signal with the CDI HSS cable (CK), it detected that the Page END Packet was not received from the Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-824], check the values from bit 0 and bit 1 (binary), and judge which one is [1]. **Is the value of bit 0 [1]?**

Y **N**

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[K color image size notified by Print Server]

- 759-800: IF_IMG_FS_PIX_IN_E1_CK
- 759-803: IF_IMG_SS_PIX_L_IN_E1_CK
- 759-806: IF_IMG_SS_PIX_H_IN_E1_CK
- 759-809: IF_IMG_RESOLUTION_IN_E1_CK

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-809] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200

A

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (CK) (PL 18.14)

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[C color image size notified by Print Server]

- 759-776: IF_IMG_FS_PIX_IN_E0_CK
- 759-779: IF_IMG_SS_PIX_L_IN_E0_CK
- 759-782: IF_IMG_SS_PIX_H_IN_E0_CK
- 759-785: IF_IMG_RESOLUTION_IN_E0_CK

A

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-785] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 2

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

B

B

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (CK) (PL 18.14)

044-963 Preq 2PEND Err (S2S1)

BSD-ON:CH3.20

When the Halftone PWB (SS) negated the image processing ASIC Page Request signal with the CDI HSS cable (S2S1), it detected that the Page END Packet was not received from the Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

From the value (decimal) of DC131 [759-825], check the values from bit 0 and bit 1 (binary), and judge which one is [1]. **Is the value of bit 0 [1]?**

Y **N**

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[S1 color image size notified by Print Server]

- 759-801: IF_IMG_FS_PIX_IN_E1_S2S1
- 759-804: IF_IMG_SS_PIX_L_IN_E1_S2S1
- 759-807: IF_IMG_SS_PIX_H_IN_E1_S2S1
- 759-810: IF_IMG_RESOLUTION_IN_E1_S2S1

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-810] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200

A

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (SS) (PL 18.13)

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[S2 color image size notified by Print Server]

- 759-777: IF_IMG_FS_PIX_IN_E0_S2S1
- 759-780: IF_IMG_SS_PIX_L_IN_E0_S2S1
- 759-783: IF_IMG_SS_PIX_H_IN_E0_S2S1
- 759-786: IF_IMG_RESOLUTION_IN_E0_S2S1

A

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-786] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 2

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

B

B

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (SS) (PL 18.13)

044-964 Rx PKT Buf OVF Err (YM)

FIP

Refer to 044-CF-006 FIP.

044-965 Rx PKT Buf OVF Err (CK)

FIP

Refer to 044-CF-006 FIP.

044-966 Rx PKT Buf OVF Err (S2S1)

FIP

Refer to 044-CF-006 FIP.

044-967 SOP Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected packet failure-related errors with CDI HSS cable (YM).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)

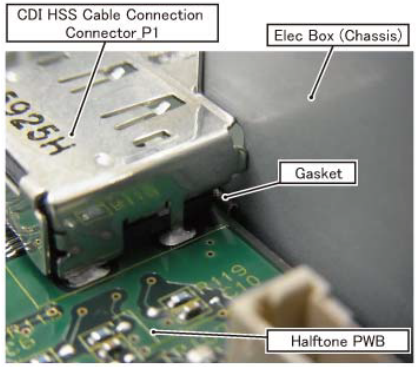


Figure 1 j0cx220001

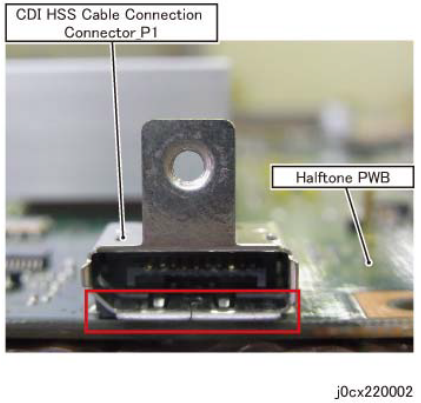


Figure 2 j0cx220002

Is it installed properly?

Y N

Install the part properly.

Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

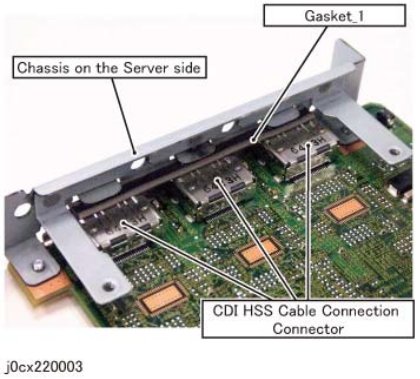


Figure 3 j0cx220003

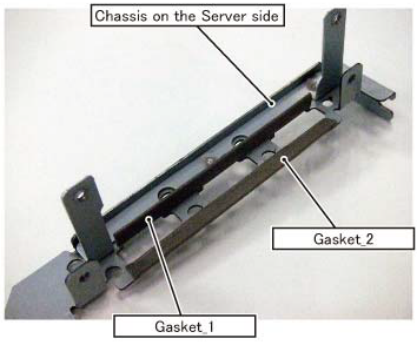


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (YM) (PL 18.14)

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-724: LINK_8b10b_CODE_ERR_CNT0_YM
- 759-727: LINK_8b10b_CODE_ERR_CNT1_YM
- 759-730: LINK_8b10b_CODE_ERR_CNT2_YM
- 759-733: LINK_8b10b_CODE_ERR_CNT3_YM
- 759-739: LINK_8B10B_RD_ERR_CNT0_YM
- 759-742: LINK_8B10B_RD_ERR_CNT1_YM
- 759-745: LINK_8B10B_RD_ERR_CNT2_YM
- 759-748: LINK_8B10B_RD_ERR_CNT3_YM
- 759-754: LINK_8B10B_INHI_K_ERR_CNT0_YM
- 759-757: LINK_8B10B_INHI_K_ERR_CNT1_YM
- 759-760: LINK_8B10B_INHI_K_ERR_CNT2_YM
- 759-763: LINK_8B10B_INHI_K_ERR_CNT3_YM

044-968 SOP Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected packet failure-related errors in CDI HSS cable (CK).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y N

Install the connector correctly.

Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)

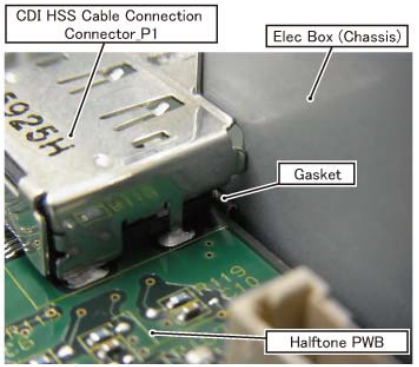
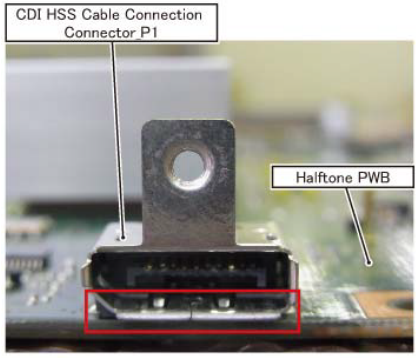


Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

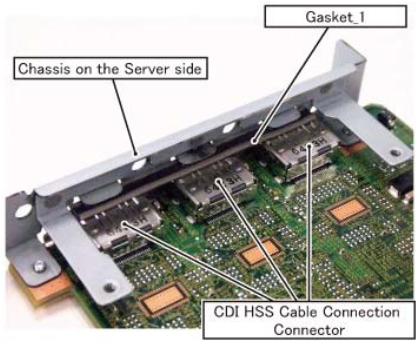
Is it installed properly?

Y N

Install the part properly.

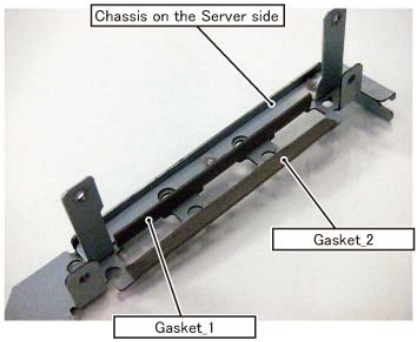
Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (CK) (PL 18.14)

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-725: LINK_8b10b_CODE_ERR_CNT0_CK
- 759-728: LINK_8b10b_CODE_ERR_CNT1_CK
- 759-731: LINK_8b10b_CODE_ERR_CNT2_CK
- 759-734: LINK_8b10b_CODE_ERR_CNT3_CK
- 759-740: LINK_8B10B_RD_ERR_CNT0_CK
- 759-743: LINK_8B10B_RD_ERR_CNT1_CK
- 759-746: LINK_8B10B_RD_ERR_CNT2_CK
- 759-749: LINK_8B10B_RD_ERR_CNT3_CK
- 759-755: LINK_8B10B_INHI_K_ERR_CNT0_CK
- 759-758: LINK_8B10B_INHI_K_ERR_CNT1_CK
- 759-761: LINK_8B10B_INHI_K_ERR_CNT2_CK
- 759-764: LINK_8B10B_INHI_K_ERR_CNT3_CK

044-969 SOP Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected packet failure-related errors in CDI HSS cable (S2S1).

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

Procedure

Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)

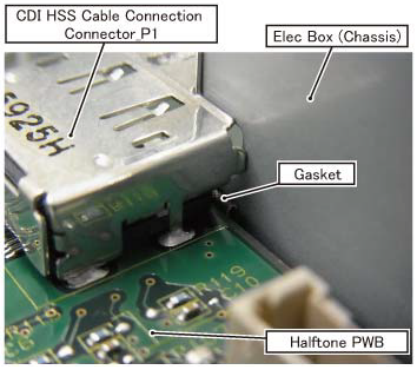


Figure 1 j0cx220001

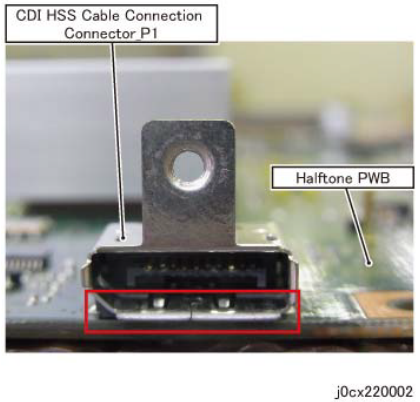


Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

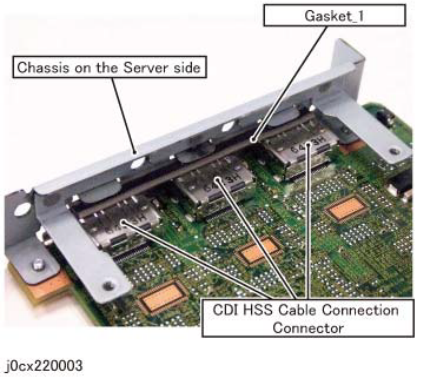


Figure 3 j0cx220003

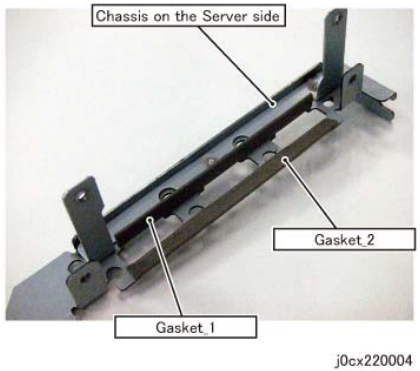


Figure 4 j0cx220004

Is it installed properly?

Y N

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board [See Print Server manual]
- Halftone PWB (SS) (PL 18.13)

Does the Fail occur?

Y N

Corrective action complete.

Obtain and escalate the DC131 log when problem occurs or the following NVM value.

- 759-726: LINK_8b10b_CODE_ERR_CNT0_S2S1
- 759-729: LINK_8bHalftone PWB (SS)10b_CODE_ERR_CNT1_S2S1
- 759-732: LINK_8b10b_CODE_ERR_CNT2_S2S1
- 759-735: LINK_8b10b_CODE_ERR_CNT3_S2S1
- 759-741: LINK_8B10B_RD_ERR_CNT0_S2S1
- 759-744: LINK_8B10B_RD_ERR_CNT1_S2S1
- 759-747: LINK_8B10B_RD_ERR_CNT2_S2S1
- 759-750: LINK_8B10B_RD_ERR_CNT3_S2S1
- 759-756: LINK_8B10B_INHI_K_ERR_CNT0_S2S1
- 759-759: LINK_8B10B_INHI_K_ERR_CNT1_S2S1
- 759-762: LINK_8B10B_INHI_K_ERR_CNT2_S2S1
- 759-765: LINK_8B10B_INHI_K_ERR_CNT3_S2S1

044-970 Tx PKTBuf UDF Err (YM)

FIP

Refer to 044-CF-007 FIP.

044-971 Tx PKTBuf UDF Err (CK)

FIP

Refer to 044-CF-007 FIP.

044-972 Tx PKTBuf UDF Err (S2S1)

FIP

Refer to 044-CF-007 FIP.

044-973 Acum ECC Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

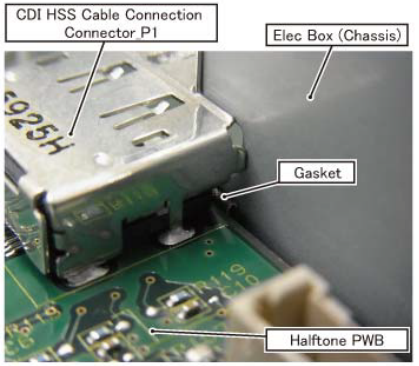
Procedure

Make a note of the following NVM values in advance.

- 758-219: ACUM_LINK_ECC1_ERR_CNT0_YM
- 758-222: ACUM_LINK_ECC1_ERR_CNT1_YM
- 758-225: ACUM_LINK_ECC1_ERR_CNT2_YM
- 758-228: ACUM_LINK_ECC1_ERR_CNT3_YM
- 758-231: ACUM_LINK_8B10B_CODE_ERR_CNT0_YM
- 758-234: ACUM_LINK_8B10B_CODE_ERR_CNT1_YM
- 758-237: ACUM_LINK_8B10B_CODE_ERR_CNT2_YM
- 758-240: ACUM_LINK_8B10B_CODE_ERR_CNT3_YM
- 758-243: ACUM_LINK_8B10B_RD_ERR_CNT0_YM
- 758-246: ACUM_LINK_8B10B_RD_ERR_CNT1_YM
- 758-249: ACUM_LINK_8B10B_RD_ERR_CNT2_YM
- 758-252: ACUM_LINK_8B10B_RD_ERR_CNT3_YM

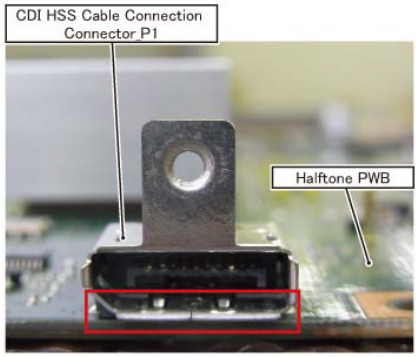
Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

- Printer Interface board [See Print Server manual]

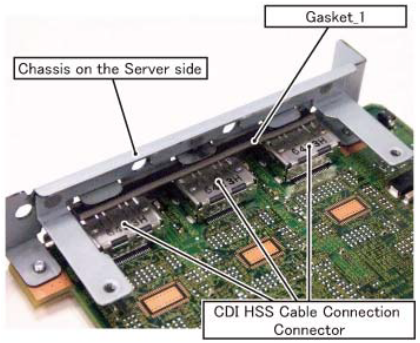


Figure 3 j0cx220003

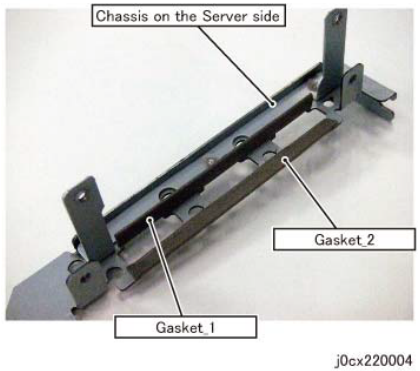


Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Turn ON the power. Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)

044-974 Acum ECC Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

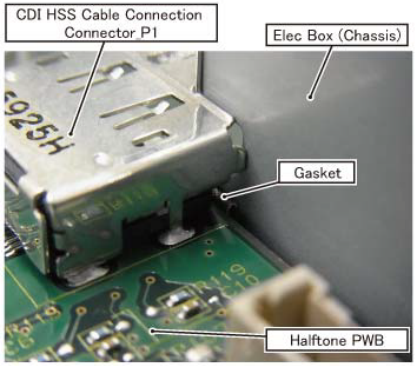
Procedure

Make a note of the following NVM values in advance.

- 758-220: ACUM_LINK_ECC1_ERR_CNT0_CK
- 758-223: ACUM_LINK_ECC1_ERR_CNT1_CK
- 758-226: ACUM_LINK_ECC1_ERR_CNT2_CK
- 758-229: ACUM_LINK_ECC1_ERR_CNT3_CK
- 758-232: ACUM_LINK_8B10B_CODE_ERR_CNT0_CK
- 758-235: ACUM_LINK_8B10B_CODE_ERR_CNT1_CK
- 758-238: ACUM_LINK_8B10B_CODE_ERR_CNT2_CK
- 758-241: ACUM_LINK_8B10B_CODE_ERR_CNT3_CK
- 758-244: ACUM_LINK_8B10B_RD_ERR_CNT0_CK
- 758-247: ACUM_LINK_8B10B_RD_ERR_CNT1_CK
- 758-250: ACUM_LINK_8B10B_RD_ERR_CNT2_CK
- 758-253: ACUM_LINK_8B10B_RD_ERR_CNT3_CK

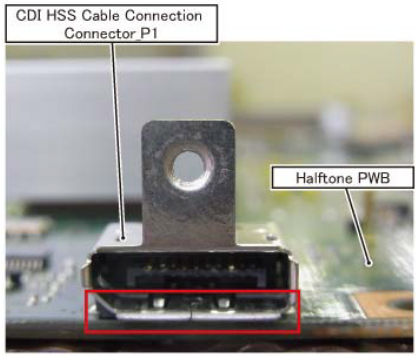
Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

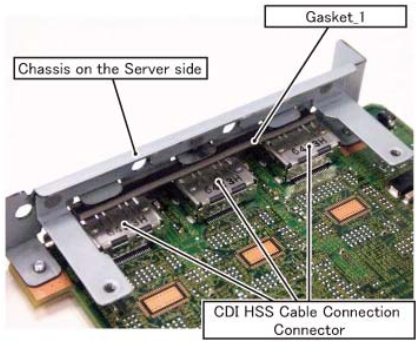
Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

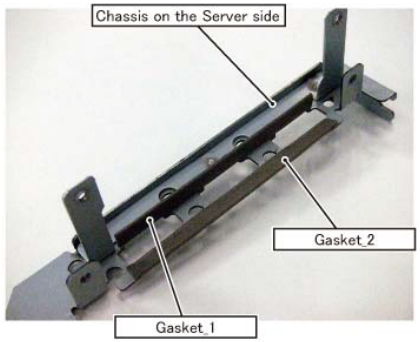
- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

- Printer Interface board [See Print Server manual]



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Turn ON the power. Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)

044-975 Acum ECC Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

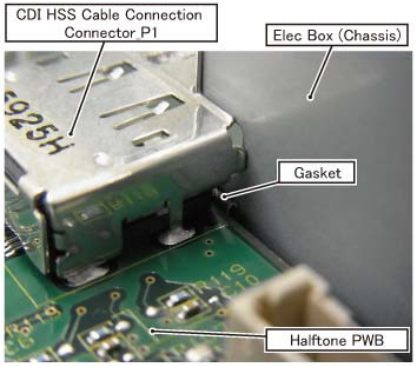
Procedure

Make a note of the following NVM values in advance.

- 758-221: ACUM_LINK_ECC1_ERR_CNT0_S2S1
- 758-224: ACUM_LINK_ECC1_ERR_CNT1_S2S1
- 758-227: ACUM_LINK_ECC1_ERR_CNT2_S2S1
- 758-230: ACUM_LINK_ECC1_ERR_CNT3_S2S1
- 758-233: ACUM_LINK_8B10B_CODE_ERR_CNT0_S2S1
- 758-236: ACUM_LINK_8B10B_CODE_ERR_CNT1_S2S1
- 758-239: ACUM_LINK_8B10B_CODE_ERR_CNT2_S2S1
- 758-242: ACUM_LINK_8B10B_CODE_ERR_CNT3_S2S1
- 758-245: ACUM_LINK_8B10B_RD_ERR_CNT0_S2S1
- 758-248: ACUM_LINK_8B10B_RD_ERR_CNT1_S2S1
- 758-251: ACUM_LINK_8B10B_RD_ERR_CNT2_S2S1
- 758-254: ACUM_LINK_8B10B_RD_ERR_CNT3_S2S1

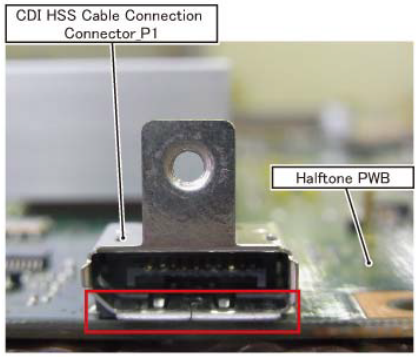
Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

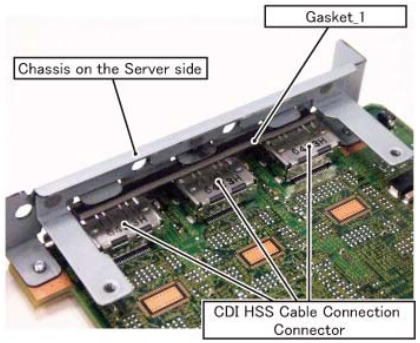
Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

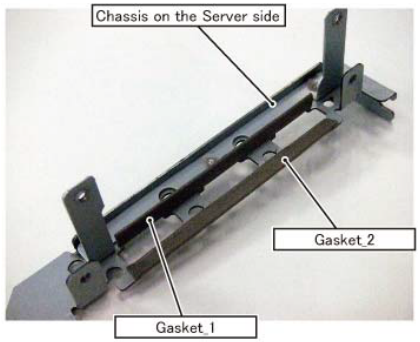
- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

- Printer Interface board [See Print Server manual]



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Turn ON the power. Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)

044-976 Acum 8b10b Code Err (YM)

BSD-ON:CH3.20

Halftone PWB (YM) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (YM).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

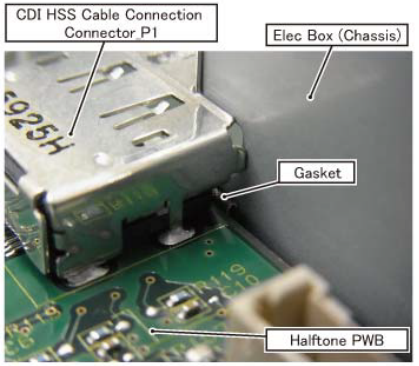
Procedure

Make a note of the following NVM values in advance.

- 758-231: ACUM_LINK_8B10B_CODE_ERR_CNT0_YM
- 758-234: ACUM_LINK_8B10B_CODE_ERR_CNT1_YM
- 758-237: ACUM_LINK_8B10B_CODE_ERR_CNT2_YM
- 758-240: ACUM_LINK_8B10B_CODE_ERR_CNT3_YM
- 758-243: ACUM_LINK_8B10B_RD_ERR_CNT0_YM
- 758-246: ACUM_LINK_8B10B_RD_ERR_CNT1_YM
- 758-249: ACUM_LINK_8B10B_RD_ERR_CNT2_YM
- 758-252: ACUM_LINK_8B10B_RD_ERR_CNT3_YM

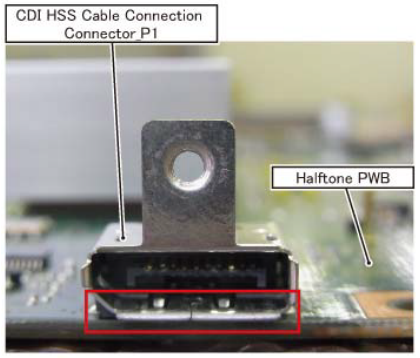
Check that the gasket in between the Halftone PWB (YM) CDI HSS cable (YM) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (YM) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (YM) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

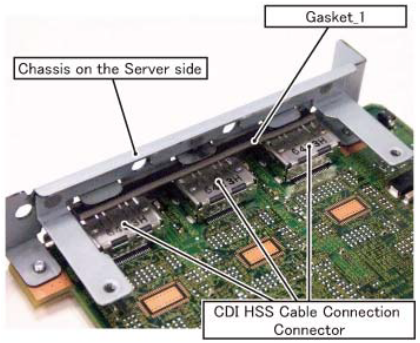
Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (YM) connector and server side chassis is properly installed.

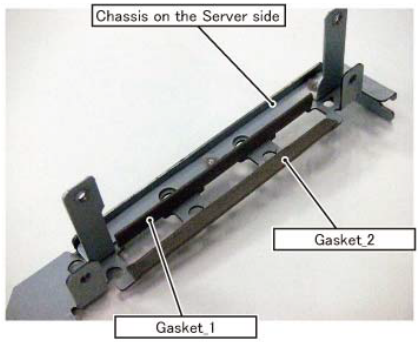
- Check that the gasket is in contact with the CDI HSS cable (YM) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

- Printer Interface board [See Print Server manual]



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Turn ON the power. Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (YM)
- Halftone PWB (YM) (PL 18.14)

044-977 Acum 8b10b Code Err (CK)

BSD-ON:CH3.20

Halftone PWB (CK) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (CK).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

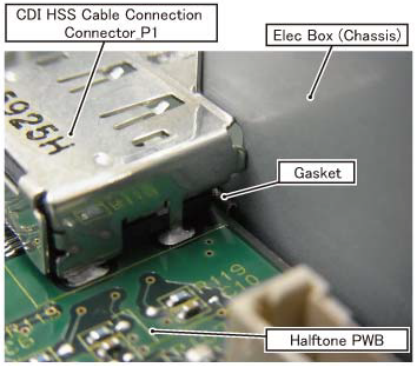
Procedure

Make a note of the following NVM values in advance.

- 758-232: ACUM_LINK_8B10B_CODE_ERR_CNT0_CK
- 758-235: ACUM_LINK_8B10B_CODE_ERR_CNT1_CK
- 758-238: ACUM_LINK_8B10B_CODE_ERR_CNT2_CK
- 758-241: ACUM_LINK_8B10B_CODE_ERR_CNT3_CK
- 758-244: ACUM_LINK_8B10B_RD_ERR_CNT0_CK
- 758-247: ACUM_LINK_8B10B_RD_ERR_CNT1_CK
- 758-250: ACUM_LINK_8B10B_RD_ERR_CNT2_CK
- 758-253: ACUM_LINK_8B10B_RD_ERR_CNT3_CK

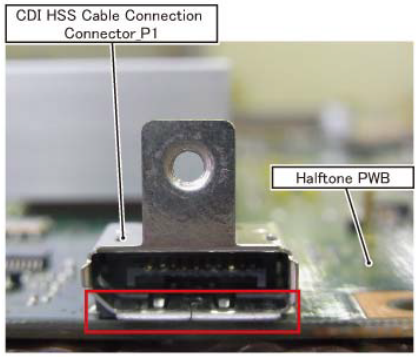
Check that the gasket in between the Halftone PWB (CK) CDI HSS cable (CK) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (CK) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (CK) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

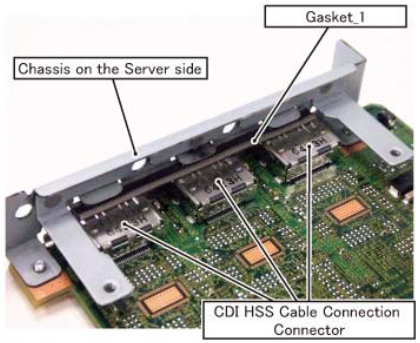
Is it installed properly?

Y **N**

Install the part properly.

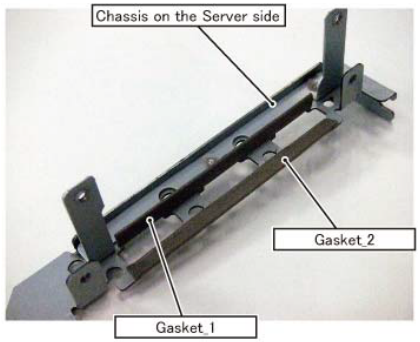
Check that the gasket in between the CDI HSS cable (CK) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (CK) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)



j0cx220003

Figure 3 j0cx220003



j0cx220004

Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Turn ON the power. Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (CK)
- Halftone PWB (CK) (PL 18.14)
- Printer Interface board [See Print Server manual]

044-978 Acum ECC Err (S2S1)

BSD-ON:CH3.20

Halftone PWB (SS) detected transmission quality-related cumulative error counter exceeded threshold with CDI HSS cable (S2S1).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board.)*

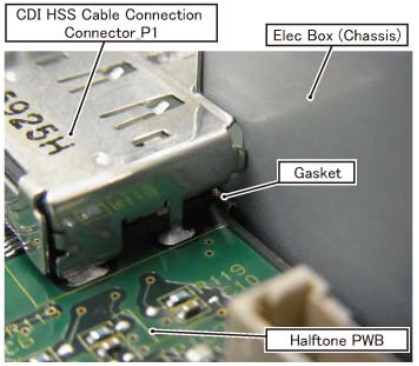
Procedure

Make a note of the following NVM values in advance.

- 758-233: ACUM_LINK_8B10B_CODE_ERR_CNT0_S2S1
- 758-236: ACUM_LINK_8B10B_CODE_ERR_CNT1_S2S1
- 758-239: ACUM_LINK_8B10B_CODE_ERR_CNT2_S2S1
- 758-242: ACUM_LINK_8B10B_CODE_ERR_CNT3_S2S1
- 758-245: ACUM_LINK_8B10B_RD_ERR_CNT0_S2S1
- 758-248: ACUM_LINK_8B10B_RD_ERR_CNT1_S2S1
- 758-251: ACUM_LINK_8B10B_RD_ERR_CNT2_S2S1
- 758-254: ACUM_LINK_8B10B_RD_ERR_CNT3_S2S1

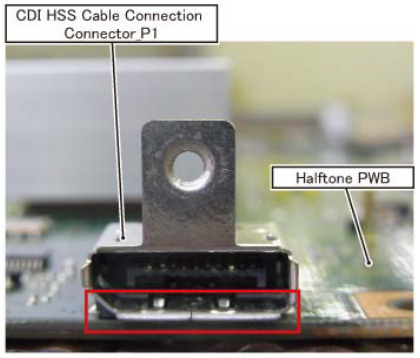
Check that the gasket in between the Halftone PWB (SS) CDI HSS cable (S2S1) connector_ P1 and Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable (S2S1) connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable (S2S1) connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable (S2S1) connector and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable (S2S1) connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

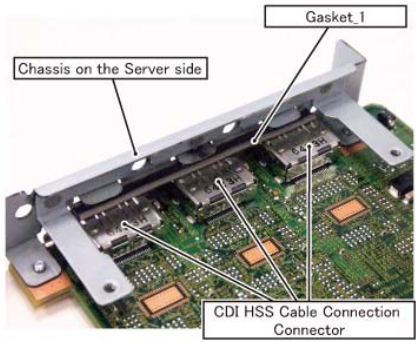


Figure 3 j0cx220003

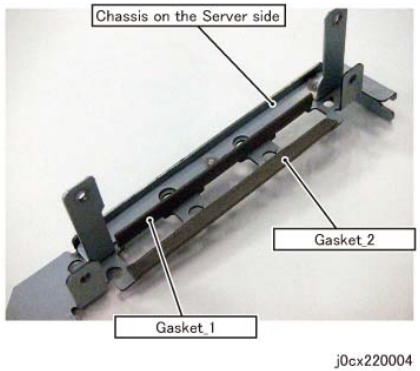


Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Turn ON the power. Compare the NVM value noted down previously with the current NVM value. **Is there an increase in NVM value?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- CDI HSS cable (S2S1)
- Halftone PWB (SS) (PL 18.13)
- Printer Interface board [See Print Server manual]

044-979 IMGST2Preq T Err (YM)

FIP

Refer to 044-CF-004 FIP.

044-980 IMGST2Preq T Err (CK)

FIP

Refer to 044-CF-004 FIP.

044-981 IMGST2Preq T Err (S2S1)

FIP

Refer to 044-CF-004 FIP.

045-312 ISP Logic Fail

BSD-ON:CH3.2

ISP Software Logic error occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-313 IM Logic Fail

BSD-ON:CH3.2

IM Software Logic error occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-314 Diag Logic Fail

BSD-ON:CH3.2

Diag Software Logic error occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-315 Marking Logic Fail

BSD-ON:CH3.2

The IOT Marking Software control error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-321 NVM Test Fail IOT #1

BSD-ON:CH3.2

Error was detected in NVM Test of IOT Main PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector P/J441between IOT Main PWB and NVM PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.14)
   - IOT Main PWB (PL 18.14)

045-322 NVM Test Fail IOT #2

BSD-ON:CH3.3

Error was detected in NVM Test of FSR/INV Core PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector P/J441_F between FSR/INV Core PWB and NVM PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.7)
   - FSR/INV Core PWB (PL 18.7)

045-324 NVM Test Fail IOT #4

BSD-ON:CH3.4

Error was detected in NVM Test of PH Core PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector P/J441_H between PH Core PWB and NVM PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.2)
   - PH Core PWB (PL 18.2)

045-325 NVM Test Fail IOT #5

BSD-ON:CH3.5

Error was detected in NVM Test of MK_EPG Core PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector P/J441_X between MK_EPG Core PWB and NVM PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)

045-326 Communication Fail IOT #2

BSD-ON:CH3.2, CH3.3

Communication error occurred between FSR/INV Core PWB and IOT Main PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the IOT Main PWB J630 and FSR/INV Core PWB J642_F for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - FSR/INV Core PWB (PL 18.7)
   - IOT Main PWB (PL 18.14)

045-328 Communication Fail IOT #4

BSD-ON:CH3.2, CH3.3, CH3.4

Communication error occurred between PH Core PWB and IOT Main PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.
   - Between IOT Main PWB J630 and FSR/INV Core PWB J642_F
   - Between FSR/INV Core PWB J643_F and ILS DC PWB J1_ID
   - Between ILS DC PWB J1_ID and PH Core PWB J642_H
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - PH Core PWB (PL 18.2)
   - IOT Main PWB (PL 18.14)

045-329 Communication Fail IOT #5

BSD-ON:CH3.2, CH3.3, CH3.4, CH3.5

Communication error occurred between MK_EPG Core PWB and IOT PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.
   - Between IOT Main PWB J630 and FSR/INV Core PWB J642_F
   - Between FSR/INV Core PWB J643_F and ILS DC PWB J1_ID
   - Between ILS DC PWB J1_ID and PH Core PWB J642_H
   - Between PH Core PWB J643_H and MK_EPG Core PWB J642_X
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_EPG Core PWB (PL 18.3)
   - IOT Main PWB (PL 18.14)

045-330 Circlink Fail

BSD-ON:CH3.2

Communication error (hardware) between IOT Main PWB and Core PWB was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - FSR/INV Core PWB (PL 18.7)
   - PH_Core PWB (PL 18.2)
   - MK_EPG Core PWB (PL 18.3)
   - MK_DRV Core PWB (PL 18.3)
   - IOT Main PWB (PL 18.14)

045-331 IOT Software Version Mismatch

BSD-ON:CH3.2

Software versions between boards do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-332 FPGA Fail #1

BSD-ON:CH3.2

Software of FPGA used in IOT Main PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software.(ADJ 18.1.2)
3. If the problem persists, replace the IOT Main PWB. (PL 18.14)

045-333 FPGA Fail #2

BSD-ON:CH3.3, CH3.15

Software of FPGA used in FSR/INV Core PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the FSR/INV Core PWB. (PL 18.7)

045-335 FPGA Fail #4

BSD-ON:CH3.4, CH3.15

Software of FPGA used in PH Core PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the PH Core PWB. (PL 18.2)

045-336 FPGA Fail #5

BSD-ON:CH3.5, CH3.15

Software of FPGA used in MK_EPG Core PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_EPG Core PWB. (PL 18.3)

045-337 Driver FPGA Fail #2-1

BSD-ON:CH3.8

Software of FPGA used in FSR/INV_1 MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the FSR/INV_1 MD PWB. (PL 18.7)

045-339 Driver FPGA Fail #4-1

BSD-ON:CH3.10

Software of FPGA used in PH_1 MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the PH_1 MD PWB. (PL 18.2)

045-340 Driver FPGA Fail #5-1

BSD-ON:CH3.13

Software of FPGA used in MK_EPG 1 MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_EPG 1 MD PWB. (PL 18.3)

045-341 FPGA Fail #6

BSD-ON:CH3.5, CH3.15

Software of FPGA used in MK_DRV Core PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_DRV Core PWB. (PL 18.3)

045-342 Communication Fail IOT - AD Converter

BSD-ON:CH3.7

Communication failure between IOT Main PWB and AD Converter.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the IOT Main PWB J631 and MK_DRV ADC PWB J720 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_DRV ADC PWB (PL 18.3)
   - IOT Main PWB (PL 18.14)

045-347 Finisher Command Parameter Fail

BSD-ON:CH3.2

There was no response from the Finisher within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of the following Software. (ADJ 18.1.2)
   - Finisher Software
   - IOT Software

045-348 Finisher Command Timing Fail

BSD-ON:CH3.2

There was no response from the Finisher within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of the following Software. (ADJ 18.1.2)
   - Finisher Software
   - IOT Software

045-349 FD Logic Fail

BSD-ON:CH3.2

FD Software Logic error occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-350 PH Logic Fail

BSD-ON:CH3.2

PH Software Logic error occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, re-install or upgrade the version of IOT Software. (ADJ 18.1.2)

045-352 NVM Test Fail IOT #6

BSD-ON:CH3.5

Error was detected in NVM Test of MK_DRV Core PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector P/J441_D between MK_DRV Core PWB and NVM PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.3)
   - MK_DRV Core PWB (PL 18.3)

045-353 Communication Fail IOT #6

BSD-ON:CH3.2, CH3.3, CH3.4, CH3.5

Communication error occurred between MK_DRV Core PWB and IOT PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.
   - Between IOT Main PWB J630 and FSR/INV Core PWB J642_F
   - Between FSR/INV Core PWB J643_F and ILS DC PWB J1_ID
   - Between ILS DC PWB J1_ID and PH Core PWB J642_H
   - Between PH Core PWB J643_H and MK_EPG Core PWB J642_X
   - Between MK_EPG Core PWB J643_X and MK_DRV Core PWB J642_D
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_DRV Core PWB (PL 18.3)
   - IOT Main PWB (PL 18.14)

045-354 Driver FPGA Fail #2-2

BSD-ON:CH3.9

Software of FPGA used in FSR/INV_2 MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the FSR/INV_2 MD PWB. (PL 18.7)

045-355 Driver FPGA Fail #4-2

BSD-ON:CH3.11

Software of FPGA used in PH_2 MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the PH_2 MD PWB. (PL 18.2)

045-356 Driver FPGA Fail #5-2

BSD-ON:CH3.14

Software of FPGA used in MK_EPG 2 MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_EPG 2 MD PWB. (PL 18.3)

045-357 Driver FPGA Fail #6-1

BSD-ON:CH3.12

Software of FPGA used in MK_DRV MD PWB does not match.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_DRV MD PWB. (PL 18.3)

045-358 SPI Communication Fail #2-1

BSD-ON:CH3.8

SPI communication error occurred between FSR/INV Core PWB and FSR/INV_1 MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the FSR/INV Core PWB J652_F and FSR/INV_1 MD PWB J661_F1 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - FSR/INV_1 MD PWB (PL 18.7)
   - FSR/INV Core PWB (PL 18.7)

045-359 SPI Communication Fail #2-2

BSD-ON:CH3.9

SPI communication error occurred between FSR/INV Core PWB and FSR/INV_2 MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the FSR/INV Core PWB J653_F and FSR/INV_2 MD PWB J661_F2 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - FSR/INV_2 MD PWB (PL 18.7)
   - FSR/INV Core PWB (PL 18.7)

045-360 SPI Communication Fail #4-1

BSD-ON:CH3.10

SPI communication error occurred between PH Core PWB and PH_1 MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the PH Core PWB J652_H and PH_1 MD PWB J661_H1 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - PH_1 MD PWB (PL 18.2)
   - PH Core PWB (PL 18.2)

045-361 SPI Communication Fail #4-2

BSD-ON:CH3.11

SPI communication error occurred between PH Core PWB and PH_2 MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the PH Core PWB J653_H and PH_2 MD PWB J661_H2 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - PH_2 MD PWB (PL 18.2)
   - PH Core PWB (PL 18.2)

045-362 SPI Communication Fail #5-1

BSD-ON:CH3.13

SPI communication error occurred between MK_EPG Core PWB and MK_EPG 1 MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the MK_EPG Core PWB J652_X and MK_EPG 1 MD PWB J661_X1 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_EPG 1 MD PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)

045-363 SPI Communication Fail #5-2

BSD-ON:CH3.14

SPI communication error occurred between MK_EPG Core PWB and MK_EPG 2 MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the MK_EPG Core PWB J653_X and MK_EPG 2 MD PWB J661_X2 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_EPG 2 MD PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)

045-364 SPI Communication Fail #6-1

BSD-ON:CH3.12

SPI communication error occurred between MK_DRV Core PWB and MK_DRV MD PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the MK_DRV Core PWB J652_D and MK_DRV MD PWB J661_D for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_DRV MD PWB (PL 18.3)
   - MK_DRV Core PWB (PL 18.3)

045-365 Dora Communication Fail #2-1

BSD-ON:CH3.8

Dorahiko communication error occurred between FSR/INV Core PWB and FSR/INV_1 MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-358 (SPI Communication Fail #2-1) FIP.

045-366 Dora Communication Fail #2-2

BSD-ON:CH3.9

Dorahiko communication error occurred between FSR/INV Core PWB and FSR/INV_2 MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-359 (SPI Communication Fail #2-2) FIP.

045-367 Dora Communication Fail #4-1

BSD-ON:CH3.10

Dorahiko communication error occurred between PH_Core PWB and PH_1 MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-360 (SPI Communication Fail #4-1) FIP.

045-368 Dora Communication Fail #4-2

BSD-ON:CH3.11

Dorahiko communication error occurred between PH_Core PWB and PH_2 MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-361 (SPI Communication Fail #4-2) FIP.

045-369 Dora Communication Fail #5-1

BSD-ON:CH3.13

Dorahiko communication error occurred between MK_EPG Core PWB and MK_EPG 1 MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-362 (SPI Communication Fail #5-1) FIP.

045-370 Dora Communication Fail #5-2

BSD-ON:CH3.14

Dorahiko communication error occurred between MK_EPG Core PWB and MK_EPG 2 MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-363 (SPI Communication Fail #5-2) FIP.

045-371 Dora Communication Fail #6-1

BSD-ON:CH3.12

Dorahiko communication error occurred between MK_DRV Core PWB and MK_DRV MD PWB.

NOTE: *When this Fail occurs, +24VDC, Tray Intlk +24VDC and +36VDC are cut off even when transiting to Diag mode. Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 045-364 (SPI Communication Fail #6-1) FIP.

045-372 PLD Fail #2-1

BSD-ON:CH3.8

The combination of FPGA and PLD used in FSR/INV_1 MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the FSR/INV_1 MD PWB. (PL 18.7)

045-373 PLD Fail #2-2

BSD-ON:CH3.9

The combination of FPGA and PLD used in FSR/INV_2 MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the FSR/INV_2 MD PWB. (PL 18.7)

045-374 PLD Fail #4-1

BSD-ON:CH3.10

The combination of FPGA and PLD used in PH_1 MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the PH_1 MD PWB. (PL 18.2)

045-375 PLD Fail #4-2

BSD-ON:CH3.11

The combination of FPGA and PLD used in PH_2 MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the PH_2 MD PWB. (PL 18.2)

045-376 PLD Fail #5-1

BSD-ON:CH3.13

The combination of FPGA and PLD used in MK_EPG 1 MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_EPG 1 MD PWB. (PL 18.3)

045-377 PLD Fail #5-2

BSD-ON:CH3.14

The combination of FPGA and PLD used in MK_EPG 2 MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_EPG 2 MD PWB. (PL 18.3)

045-378 PLD Fail #6-1

BSD-ON:CH3.12

The combination of FPGA and PLD used in MK_DRV MD PWB is incorrect.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the MK_DRV MD PWB. (PL 18.3)

045-379 Driver Fuse Fail #2-1

BSD-ON:CH1.50, CH1.51, CH10.16, CH10.17, CH10.9, CH10.39, CH10.45, CH10.34, CH10.32, CH10.31, CH10.28, CH10.26, CH10.36, CH10.18, CH10.40, CH10.6, CH10.24, CH10.20, CH10.27, CH10.46, CH10.21

The fuse on FSR/INV_1 MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of Fuse (F5-F19, F21-F24) on the FSR/INV_1 MD PWB.

Is it conducting?

Y **N**

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between DST 2 PWB J1008-5 and FSR/INV_1 MD PWB J669_F1-3
- Between DST 2 PWB J1008-6 and FSR/INV_1 MD PWB J675_F1-3
- Between DST 2 PWB J1009-8 and FSR/INV_1 MD PWB J671_F1-1
- Between DST 2 PWB J1009-10 and FSR/INV_1 MD PWB J683_F1-1
- Between DST 2 PWB J1010-3 and FSR/INV_1 MD PWB J675_F1-1
- Between DST 2 PWB J1012-4 and FSR/INV_1 MD PWB J669_F1-1
- Between DST 2 PWB J1012-5 and FSR/INV_1 MD PWB J671_F1-3

Disconnect the following connectors from the FSR/INV_1 MD PWB and measure the resistance between the connector terminal and the GND.

- F5: J670_F1-19 (Fusing Belt Walk Motor)
- F6: J670_F1-17 (Refresh Roll Retract Motor)
- F7: J670_F1-15, 16 (P/R Latch Motor)
- F8: J682_F1-19, 20 (IOT Exit Motor)
- F9: J682_F1-17, 18 (Dup Out Motor)
- F10: J682_F1-15, 16 (Invert Upper Motor)_f1
- F11: J684_F1-3, 4 (Decurler Roll Pene Motor)
- F12: J684_F1-1, 2 (Decurler Belt Pene Motor)
- F13: J685_F1-4 (Cooling Lower Walk Motor)
- F14: J685_F1-2 (Cooling Upper Walk Motor)
- F15: J681_F1-19, 20 (Invert In Motor)
- F16: J681_F1-3, 4 (Exit V-Tra Motor)
- F17: J681_F1-1, 2 (Invert Path Motor)
- F18: J674_F1-17 (V-Tra Fan 4)
- F19: J674_F1-9 (Fusing Waste Fan)
- F21: J673_F1-1, 4 (Fusing WEB Motor)
- F22: J676_F1-3 (Cooling Lower Motor)
- F23: J687_F1-1 (Heat Sink Fan 2)
- F24: J688_F1-5 (Fusing Belt Fan 1-3), J688_F1-11 (IOT-R Rear Cooling Fan)

Is the resistance 5 Ohm or higher for each?

Y **N**

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.
- The target components for internal short circuits.

Replace the FSR/INV_1 MD PWB. (PL 18.7)

045-380 Driver Fuse Fail #2-2

BSD-ON:CH1.52, CH1.53, CH10.33, CH10.37, CH10.4, CH10.35, CH10.38, CH10.43, CH10.42, CH10.44, CH10.41, CH10.22, CH1.4, CH10.47, CH10.24, CH10.19, CH10.46

The fuse on FSR/INV_2 MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of Fuse (F1-F3, F5, F6, F8, F9, F11, F12, F18, F19, F21-F24) on the FSR/INV_2 MD PWB. **Is it conducting?**

Y N

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between DST 2 PWB J1008-8 and FSR/INV_2 MD PWB J669_F2-1
- Between DST 2 PWB J1009-7 and FSR/INV_2 MD PWB J689_F2-3
- Between DST 2 PWB J1009-9 and FSR/INV_2 MD PWB J669_F2-3
- Between DST 2 PWB J1009-8 and FSR/INV_2 MD PWB J683_F2-1
- Between DST 2 PWB J1014-1 and FSR/INV_2 MD PWB J689_F2-1
- Between DST 2 PWB J1014-1 and FSR/INV_2 MD PWB J683_F2-3
- Between DST 2 PWB J1013-8 and FSR/INV_2 MD PWB J675_F2-1
- Between DST 2 PWB J1013-6 and FSR/INV_2 MD PWB J671_F2-3

Disconnect the following connectors from the FSR/INV_2 MD PWB and measure the resistance between the connector terminal and the GND.

- F1: J668_F2-A1, A2 (Invert Entrance Motor)
- F2: J668_F2-A3, A4 (Invert Motor)
- F3: J668_F2-B1, B2 (V-Tra Motor 4)
- F5: J670_F2-19, 20 (Invert Gate Motor)
- F6: J670_F2-17, 18 (Invert N/R Motor)
- F8: J682_F2-19, 20 (Dup Invert Motor)
- F9: J682_F2-17, 18 (D-Tra Motor 2)
- F11: J684_F2-3, 4 (Duplex Motor)
- F12: J684_F2-1, 2 (D-Tra Motor 1)
- F18: J674_F2-17, 15 (Fusing P/R Fan 1/2)
- F19: J674_F2-9, 5 (TRIAC Fan, Fusing P/R Fan 3)
- F21: J673_F2-1, 4 (OCT Offset Motor)
- F22: J676_F2-1 (Fusing Lower Fan)
- F23: J687_F2-3, 5 (Exit V-Tra Fan 1/2)
- F24: J688_F2-5 (Hear Sink Fan 1)

Is the resistance 5 Ohm or higher for each?

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.

A

- The target components for internal short circuits

Replace the FSR/INV_2 MD PWB. (PL 18.7)

045-381 Driver Fuse Fail #4-1

BSD-ON:CH1.54, CH1.55, CH8.22, CH8.23, CH8.24, CH8.19, CH10.1, CH10.2, CH8.12, CH8.21, CH8.26, CH8.10, CH8.1, CH7.11, CH7.15, CH7.16, CH8.29, CH8.30, CH8.27, CH7.15, CH7.19, CH10.5, CH10.6, CH7.9

The fuse on PH_1 MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of each Fuse (F1-F20, F22) on the PH_1 MD PWB. **Is it conducting?**

Y N

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between DST 1 PWB J1111-5 and PH_1 MD PWB J669_H1-1
- Between DST 1 PWB J1112-A6 and PH_1 MD PWB J671_H1-1
- Between DST 1 PWB J1112-A2 and PH_1 MD PWB J683_H1-3
- Between DST 1 PWB J1114-5 and PH_1 MD PWB J675_H1-1
- Between DST 1 PWB J1114-6 and PH_1 MD PWB J689_H1-3
- Between DST 1 PWB J1115-4 and PH_1 MD PWB J671_H1-3
- Between DST 3 PWB J1013_3-7 and PH_1 MD PWB J683_H1-1
- Between DST 3 PWB J1012_3-4 and PH_1 MD PWB J675_H1-3
- Between DST 3 PWB J1014_3-1 and PH_1 MD PWB J669_H1-3

Disconnect the following connectors from the PH_1 MD PWB and measure the resistance between the connector terminal and the GND.

- F1: J668_H1-A1, A2 (Aligner Crossed N/R Motor 1)
- F2: J668_H1-A3, A4 (Aligner Crossed N/R Motor 2)
- F3: J668_H1-B1, B2 (Aligner Crossed N/R Motor 3)
- F4: J668_H1-B3, B4 (Pre Aligner N/R Motor)
- F5: J670_H1-19, 20 (V-Tra Motor 1)
- F6: J670_H1-17, 18 (V-Tra Motor 2)
- F7: J670_H1-15, 16 (H-Tra 1 Motor 1)
- F8: J682_H1-19, 20 (Aligner Unit Skew Motor)
- F9: J682_H1-17, 18 (Aligner Shift Motor)
- F10: J682_H1-16 (Burr Press Retruct Motor)
- F11: J684_H1-3, 4 (Tray 1 Feed Motor)
- F12: J684_H1-1, 2 (Tray 1 Shift Motor)
- F13: J685_H1-3, 4 (Tray 1 Lead Shutter Motor)
- F14: J685_H1-1, 2 (Tray 1 End Shutter Motor)

A

- F15: J681_H1-19, 20 (Regi Motor)
- F16: J681_H1-3, 4 (Regi N/R Motor)
- F17: J681_H1-1, 2 (Regi Side Shift Motor)
- F18: J672_H1-17 (Tray 1 Lead Blower Fan), J674_H1-15 (Tray 1 Front Blower Fan)
- F19: J674_H1-9, 7, 5 (V-Tra Fan 1/2/3)
- F20: J672_H1-1 (Tray 1 Lift Motor)
- F22: J676_H1-10 (Tray 1 Nudger Solenoid)

Is the resistance 5 Ohm or higher for each?

Y **N**

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.
- The target components for internal short circuits

Replace the PH_1 MD PWB. (PL 18.2)

045-382 Driver Fuse Fail #4-2

BSD-ON:CH1.56, CH1.57, CH8.20, CH8.17, CH8.18, CH8.15, CH8.16, CH8.25, CH8.14, CH8.13, CH8.3, CH7.12, CH7.17, CH7.18, CH8.6, CH10.3, CH8.5, CH7.17, CH7.20, CH7.10, CH8.7, CH8.11, CH8.8

The fuse on PH_2 MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of each Fuse (F1-6, F8-F18, F20, F22-24) on the PH_2 MD PWB. **Is it conducting?**

Y **N**

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between DST 1 PWB J1112-A5 and PH_2 MD PWB J683_H2-1
- Between DST 1 PWB J1112-A6 and PH_2 MD PWB J669_H2-1
- Between DST 1 PWB J1112-A8 and PH_2 MD PWB J669_H2-3
- Between DST 1 PWB J1112-A4 and PH_2 MD PWB J671_H2-1
- Between DST 1 PWB J1112-A10 and PH_2 MD PWB J683_H2-3
- Between DST 1 PWB J1113-6 and PH_2 MD PWB J689_H2-3
- Between DST 1 PWB J1113-7 and PH_2 MD PWB J675_H2-1
- Between DST 1 PWB J1113-8 and PH_2 MD PWB J675_H2-3
- Between DST 3 PWB J1009_3-10 and PH_2 MD PWB J689_H2-1
- Between DST 3 PWB J1009_3-9 and PH_2 MD PWB J675_H2-3

Disconnect the following connectors from the PH_2 MD PWB and measure the resistance between the connector terminal and the GND.

- F1: J668_H2-A1, A2 (Pre Aligner Drive Motor Rear)
- F2: J668_H2-A3, A4 (Pre Aligner Drive Motor Front)
- F3: J668_H2-B1, B2 (P-Regi Roll 1 N/R Motor)
- F4: J668_H2-B3, B4 (P-Regi Roll 2 N/R Motor)
- F5: J670_H2-19, 20 (Pre Regi Motor1)
- F6: J670_H2-17, 18 (Pre Regi Motor2)
- F8: J682_H2-19, 20 (Aligner Drive Motor)
- F9: J682_H2-17, 18 (Transport Motor)
- F10: J682_H2-15, 16 (I-Tra Motor)
- F11: J684_H2-3, 4 (Tray 2 Feed Motor)
- F12: J684_H2-1, 2 (Tray 2 Shift Motor)
- F13: J685_H2-3, 4 (Tray 2 Lead Shutter Motor)
- F14: J685_H2-1, 2 (Tray 2 End Shutter Motor)
- F15: J681_H2-19, 20 (J-Tra 2 Motor)
- F16: J681_H2-3, 4 (V-Tra Motor 3)
- F17: J681_H2-1, 2 (J-Tra 1 Motor)
- F18: J674_H2-15, 17 (Tray 2 Front Blower Fan/Lead Blower Fan)
- F20: J674_H2-1 (Tray 2 Lift Motor)
- F22: J676_H2-10 (Tray 2 Nudger Solenoid)
- F23: J687_H2-1, 3, 8 (H-Tra 2 In Motor/H-Tra 1 Motor 2/H-Tra 1 Clutch)
- F24: J688_H2-1 (H-Tra 2 Out Motor)

Is the resistance 5 Ohm or higher for each?

Y **N**

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.
- The target components for internal short circuits

Replace the PH_2 MD PWB. (PL 18.2)

045-383 Driver Fuse Fail #5-1

BSD-ON:CH1.58, CH1.59, CH9.69, CH9.70, CH9.71, CH9.72, CH9.68, CH9.73, CH9.65, CH9.66, CH9.67, CH9.80, CH9.81

The fuse on MK_EPG 1 MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of Fuse (F1-F6, F9-F12, F24) on the MK_EPG 1 MD PWB. **Is it conducting?**

Y N

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between DST 1 PWB J1114-4 and MK_EPG 1 MD PWB J669_X1-3
- Between DST 1 PWB J1111-6 and MK_EPG 1 MD PWB J683_X1-1
- Between DST 1 PWB J1111-7 and MK_EPG 1 MD PWB J689_X1-3
- Between DST 4 PWB J1014_4-1 and MK_EPG 1 MD PWB J669_X1-1
- Between DST 4 PWB J1014_4-1 and MK_EPG 1 MD PWB J683_X1-3
- Between DST 4 PWB J1014_4-1 and MK_EPG 1 MD PWB J689_X1-1

Disconnect the following connectors from the MK_EPG 1 MD PWB and measure the resistance between the connector terminal and the GND.

- F1: J668_X1-A1, A2 (Cleaner Motor Y)
- F2: J668_X1-A3, A4 (Cleaner Motor M)
- F3: J668_X1-B1, B2 (Cleaner Motor C)
- F4: J668_X1-B3, B4 (Cleaner Motor K)
- F5: J670_X1-19, 20 (Cleaner Motor #1)
- F6: J670_X1-17, 18 (Cleaner Motor #6)
- F9: J682_X1-17 (CC Cleaner Motor Y)
- F10: J682_X1-15 (CC Cleaner Motor M)
- F11: J684_X1-4 (CC Cleaner Motor C)
- F12: J684_X1-2 (CC Cleaner Motor K)
- F24: J688_X1-1, 3 (CC Fan 1/6)

Is the resistance 5 Ohm or higher for each?

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.
- The target components for internal short circuits

Replace the MK_EPG 1 MD PWB.(PL 18.3)

045-384 Driver Fuse Fail #5-2

BSD-ON:CH1.60, CH1.61, CHCH9.52, CH9.53, CH9.55, CH9.56, CH9.62, CH9.61, CH9.63, CH9.60, CH9.65, CH9.67, CH6.17, CH9.80, CH9.81

The fuse on MK_EPG 2 MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of Fuse (F1-F6, F8-F12, F22, F24) on the MK_EPG 2 MD PWB. **Is it conducting?**

Y N

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between DST 1 PWB J1108-6 and MK_EPG 2 MD PWB J675_X2-1
- Between DST 1 PWB J1117-6 and MK_EPG 2 MD PWB J669_X2-3
- Between DST 1 PWB J1120-3 and MK_EPG 2 MD PWB J689_X2-1
- Between DST 3 PWB J1009_3-9 and MK_EPG 2 MD PWB J683_X2-1
- Between DST 3 PWB J1009_3-9 and MK_EPG 2 MD PWB J669_X2-1
- Between DST 4 PWB J1009_4-8 and MK_EPG 2 MD PWB J689_X2-3

Disconnect the following connectors from the MK_EPG 2 MD PWB and measure the resistance between the connector terminal and the GND.

- F1: J668_X2-A2 (1st BTR CNT/RET Motor R1)
- F2: J668_X2-A4 (1st BTR CNT/RET Motor R2)
- F3: J668_X2-B2 (1st BTR CNT/RET Motor R3)
- F4: J668_X2-B4 (1st BTR CNT/RET Motor R4)
- F5: J670_X2-19, 20 (Rear 2nd Nip Adjustable Motor)
- F6: J670_X2-17, 18 (Front 2nd Nip Adjustable Motor)
- F8: J682_X2-19, 20 (2nd BTB Cleaning Motor)
- F9: J682_X2-17, 18 (2nd BTB CNT/RET Motor)
- F10: J682_X2-15, 16 (2nd BTB Motor)
- F11: J684_X2-4 (CC Cleaner Motor #1)
- F12: J684_X2-2 (CC Cleaner Motor #6)
- F22: J676_H2-1 (ROS Fan 1)
- F24: J688_X2-3/5/9/11 (CC Fan 2/3/4/5)

Is the resistance 5 Ohm or higher for each?

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.
- The target components for internal short circuits

Replace the MK_EPG 2 MD PWB.(PL 18.3)

045-385 Driver Fuse Fail #6-1

BSD-ON:CH1.62, CH1.63, CH9.75, CH9.49, CH9.75, CH9.76, CH9.10, CH9.11, CH9.12, CH9.13, CH9.74, CH9.9, CH9.14, CH9.82, CH9.83

The fuse on MK_DRV MD PWB has blown.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the power OFF and check the conductivity of Fuse (F1, F2, F5-F7, F9-F12, F15-F19, F22) on the MK_DRV MD PWB. **Is it conducting?**

Y N

Turn OFF the power and check for open circuit, short circuit, and poor contact on the Fuse Line where there is no conductivity.

- Between LVPS H1U J509_U-2 and MK_DRV MD PWB J669_D-3
- Between DST 1 PWB J1109-3 and MK_DRV MD PWB J683_D-1
- Between DST 1 PWB J1109-2 and MK_DRV MD PWB J689_D-3
- Between DST 1 PWB J1109-1 and MK_DRV MD PWB J683_D-1, 3
- Between DST 1 PWB J1111-5 and MK_DRV MD PWB J671_D-1
- Between DST 1 PWB J1116-5 and MK_DRV MD PWB J669_D-1
- Between DST 4 PWB J1014_4-1 and MK_DRV MD PWB J675_D-3

Disconnect the following connectors from the MK_DRV MD PWB and measure the resistance between the connector terminal and the GND.

- F1: J668_D-A2 (Toner Collect Motor)
- F2: J668_D-A4 (IBT Steering Motor)
- F5: J670_D-19 (Auger Motor 1)
- F6: J670_D-17 (Auger Motor 2)
- F7: J670_D-15 (Active Bottle Switching Motor)
- F9: J682_D-17, 18 (Drum Motor Y)
- F10: J682_D-15, 16 (Drum Motor M)
- F11: J684_D-3, 4 (Drum Motor C)
- F12: J684_D-1, 2 (Drum Motor K)
- F15: J681_D-19, 20 (IBT Cleaner Motor)
- F16: J681_D-3, 4 (Drum Motor #1)
- F17: J681_D-1, 2 (Drum Motor #6)
- F18: J674_D-17/15/13/11 (Rear Drive Cooling Fan 2/3/4/5)
- F19: J674_D-9, 7, 5 (Rear Drive Cooling Fan 1/6, Rear Cooling Fan 9)
- F22: J674_D-2 (Rear Cooling Fan 10)

Is the resistance 5 Ohm or higher for each?

Y N

Check the following:

- The connections that are in earth fault (at 5 Ohm or lower) for open circuit, short circuit, and poor contact.
- The target components for internal short circuits.

A

A

Replace the MK_DRV MD PWB. (PL 18.3)

045-386 PWBA HT_1 Connect Fail

BSD-ON:CH3.20, CH3.16

Connection error between Halftone PWB YM and IOT Main PWB was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connector (P/J7681) between HalfTone PWB YM and IOT Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB YM (PL 18.14)
   - IOT Main PWB (PL 18.14)

045-387 PWBA HT_2 Connect Fail

BSD-ON:CH3.20, CH3.16

Connection error between Halftone PWB CK and IOT Main PWB was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connector (P/J7682) between HalfTone PWB CK and IOT Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB CK (PL 18.14)
   - IOT Main PWB (PL 18.14)

045-388 PWBA HT_3 Connect Fail

BSD-ON:CH3.20, CH3.16

Connection error between Halftone PWB SS and IOT Main PWB was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the connector (P/J7683) between HalfTone PWB SS and IOT Main PWB for poor contact, damage, and foreign substances.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB SS (PL 18.13)
   - IOT Main PWB (PL 18.14)

045-390 NVM Data Fail IOT #1

BSD-ON:CH3.2

Presence of NVM Data of other PWB in NVM of IOT Main PWB was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. Initialize NVM of the IOT Main PWB (includes writing back the adjustment NVM).
4. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.14)
   - IOT Main PWB (PL 18.14)

045-391 NVM Data Fail IOT #2

BSD-ON:CH3.3

Presence of NVM Data of other PWB in NVM of FSR/INV Core PWB was detected.

NOTE: *This fault detects the wrong installation of NVM PWB to be reused when multiple Core PWBs are replaced at the same time. Normally, when replacing multiple NVM PWBs, the power supply is turned ON every time 1 board is replaced so that data is matched to avoid this fault.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. Initialize NVM of the FSR/INV Core PWB (includes writing back the adjustment NVM).
4. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.7)
   - FSR/INV Core PWB (PL 18.7)

045-392 NVM Data Fail IOT #4

BSD-ON:CH3.4

Presence of NVM Data of other PWB in NVM of PH Core PWB was detected.

NOTE: *This fault detects the wrong installation of NVM PWB to be reused when multiple Core PWBs are replaced at the same time. Normally, when replacing multiple NVM PWBs, the power supply is turned ON every time 1 board is replaced so that data is matched to avoid this fault.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. Initialize NVM of the PH Core PWB (includes writing back the adjustment NVM).
4. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.2)
   - PH Core PWB (PL 18.2)

045-393 NVM Data Fail IOT #5

BSD-ON:CH3.5

Presence of NVM Data of other PWB in NVM of MK_EPG Core PWB was detected.

NOTE: *This fault detects the wrong installation of NVM PWB to be reused when multiple Core PWBs are replaced at the same time. Normally, when replacing multiple NVM PWBs, the power supply is turned ON every time 1 board is replaced so that data is matched to avoid this fault.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. Initialize NVM of the MK_EPG Core PWB (includes writing back the adjustment NVM).
4. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.3)

- MK_EPG Core PWB (PL 18.3)

045-394 NVM Data Fail IOT #6

BSD-ON:CH3.5

Presence of NVM Data of other PWB in NVM of MK_DRV Core PWB was detected.

NOTE: *This fault detects the wrong installation of NVM PWB to be reused when multiple Core PWBs are replaced at the same time. Normally, when replacing multiple NVM PWBs, the power supply is turned ON every time 1 board is replaced so that data is matched to avoid this fault.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. Initialize NVM of the MK_DRV Core PWB (includes writing back the adjustment NVM).
4. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - NVM PWB (PL 18.3)
   - MK_DRV Core PWB (PL 18.3)

045-395 Diag Time Out Fail

BSD-ON:CH3.2

Detected that there was no Response from the Diag Software within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - IOT Main PWB (PL 18.14)
   - SYS PWB (PL 18.14)

045-396 MK Time Out Fail

BSD-ON:CH3.2

Detected that there was no Response from the MK Software within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_EPG Core PWB (PL 18.3)
   - MK_DRV Core PWB (PL 18.3)

045-397 PH Time Out Fail

BSD-ON:CH3.2

Detected that there was no Response from the PH Software within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the PH Core PWB. (PL 18.2)

045-398 IM Pitch Skip Fail

BSD-ON:CH3.2

Detected that IM Software performed Pitch Skip for the specified number of times.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Re-install or upgrade the version of IOT Software. (ADJ 18.1.2)
3. If the problem persists, replace the IOT Main PWB. (PL 18.14)

045-600 Communication Fail IOT - ADC Gain

BSD-ON:CH3.7

Communication failure between IOT Main PWB and Digital Potentiometer.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the IOT Main PWB J631 and MK_DRV ADC PWB J720 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_DRV ADC PWB (PL 18.3)
   - IOT Main PWB (PL 18.14)

045-910 Image Ready NG

BSD-ON:CH3.2, CH3.1

Image preparation failure of the Controller.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
   - The connection between the SYS PWB J644 and IOT Main PWB J630 for open circuit, short circuit, and poor contact.
   - Poor contact, damage, and foreign substances of the connector (P/J7681, P/J7682, P/J7683) between the HalfTone PWB YM/CK/SS and IOT Main PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - IOT Main PWB (PL 18.14)
   - HalfTone PWB (PL 18.13, PL 18.14)
   - SYS PWB (PL 18.14)

045-940 Down Purge Fault

BSD-ON:CH3.2

Due to a Jam in the middle of a Print, the scratch sheet was output to a Tray that is not meant for paper output.

Cause/Action

No action necessary.

045-941 Up Purge Fault

BSD-ON:CH3.2

After CycleDown due to Jam, paper that could be Up Purge in the machine was detected.

Cause/Action

No action necessary.

047-310 Output Device Comm Fail

BSD-ON:CH3.19

Unable to communicate between IOT and CDM.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. When the problem persists, check for open circuit, short circuit, and poor contact between FSR/INV Core PWB J656_F and CDM Main PWB DJ631.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

   - FSR/INV Core PWB (PL 18.7)
   - CDM Main PWB (PL 43.3a, PL 43.3b)

047-320 All Output Fail

BSD-ON:CH3.19

All of the output destinations in the Output device are malfunctioning, and no output destination is available.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter [Shutdown History], check the Fail of the Output Device immediately before this Fail occurrence, and solve the problem based on the applicable Fail.

047-940 OCT Full Stack

BSD-ON:CH10.47

Offset Catch Tray Full was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the light emitter or the light receptor section of OCT Full Stack Sensor for blockage due to curled paper tail edge which is output. (PL 17.3)
2. Check the OCT Full Stack Sensor (DC330 [008-102]) for operation failure.
3. Check the light emitter or the light receptor section of the OCT Full Stack Sensor for foreign substances.
4. If no problem are found, replace the FSR/INV 2 MD PWB. (PL 18.7)

052-211 ILS WR Motor Fail

BSD-ON:CH6.22, CH6.19

Unable to detect the Home Position of the White Ref Drive Motor.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the Power Supply voltage of the White Ref Home Sensor and White Ref Drive Motor.
   - White Ref Home Sensor: Between ILS DC Power PWB J20_ID-1 and GND (+5VDC)
   - White Ref Drive Motor: Between Relay Connector P/J9652-1 and GND (+24VDC)
2. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.
   - Between White Ref Home Sensor J306 and ILS DC Power PWB J20_ID
   - Between Relay Connector J9652 and ILS DC Power PWB J18_ID
   - Between ILS DC Power PWB J13_ID and White Ref Drive Motor J307
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - WR Roll Assembly (PL 20.1)
   - ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-212 ILS AGOC Error 1

BSD-ON:CH6.21, CH6.20

The CCD Output after Gain adjustment is lower than the reference value for the Adjust Gain/Offset of the CCD Output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the Power OFF and wipe both sides of the Lamp Assembly Window and the WR Roll of the WR Roll Assembly with a dry cloth. When the exterior surface of the Lamp Assembly Window is heavily contaminated, use a lens cleaner and wipe with a silicone cloth.
Open the IOT-R Front Right Cover and cheat the IOT-R F-Cover Interlock Switch R. Enter Component Check and turn DC330 [017-001] (ILS Lamp) ON. **Does the ILS Lamp 1 - 4 light up?**

Y **N**

Turn the Power OFF and check for poor contact of the Connector between ILS DC Power PWB and ILS Lamp 1 - 4. **Is the connection normal?**

Y **N**

Correctly connect the Connector. Perform adjustments after the [Connector Check] after connecting. (Refer to ILS Adjustment Flow of ADJ 20.1.7)

A **B**

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems. Perform ILS adjustment after repairing. (Refer to ILS Adjustment Flow of ADJ 20.1.7)

- Lamp Assembly (PL 20.1)
- ILS DC Power PWB (PL 20.2)

A **B**

Perform [Adjust Gain / Offset] of [DC970: ILS Standard Setup] and check if the Gain adjustment value and Offset adjustment value of 1(R) to 6(B) are within the setting range (see below).

- Adjustment Value of Gain: 5 - 55
- Adjustment Value of Offset: Value between the Lower Limit Value and Upper Limit Value

Are the Gain Adjustment Value and Offset Value within the setting range?

Y **N**

On the UI screen, click [Not to update, and end] to end. After ending, perform [Process when Abnormal - Adjust Gain Offset] of [ADJ 20.1.10 Adjust Gain / Offset]. (ADJ 20.1.10.2)
If the problem persists, contact the Support Department and get instructions.

On the UI screen, click [Update, and end]. After ending, refer to [ADJ 20.1.7 ILS Adjustment Flow] and perform adjustments from [Adjust Gain / Offset] onwards.

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-213 ILS AGOC Error 2

BSD-ON:CH6.21

The CCD Output after Gain adjustment is higher than the reference value for the Gain/Offset Adjustment of the CCD Output.

Cause/Action

Refer to 052-212 (ILS AGOC Error 1) FIP.

052-214 ILS SHD Error 2

BSD-ON:CH6.21, CH6.20

Black Shading failure (Read value abnormality when the Lamp goes OFF) has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter Diag [DC122: Shutdown History], check if Fail 052-211 (ILS WR Motor Fail) has occurred. **Has Fail 052-211 occurred?**

Y **N**

Turn the Power OFF and wipe both sides of the Lamp Assembly Window and the WR Roll of the WR Roll Assembly with a dry cloth. When the exterior surface of the Lamp Assembly Window is heavily contaminated, use a lens cleaner and wipe with a silicone cloth.
Open the IOT-R Front Right Cover and cheat the IOT-R F-Cover Interlock Switch R. Enter Component Check and turn DC330 [017-001] (ILS Lamp) ON. **Does the ILS Lamp 1 - 4 light up?**

Y **N**

Turn the Power OFF and check for poor contact of the Connector between ILS DC Power PWB and ILS Lamp 1 - 4. **Is the connection normal?**

Y **N**

Correctly connect the Connector. Perform adjustments after the [Connector Check] after connecting. (Refer to ILS Adjustment Flow of ADJ 20.1.7)

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems. Perform ILS adjustment after repairing. (Refer to ILS Adjustment Flow of ADJ 20.1.7)

- Lamp Assembly (PL 20.1)
- ILS DC Power PWB (PL 20.2)

Perform [Adjust Gain / Offset] of [DC970: ILS Standard Setup] and check if the Gain adjustment value and Offset adjustment value of 1(R) to 6(B) are within the setting range (see below).

- Adjustment Value of Gain: 5 - 55
- Adjustment Value of Offset: Value between the Lower Limit Value and Upper Limit Value

Are the Gain Adjustment Value and Offset Value within the setting range?

Y **N**

On the UI screen, click [Not to update, and end] to end. After ending, perform [Process when Abnormal - Adjust Gain Offset] of [ADJ 20.1.10 Adjust Gain / Offset]. (ADJ 20.1.10.2)
If the problem persists, contact the Support Department and get instructions.

On the UI screen, click [Update, and end]. After ending, refer to [ADJ 20.1.7 ILS Adjustment Flow] and perform adjustments from [Adjust Gain / Offset] onwards.

Go to the appropriate FIP

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-215 ILS SHD Error 3

BSD-ON:CH6.21

Y Correction, Correction Coefficient calculation error has occurred.

Cause/Action

Refer to 052-214 (ILS SHD Error 2) FIP.

052-217 ILS CCD Calibration Error

BSD-ON:CH6.21

Correction Color Reference Plate read error has occurred.

Cause/Action

Refer to 052-214 (ILS SHD Error 2) FIP.

052-219 ILS Fan Fail 1

BSD-ON:CH6.23

The ILS Fan 1 error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the ILS Fan 1 for foreign substances.
2. Check the connection between the ILS DC Power PWB J12_ID and ILS Fan 1 P301 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS Fan 1 (PL 20.2)
   - ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-223 ILS Lamp Check Error

BSD-ON:CH6.21, CH6.20

Lamp Check of the Lamp does not converge. (Side reference is dark, one side of the LED does not light up)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the Power OFF and wipe both sides of the Lamp Assembly Window and the WR Roll of the WR Roll Assembly with a dry cloth. When the exterior surface of the Lamp Assembly Window is heavily contaminated, use a lens cleaner and wipe with a silicone cloth.

Open the IOT-R Front Right Cover and cheat the IOT-R F-Cover Interlock Switch R. Enter Component Check and turn DC330 [017-001] (ILS Lamp) ON. **Does the ILS Lamp 1 - 4 light up?**

Y **N**

Turn the Power OFF and check for poor contact of the Connector between ILS DC Power PWB and ILS Lamp 1 - 4. **Is the connection normal?**

Y **N**

Correctly connect the Connector. Perform adjustments after the [Connector Check] after connecting. (Refer to ILS Adjustment Flow of ADJ 20.1.7)

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems. Perform ILS adjustment after repairing. (Refer to ILS Adjustment Flow of ADJ 20.1.7)

- Lamp Assembly (PL 20.1)
- ILS DC Power PWB (PL 20.2)

Refer to [ILS Adjustment Flow of ADJ 20.1.7] and perform adjustments from [Adjust LED Intensity].

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-224 ILS CCD Fail

BSD-ON:CH6.21, CH6.19

Poor connection of CCD PWB or Power supply system failure of CCD has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn OFF the power and check the Flat Cable between the ILS CCD PWB J700 and ILS DC Power PWB J107_ID for open circuits, short circuits, and poor contacts.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ILS CCD PWB (ILS Assembly) (PL 20.3)
- ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-225 ILS Fan Fail 2

BSD-ON:CH6.23

The ILS Fan 2 error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the ILS Fan 2 for foreign substances.
2. Check the connection between the ILS DC Power PWB J12_ID and ILS Fan 2 P302 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS Fan 2 (PL 20.2)
   - ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-226 ILS Fan Fail 3

BSD-ON:CH6.23

The ILS Fan 3 error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the ILS Fan 3 for foreign substances.
2. Check the connection between the ILS DC Power PWB J12_ID and ILS Fan 3 P303 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS Fan 3 (PL 20.2)
   - ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-227 ILS Fan Fail 4

BSD-ON:CH6.23

The ILS Fan 4 error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the ILS Fan 4 for foreign substances.
2. Check the connection between the ILS DC Power PWB J12_ID and ILS Fan 4 P304 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS Fan 4 (PL 20.2)
   - ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-228 ILS Fan Fail 5

BSD-ON:CH6.23

The ILS Fan 5 error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the ILS Fan 5 for foreign substances.
2. Check the connection between the ILS DC Power PWB J12_ID and ILS Fan 5 P305 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS Fan 5 (PL 20.2)
   - ILS DC Power PWB (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-310 ILS DC Communication Fail

BSD-ON:CH3.2, CH3.3

Detected communication abnormality between IOT and ILS DC PWB or timeout.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
   - The connection between the IOT Main PWB J630 and FSR/INV Core PWB J642_F for open circuit, short circuit, and poor contact.
   - Check the connection between the FSR/INV Core PWB J643_F and ILS DC Power PWB J1_ID for open circuit, short circuit, or poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS DC Power PWB (PL 20.2)
   - IOT Main PWB (PL 18.14)
   - FSR/INV Core PWB (PL 18.7)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-311 ILS Power24 Fail

BSD-ON:CH6.19, CH6.20, CH6.22

The 24V Fuse (Lamp Inverter, WR Motor) went out.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the Power ON and check the +24VDC supply line to the ILS DC Power PWB **Is the voltage between Relay Connector P/J9652-1(+) and GND(-) +24VDC?**

Y N

Refer to BSD and check the +24VDC supply line to the ILS DC Power PWB.

Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.

- Between Relay Connector J9652-1 and ILS DC Power PWB J18_ID-1
- Between ILS DC Power PWB J14_ID-3/7 and ILS Lamp Drive PWB J1_IL-6/2.

Is the connection normal?

Y N

Repair the open circuit, short circuit or poor contact.

Disconnect the following connectors from ILS Lamp Drive PWB and ILS DC Power PWB and measure the resistance between each connector terminal and the GND.

- ILS Lamp Drive PWB J2_IL-2 (ILS Lamp 1)
- ILS Lamp Drive PWB J2_IL-10 (ILS Lamp 2)
- ILS Lamp Drive PWB J3_IL-2 (ILS Lamp 3)

- ILS Lamp Drive PWB J3_IL-10 (ILS Lamp 4)
- ILS DC Power PWB J13_ID-5/6/3/4 (White Reference Drive Motor)

Is the resistance 5 Ohm or higher for each?

Y **N**

Check the following:
- The connections that are in earth fault (at 5 Ohm or lower) for short circuits.
- The target components for internal short circuits.

Replace the ILS DC Power PWB. (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-314 ILS SHD Error 1

BSD-ON:CH6.21

Some of the White Read Values are less than the Reference Value due to Shading adjustment, non-uniform lighting error.

Cause/Action

Refer to 052-214 (ILS SHD Error 2) FIP.

052-317 ILS Flash RW Error

BSD-ON:CH3.3

Detected access error to the H8 Flash Memory.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check that there is no foreign matter or lifting of solder on the Lead of H8 ASIC (U1), Flash Memory IC (U3) on the ILS DC Power PWB. If the problem persists, replace the ILS DC Power PWB. (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-318 ILS IOT Parameter Fail

BSD-ON:CH3.3

The IF Parameter that was notified by IOT is abnormal.

Cause/Action

Check the consistency of the IOT Software Version and ILS Software Version. If the versions are inconsistent, download the appropriate version of the ILS Software. Turn the Power OFF/ON after downloading.

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-319 ILS H8 Logic Fail

BSD-ON:CH3.3

Detected H8 Software error.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn the power OFF and ON. If the problem persists, replace the ILS DC Power PWB. (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-320 ILS Capturing Error

BSD-ON:CH6.21

The Image acquiring does not finish in Image Processing IC on the ILS DC Power PWB. (Includes wait time for starting image acquiring)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn OFF the power and check the Flat Cable between the ILS DC Power PWB J107_ID and ILS CCD PWB J700 for open circuits, short circuits, and poor contacts.
2. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - ILS DC Power PWB (PL 20.2)
   - ILS CCD PWB (ILS Assembly) (PL 20.3)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-321 ILS IMX FW Fail

BSD-ON:CH3.3

Abnormality of ILS Power DC PWB (IMX Startup error, Block transmission preparation incomplete, Block transmission NG, IMX FW abnormality, IMX Initialization Data error, IMX communication error) has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check that there is no foreign matter on the ILS DC Power PWB. If no problem is found after checking, replace the ILS DC Power PWB. (PL 20.2)

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-400 ILS Not Ready

BSD-ON:CH3.3

Detected that ILS started adjustment.

Cause/Action

1. Wait for ILS adjustment to end.
2. If the adjustment does not end, turn the power OFF then ON.

If the problem persists, contact the Support Department and get instructions.

052-600 ILS SHD Result Error

BSD-ON:CH6.21

There is foreign matter or contamination on the Window glass or the background surface of WR.

Cause/Action

Turn the Power OFF and wipe both sides of the Lamp Assembly Window and the WR Roll of the WR Roll Assembly with a dry cloth. When the exterior surface of the Lamp Assembly Window is heavily contaminated, use a lens cleaner and wipe with a silicone cloth.

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

052-602 ILS LED Adjust Fail

BSD-ON:CH6.21

One of these Fail has occurred: LED Lamp 1 failure (Unbalanced R,G,B), LED Lamp 1 failure (Lack of intensity), LED Lamp 1 failure (Excessive Intensity), LED Lamp 2 failure (Unbalanced R,G,B), LED Lamp 2 failure (Lack of intensity), LED Lamp 2 failure (Excessive Intensity), LED Lamp 1&2 Failure Total (Unbalanced R,G,B), LED Lamp 1&2 Failure Total (Lack of intensity), LED Lamp 1&2 Failure Total (Excessive intensity).

Procedure

Check the value of NVM [782-827] (Error Code 1) in Diag [NVM Read/Write].

- 50: LED Lamp 1 Malfunction (Unbalanced R,G,B)
- 51: LED Lamp 1 Malfunction (Lack of Intensity)
- 52: LED Lamp 1 Malfunction (Excessive Intensity)
- 53: LED Lamp 2 Malfunction (Unbalanced R,G,B)
- 54: LED Lamp 2 Malfunction (Lack of Intensity)
- 55: LED Lamp 2 Malfunction (Excessive Intensity)
- 56: LED Lamp 1 & 2 Malfunction (Unbalanced R,G,B)
- 57: LED Lamp 1 & 2 Malfunction (Lack of Intensity)
- 58: LED Lamp 1 & 2 Malfunction (Excessive Intensity)

Is the value 56?

Y N

Refer to [ADJ 20.1.9 LED Light Amount Adjustment], [Process when Abnormal - LED Light Amount Adjustment] (ADJ 20.1.9.2) and perform corrective action.

Did this Fail occur when machine power was turned on for the first time that day?

Y N

Refer to [ADJ 20.1.9 LED Light Amount Adjustment], [Process when Abnormal - LED Light Amount Adjustment] (ADJ 20.1.9.2) and perform corrective action.

Check the values of the following NVM: If they are default values, rewrite them to part-specific NVM values according to [ADJ 20.1.8 How to rewrite ILS Setup Related NVM Value], and perform ILS adjustment (refer to ADJ 20.1.7, Figure 1, 2, 3).

- NVM [782-843]: 9042 (Default Value)
- NVM [782-844]: 9042 (Default Value)
- NVM [782-845]: 9042 (Default Value)

NOTE: *Patch read value will change, so if a Print Server-side profile has already been created, the profile may be affected. In this case, create a new profile.*

Note

When ILS related trouble occurs, the ILS function can be disabled to continue with the Job until you start the recovery task for the ILS. To disable the ILS function, refer to [6.5.1 How to Disable the ILS Function].

061-310 ContIF Error Fail #1

FIP

Refer to 061-CF-001 FIP.

061-311 ContIF Error Fail #2

FIP

Refer to 061-CF-001 FIP.

061-312 ContIF Error Fail #3

FIP

Refer to 061-CF-001 FIP.

061-313 ContIF Error Fail #4

FIP

Refer to 061-CF-001 FIP.

061-314 ContIF Error Fail #5

FIP

Refer to 061-CF-001 FIP.

061-315 ContIF Error Fail #6

FIP

Refer to 061-CF-001 FIP.

061-316 Video ASIC Fail #1

FIP

Refer to 061-CF-002 FIP.

061-317 Video ASIC Fail #2

FIP

Refer to 061-CF-002 FIP.

061-318 Video ASIC Fail #3

FIP

Refer to 061-CF-002 FIP.

061-319 Video ASIC Fail #4

FIP

Refer to 061-CF-002 FIP.

061-320 Video ASIC Fail #5

FIP

Refer to 061-CF-002 FIP.

061-321 Video ASIC Fail #6

FIP

Refer to 061-CF-002 FIP.

061-322 Video Line Fail #1

FIP

Refer to 061-CF-003 FIP.

061-323 Video Line Fail #2

FIP

Refer to 061-CF-003 FIP.

061-324 Video Line Fail #3

FIP

Refer to 061-CF-003 FIP.

061-325 Video Line Fail #4

FIP

Refer to 061-CF-003 FIP.

061-326 Video Line Fail #5

FIP

Refer to 061-CF-003 FIP.

061-327 Video Line Fail #6

FIP

Refer to 061-CF-003 FIP.

061-328 ROS Data Fail #1

FIP

Refer to 061-CF-004 FIP.

061-329 ROS Data Fail #2

FIP

Refer to 061-CF-004 FIP.

061-330 ROS Data Fail #3

FIP

Refer to 061-CF-004 FIP.

061-331 ROS Data Fail #4

FIP

Refer to 061-CF-004 FIP.

061-332 ROS Data Fail #5

FIP

Refer to 061-CF-004 FIP.

061-333 ROS Data Fail #6

FIP

Refer to 061-CF-004 FIP.

061-334 ROS LD Fail #1

FIP

Refer to 061-CF-005 FIP.

061-335 ROS LD Fail #2

FIP

Refer to 061-CF-005 FIP.

061-336 ROS LD Fail #3

FIP

Refer to 061-CF-005 FIP.

061-337 ROS LD Fail #4

FIP

Refer to 061-CF-005 FIP.

061-338 ROS LD Fail #5

FIP

Refer to 061-CF-005 FIP.

061-339 ROS LD Fail #6

FIP

Refer to 061-CF-005 FIP.

061-340 No SOS Fail #1

BSD-ON: CH6.3

The ROS #1 SOS signal cannot be detected at all after the completion of initial APC (Auto Power Control).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-100] (Polygon Motor Ready Check Fail 1), DC330 [006-106] (No SOS Fail 1) ON after turning DC330 [006-007] (ROS LD 1) ON and check each Status Display.

- DC330 [006-100]: OK: Low, NG: High
- DC330 [006-106]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-100] or DC330 [006-106]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JB764(#1) and ROS Assembly (#1) J3451 for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#1) and SOS PWB J342 (#1).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#1).

If no problem is found, replace the ROS Assembly (#1). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-341 No SOS Fail #2

BSD-ON: CH6.5

Not able to detect even once the ROS Y SOS Signal after initializing the APC (Auto Power Control).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-101] (Polygon Motor Ready Check Fail 2), DC330 [006-107] (No SOS Fail 2) ON after turning DC330 [006-008] (ROS LD 2) ON and check each Status Display.

- DC330 [006-101]: OK: Low, NG: High
- DC330 [006-107]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-101] or DC330 [006-107]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JA764(Y) and ROS Assembly (Y) J345Y for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (Y) and SOS PWB J342 (Y).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (Y).

If no problem is found after checking, replace the ROS Assembly (Y). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-342 No SOS Fail #3

BSD-ON: CH6.7

Not able to detect even once the ROS M SOS Signal after initializing the APC (Auto Power Control).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-102] (Polygon Motor Ready Check Fail 3), DC330 [006-108] (No SOS Fail 3) ON after turning DC330 [006-009] (ROS LD 3) ON and check each Status Display.

- DC330 [006-102]: OK: Low, NG: High
- DC330 [006-108]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-102] or DC330 [006-108]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JB764(M) and ROS Assembly (M) J345M for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (M) and SOS PWB J342 (M).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (M).

If no problem is found after checking, replace the ROS Assembly (M). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-343 No SOS Fail #4

BSD-ON: CH6.9

Not able to detect even once the ROS C SOS Signal after initializing the APC (Auto Power Control).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-103] (Polygon Motor Ready Check Fail 4), DC330 [006-109] (No SOS Fail 4) ON after turning DC330 [006-010] (ROS LD 4) ON and check each Status Display.

- DC330 [006-103]: OK: Low, NG: High
- DC330 [006-109]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-103] or DC330 [006-109]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JA764(C) and ROS Assembly (C) J345C for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (C) and SOS PWB J342 (C).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (C).

If no problem is found after checking, replace the ROS Assembly (C). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-344 No SOS Fail #5

BSD-ON: CH6.11

Not able to detect even once the ROS K SOS Signal after initializing the APC (Auto Power Control).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-104] (Polygon Motor Ready Check Fail 5), DC330 [006-110] (No SOS Fail 5) ON after turning DC330 [006-011] (ROS LD 5) ON and check each Status Display.

- DC330 [006-104]: OK: Low, NG: High
- DC330 [006-110]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-104] or DC330 [006-110]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JB764(K) and ROS Assembly (K) J345K for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (K) and SOS PWB J342 (K).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (K).

If no problem is found after checking, replace the ROS Assembly (K). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-345 No SOS Fail #6

BSD-ON: CH6.13

The ROS #6 SOS signal cannot be detected at all after the completion of initial APC (Auto Power Control).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-105] (Polygon Motor Ready Check Fail 6), DC330 [006-111] (No SOS Fail 6) ON after turning DC330 [006-012] (ROS LD 6) ON and check each Status Display.

- DC330 [006-105]: OK: Low, NG: High
- DC330 [006-111]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-105] or DC330 [006-111]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JA764 (#6) and ROS Assembly (#6) J3456 for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#6) and SOS PWB J342 (#6).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#6).

If no problem is found, replace the ROS Assembly (#6). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-346 SOS Long Fail #1

FIP

Refer to 061-CF-006 FIP.

061-347 SOS Long Fail #2

FIP

Refer to 061-CF-007 FIP.

061-348 SOS Long Fail #3

FIP

Refer to 061-CF-008 FIP.

061-349 SOS Long Fail #4

FIP

Refer to 061-CF-009 FIP.

061-350 SOS Long Fail #5

FIP

Refer to 061-CF-010 FIP.

061-351 SOS Long Fail #6

FIP

Refer to 061-CF-011 FIP.

061-352 SOS Short Fail #1

FIP

Refer to 061-CF-012 FIP.

061-353 SOS Short Fail #2

FIP

Refer to 061-CF-013 FIP.

061-354 SOS Short Fail #3

FIP

Refer to 061-CF-014 FIP.

061-355 SOS Short Fail #4

FIP

Refer to 061-CF-015 FIP.

061-356 SOS Short Fail #5

FIP

Refer to 061-CF-016 FIP.

061-357 SOS Short Fail #6

FIP

Refer to 061-CF-017 FIP.

061-358 SOS Stop Fail #1

BSD-ON: CH6.3

SOS signal of ROS Assy #1 can not be detected after APC is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-100] (Polygon Motor Ready Check Fail 1), DC330 [006-106] (No SOS Fail 1), DC330 [006-124] (SOS Stop Fail 1) ON after turning DC330 [006-007] (ROS LD 1) ON and check each Status Display.

- DC330 [006-100]: OK: Low, NG: High
- DC330 [006-106]: OK: Low, NG: High
- DC330 [006-124]: OK: Low, NG: High

Is the Status Display NG for DC330 [006-100], DC330 [006-106] or DC330 [006-124]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JB764(#1) and ROS Assembly (#1) J3451 for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#1) and SOS PWB J342 (#1).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#1).

If no problem is found, replace the ROS Assembly (#1). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-359 SOS Stop Fail #2

BSD-ON: CH6.5

SOS signal of ROS Assy #2 can not be detected after APC is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-101] (Polygon Motor Ready Check Fail 2), DC330 [006-107] (No SOS Fail 2), DC330 [006-125] (SOS Stop Fail 2) ON after turning DC330 [006-008] (ROS LD 2) ON and check each Status Display.

- DC330 [006-101]: OK: Low, NG: High
- DC330 [006-107]: OK: Low, NG: High
- DC330 [006-125]: OK: Low, NG: High

Is the Status Display NG for DC330 [006-101], DC330 [006-107] or DC330 [006-125]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JA764(Y) and ROS Assembly (Y) J345Y for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (Y) and SOS PWB J342 (Y).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (Y).

If no problem is found after checking, replace the ROS Assembly (Y). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-360 SOS Stop Fail #3

BSD-ON: CH6.7

SOS signal of ROS Assy #3 can not be detected after APC is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-102] (Polygon Motor Ready Check Fail 3), DC330 [006-108] (No SOS Fail 3), DC330 [006-126] (SOS Stop Fail 3) ON after turning DC330 [006-009] (ROS LD 3) ON and check each Status Display.

- DC330 [006-102]: OK: Low, NG: High
- DC330 [006-108]: OK: Low, NG: High
- DC330 [006-126]: OK: Low, NG: High

Is the Status Display NG for DC330 [006-102], DC330 [006-108] or DC330 [006-126]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JB764(M) and ROS Assembly (M) J345M for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (M) and SOS PWB J342 (M).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (M).

If no problem is found after checking, replace the ROS Assembly (M). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-361 SOS Stop Fail #4

BSD-ON: CH6.9

SOS signal of ROS Assy #4 can not be detected after APC is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-103] (Polygon Motor Ready Check Fail 4), DC330 [006-109] (No SOS Fail 4), DC330 [006-127] (SOS Stop Fail 4) ON after turning DC330 [006-010] (ROS LD 4) ON and check each Status Display.

- DC330 [006-103]: OK: Low, NG: High
- DC330 [006-109]: OK: Low, NG: High
- DC330 [006-127]: OK: Low, NG: High

Is the Status Display NG for DC330 [006-103], DC330 [006-109] or DC330 [006-127]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JA764(C) and ROS Assembly (C) J345C for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (C) and SOS PWB J342 (C).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (C).

If no problem is found after checking, replace the ROS Assembly (C). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-362 SOS Stop Fail #5

BSD-ON: CH6.11

SOS signal of ROS Assy #5 can not be detected after APC is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-104] (Polygon Motor Ready Check Fail 5), DC330 [006-110] (No SOS Fail 5), DC330 [006-128] (SOS Stop Fail 5) ON after turning DC330 [006-011] (ROS LD 5) ON and check each Status Display.

- DC330 [006-104]: OK: Low, NG: High
- DC330 [006-110]: OK: Low, NG: High
- DC330 [006-128]: OK: Low, NG: High

Is the Status Display NG for DC330 [006-104], DC330 [006-110] or DC330 [006-128]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JB764(K) and ROS Assembly (K) J345K for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (K) and SOS PWB J342 (K).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (K).

If no problem is found after checking, replace the ROS Assembly (K). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-363 SOS Stop Fail #6

BSD-ON: CH6.13

SOS signal of ROS Assy #6 can not be detected after APC is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-105] (Polygon Motor Ready Check Fail 6), DC330 [006-111] (No SOS Fail 6), DC330 [006-129] (SOS Stop Fail 6) ON after turning DC330 [006-012] (ROS LD 6) ON and check each Status Display.

- DC330 [006-105]: OK: Low, NG: High
- DC330 [006-111]: OK: Low, NG: High
- DC330 [006-129]: OK: Low, NG: High

Is the Status Display NG for DC330 [006-105], DC330 [006-111] or DC330 [006-129]?

Y **N**

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JA764 (#6) and ROS Assembly (#6) J3456 for open circuit, short circuit, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#6) and SOS PWB J342 (#6).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#6).

If no problem is found, replace the ROS Assembly (#6). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-364 Polygon Motor Fail #1

FIP

Refer to 061-CF-018 FIP.

061-365 Polygon Motor Fail #2

FIP

Refer to 061-CF-019 FIP.

061-366 Polygon Motor Fail #3

FIP

Refer to 061-CF-020 FIP.

061-367 Polygon Motor Fail #4

FIP

Refer to 061-CF-021 FIP.

061-368 Polygon Motor Fail #5

FIP

Refer to 061-CF-022 FIP.

061-369 Polygon Motor Fail #6

FIP

Refer to 061-CF-023 FIP.

061-370 Polygon Motor Ready Check Fail #1

BSD-ON:CH6.3

The nM_READY signal is not at the high level when the Polygon Motor of ROS #1 is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the DC330 [006-100] (Polygon Motor Ready Check Fail 1) ON and check the Status Display.

- Ready: Low, Not Ready: High

Is the Status Display of DC330 [006-100] Not Ready?

Y **N**

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (#1) for open circuit, short circuit, and poor contact.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- ROS Assembly (#1) (PL 2.2)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-371 Polygon Motor Ready Check Fail #2

BSD-ON:CH6.5

The nM_READY signal is not at the high level when the Polygon Motor of ROS Y is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the DC330 [006-101] (Polygon Motor Ready Check Fail 2) ON and check the Status Display.

- Ready: Low, Not Ready: High

Is the Status Display of DC330 [006-101] Not Ready?

Y **N**

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (Y) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- ROS Assembly (Y) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-372 Polygon Motor Ready Check Fail #3

BSD-ON:CH6.7

The nM_READY signal is not at the high level when the Polygon Motor of ROS M is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the DC330 [006-102] (Polygon Motor Ready Check Fail 3) ON and check the Status Display.

- Ready: Low, Not Ready: High

Is the Status Display of DC330 [006-102] Not Ready?

Y **N**

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (M) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- ROS Assembly (M) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-373 Polygon Motor Ready Check Fail #4

BSD-ON:CH6.9

The nM_READY signal is not at the high level when the Polygon Motor of ROS C is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the DC330 [006-103] (Polygon Motor Ready Check Fail 4) ON and check the Status Display.

- Ready: Low, Not Ready: High

Is the Status Display of DC330 [006-103] Not Ready?

Y **N**

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (C) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- ROS Assembly (C) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-374 Polygon Motor Ready Check Fail #5

BSD-ON:CH6.11

The nM_READY signal is not at the high level when the Polygon Motor of ROS K is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the DC330 [006-104] (Polygon Motor Ready Check Fail 5) ON and check the Status Display.

- Ready: Low, Not Ready: High

Is the Status Display of DC330 [006-104] Not Ready?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (K) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- ROS Assembly (K) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-375 Polygon Motor Ready Check Fail #6

BSD-ON:CH6.13

The nM_READY signal is not at the high level when the Polygon Motor of ROS #6 is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn the DC330 [006-105] (Polygon Motor Ready Check Fail 6) ON and check the Status Display.

- Ready: Low, Not Ready: High

Is the Status Display of DC330 [006-105] Not Ready?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (#6) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- ROS Assembly (#6) (PL 2.2)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-376 ROS I2C Fail_2

FIP

Refer to 061-CF-026 FIP.

061-377 ROS I2C Fail_3

FIP

Refer to 061-CF-026 FIP.

061-378 ROS I2C Fail_4

FIP

Refer to 061-CF-026 FIP.

061-379 ROS I2C Fail_5

FIP

Refer to 061-CF-026 FIP.

061-380 ROS I2C Fail_6

FIP

Refer to 061-CF-026 FIP.

061-381 ROS I2C Fail_1

FIP

Refer to 061-CF-026 FIP.

061-388 ROS VDD Down Fail #1

FIP

Refer to 061-CF-024 FIP.

061-389 ROS VDD Down Fail #2

FIP

Refer to 061-CF-024 FIP.

061-390 ROS VDD Down Fail #3

FIP

Refer to 061-CF-024 FIP.

061-391 ROS VDD Down Fail #4

FIP

Refer to 061-CF-024 FIP.

061-392 ROS VDD Down Fail #5

FIP

Refer to 061-CF-024 FIP.

061-393 ROS VDD Down Fail #6

FIP

Refer to 061-CF-024 FIP.

061-397 PLD Fail 23

FIP

Refer to 061-CF-025 FIP.

061-398 PLD Fail 45

FIP

Refer to 061-CF-025 FIP.

061-399 PLD Fail 61

FIP

Refer to 061-CF-025 FIP.

061-608 ROS LD ALM #1

FIP

Refer to 061-CF-005 FIP.

061-609 ROS LD ALM #2

FIP

Refer to 061-CF-005 FIP.

061-610 ROS LD ALM #3

FIP

Refer to 061-CF-005 FIP.

061-611 ROS LD ALM #4

FIP

Refer to 061-CF-005 FIP.

061-612 ROS LD ALM #5

FIP

Refer to 061-CF-005 FIP.

061-613 ROS LD ALM #6

FIP

Refer to 061-CF-005 FIP.

061-634 Image Mismatch_H ERR #1

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

Cause/Action

No action necessary.

061-635 Image Mismatch_H ERR #2

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

Cause/Action

No action necessary.

061-636 Image Mismatch_H ERR #3

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

Cause/Action

No action necessary.

061-637 Image Mismatch_H ERR #4

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

Cause/Action

No action necessary.

061-638 Image Mismatch_H ERR #5

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

Cause/Action

No action necessary.

061-639 Image Mismatch_H ERR #6

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

Cause/Action

No action necessary.

061-640 ContIF Error_H Fail #1

FIP

Refer to 061-CF-001 FIP.

061-641 ContIF Error_H Fail #2

FIP

Refer to 061-CF-001 FIP.

061-642 ContIF Error_H Fail #3

FIP

Refer to 061-CF-001 FIP.

061-643 ContIF Error_H Fail #4

FIP

Refer to 061-CF-001 FIP.

061-644 ContIF Error_H Fail #5

FIP

Refer to 061-CF-001 FIP.

061-645 ContIF Error_H Fail #6

FIP

Refer to 061-CF-001 FIP.

061-646 ROS LD_H Fail #1

FIP

Refer to 061-CF-005 FIP.

061-647 ROS LD_H Fail #2

FIP

Refer to 061-CF-005 FIP.

061-648 ROS LD_H Fail #3

FIP

Refer to 061-CF-005 FIP.

061-649 ROS LD_H Fail #4

FIP

Refer to 061-CF-005 FIP.

061-650 ROS LD_H Fail #5

FIP

Refer to 061-CF-005 FIP.

061-651 ROS LD_H Fail #6

FIP

Refer to 061-CF-005 FIP.

061-652 SOS Long_H Fail #1

FIP

Refer to 061-CF-006 FIP.

061-653 SOS Long_H Fail #2
FIP
Refer to 061-CF-007 FIP.

061-654 SOS Long_H Fail #3
FIP
Refer to 061-CF-008 FIP.

061-655 SOS Long_H Fail #4
FIP
Refer to 061-CF-009 FIP.

061-656 SOS Long_H Fail #5
FIP
Refer to 061-CF-010 FIP.

061-657 SOS Long_H Fail #6
FIP
Refer to 061-CF-011 FIP.

061-658 SOS Short_H Fail #1
FIP
Refer to 061-CF-012 FIP.

061-659 SOS Short_H Fail #2
FIP
Refer to 061-CF-013 FIP.

061-660 SOS Short_H Fail #3
FIP
Refer to 061-CF-014 FIP.

061-661 SOS Short_H Fail #4
FIP
Refer to 061-CF-015 FIP.

061-662 SOS Short_H Fail #5
FIP
Refer to 061-CF-016 FIP.

061-663 SOS Short_H Fail #6
FIP
Refer to 061-CF-017 FIP.

061-664 PolygonMotor_H Fail #1
FIP
Refer to 061-CF-018 FIP.

061-665 PolygonMotor_H Fail #2
FIP
Refer to 061-CF-019 FIP.

061-666 PolygonMotor_H Fail #3
FIP
Refer to 061-CF-020 FIP.

061-667 PolygonMotor_H Fail #4
FIP
Refer to 061-CF-021 FIP.

061-668 PolygonMotor_H Fail #5
FIP
Refer to 061-CF-022 FIP.

061-669 PolygonMotor_H Fail #6
FIP
Refer to 061-CF-023 FIP.

061-670 ROS VDD Down_H Fail #1
FIP
Refer to 061-CF-024 FIP.

061-671 ROS VDD Down_H Fail #2
FIP
Refer to 061-CF-024 FIP.

061-672 ROS VDD Down_H Fail #3
FIP
Refer to 061-CF-024 FIP.

061-673 ROS VDD Down_H Fail #4

FIP

Refer to 061-CF-024 FIP.

061-674 ROS VDD Down_H Fail #5

FIP

Refer to 061-CF-024 FIP.

061-675 ROS VDD Down_H Fail #6

FIP

Refer to 061-CF-024 FIP.

061-911 Image Mismatch ERR (S1)

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

Procedure

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.
[S1 color image size notified by Print Server]

- 759-801: IF_IMG_FS_PIX_IN_E1_S2S1
- 759-804: IF_IMG_SS_PIX_L_IN_E1_S2S1
- 759-807: IF_IMG_SS_PIX_H_IN_E1_S2S1
- 759-810: IF_IMG_RESOLUTION_IN_E1_S2S1

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-810] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board
- Halftone PWB (SS) (PL 18.13)

061-912 Image Mismatch ERR (Y)

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

Procedure

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[Y color image size notified by Print Server]

- 759-775: IF_IMG_FS_PIX_IN_E0_YM
- 759-778: IF_IMG_SS_PIX_L_IN_E0_YM
- 759-781: IF_IMG_SS_PIX_H_IN_E0_YM
- 759-784: IF_IMG_RESOLUTION_IN_E0_YM

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-784] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6 x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board
- Halftone PWB (YM) (PL 18.14)

061-913 Image Mismatch ERR (M)

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

Procedure

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[M color image size notified by Print Server]

- 759-799: IF_IMG_FS_PIX_IN_E1_YM
- 759-802: IF_IMG_SS_PIX_L_IN_E1_YM
- 759-805: IF_IMG_SS_PIX_H_IN_E1_YM
- 759-808: IF_IMG_RESOLUTION_IN_E1_YM

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-808] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board
- Halftone PWB (YM) (PL 18.14)

061-914 Image Mismatch ERR (C)

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

Procedure

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[C color image size notified by Print Server]

- 759-776: IF_IMG_FS_PIX_IN_E0_CK
- 759-779: IF_IMG_SS_PIX_L_IN_E0_CK
- 759-782: IF_IMG_SS_PIX_H_IN_E0_CK
- 759-785: IF_IMG_RESOLUTION_IN_E0_CK

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-785] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board
- Halftone PWB (CK) (PL 18.14)

061-915 Image Mismatch ERR (K)

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

Procedure

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[K color image size notified by Print Server]

- 759-800: IF_IMG_FS_PIX_IN_E1_CK
- 759-803: IF_IMG_SS_PIX_L_IN_E1_CK
- 759-806: IF_IMG_SS_PIX_H_IN_E1_CK
- 759-809: IF_IMG_RESOLUTION_IN_E1_CK

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-809] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board
- Halftone PWB (CK) (PL 18.14)

061-916 Image Mismatch ERR (S2)

BSD-ON:-

The Image size sent by Print Server and the Image size recognized by the Print Engine do not match.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

Procedure

Check the following NVM value, obtain the image size from [Paper Size and Pixel Count Comparison Table], compare the image size notified by Print Server against the image size set by Print Server on UI and the paper size fed by IOT, and identify the location that does not match the desired size.

[S2 color image size notified by Print Server]

- 759-777: IF_IMG_FS_PIX_IN_E0_S2S1
- 759-780: IF_IMG_SS_PIX_L_IN_E0_S2S1
- 759-783: IF_IMG_SS_PIX_H_IN_E0_S2S1
- 759-786: IF_IMG_RESOLUTION_IN_E0_S2S1

NOTE: *The resolution in [Paper Size and Pixel Count Comparison Table] is determined from DC131 [759-786] above, and is 600 dpi in the case of 5 or less, or 9 to 10, and 1200 dpi in the case of 6 to 8, or 11 to 12.*

[Paper Size and Pixel Count Comparison Table]

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
A5 SEF	1480	2100	3496	4960	6992	9920
A4 SEF	2100	2970	4960	7014	9920	14028
A4 LEF	2970	2100	7014	4960	14028	9920
A3	2970	4200	7014	9920	14028	19840
B5 SEF	1820	2570	4298	6070	8596	12140
B5 LEF	2570	1820	6070	4298	12140	8596
B4 SEF	2570	3640	6070	8598	12140	17196
STATEMENT SEF	1397	2159	3300	5100	6600	10200
STATEMENT LEF	2159	1397	5100	3300	10200	6600
Executive SEF	1842	2667	4350	6300	8700	12600
Executive LEF	2667	1842	6300	4350	12600	8700

Table 1

Paper Size	Size X	Size Y	600 dpi		1200 dpi	
			FS pix	SS pix	FS pix	SS pix
8x10 SEF	2032	2540	4800	6000	9600	12000
Letter LEF	2159	2794	5100	6600	10200	13200
Letter SEF	2794	2159	6600	5100	13200	10200
8.5x13 SEF	2159	3302	5100	7800	10200	15600
Legal	2159	3556	5100	8400	10200	16800
Ledger	2794	4318	6600	10200	13200	20400
Special A4 SEF	2260	3100	5338	7322	10676	14644
Special A4 LEF	3100	2260	7322	5338	14644	10676
DT Special A3 SEF	3100	4320	7322	10204	14644	20408
SRA3	3200	4500	7558	10628	15116	21256
12x18	3048	4572	7200	10800	14400	21600
12.6x19.2	3200	4880	7558	11526	15116	23052
13x18	3302	4572	7800	10800	15600	21600
13x19	3302	4826	7800	11400	15600	22800
16KAI-T LEF	2670	1940	6306	4582	12612	9164
8KAI-T SEF	2670	3880	6306	9164	12612	18328
16KAI-C SEF	2700	1950	6376	4606	12752	9212
8KAI-C SEF	2700	3900	6376	9212	12752	18424

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- Printer Interface board
- Halftone PWB (SS) (PL 18.13)

061-940 CC/Big Module Interlock Open

BSD-ON:CH1.22

When ROS VDD Down Fail is detected, it is detected that the Front Interlock is in the Close state and the port of the Laser Interlock is Open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The BGM Interlock Switch (DC330 [004-311]) for operation failure. (PL 9.5)
- CC/Big Module installation failure.

If no problem is found, replace the IOT Main PWB. (PL 18.14)

061-941 Front Cover Interlock Interruption Open Fail

BSD-ON:CH1.17

When SOS-type Fail and Polygon Motor Fail are detected, it is detected that the Front Interlock is in the Close state and the port of the Laser Interlock is Open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The IOT-L Front RH Cover Interlock Switch (DC330 [004-303]) for operation failure. (PL 19.1)
- The Front Cover for damage or mismatch.

If no problem is found, replace the IOT Main PWB. (PL 18.14)

061-942 ContIF Error Fail CycleDown #1

FIP

Refer to 061-CF-001 FIP.

061-943 ContIF Error Fail CycleDown #2

FIP

Refer to 061-CF-001 FIP.

061-944 ContIF Error Fail CycleDown #3
FIP
Refer to 061-CF-001 FIP.

061-945 ContIF Error Fail CycleDown #4
FIP
Refer to 061-CF-001 FIP.

061-946 ContIF Error Fail CycleDown #5
FIP
Refer to 061-CF-001 FIP.

061-947 ContIF Error Fail CycleDown #6
FIP
Refer to 061-CF-001 FIP.

061-948 ROS LD Fail CycleDown #1
FIP
Refer to 061-CF-005 FIP.

061-949 ROS LD Fail CycleDown #2
FIP
Refer to 061-CF-005 FIP.

061-950 ROS LD Fail CycleDown #3
FIP
Refer to 061-CF-005 FIP.

061-951 ROS LD Fail CycleDown #4
FIP
Refer to 061-CF-005 FIP.

061-952 ROS LD Fail CycleDown #5
FIP
Refer to 061-CF-005 FIP.

061-953 ROS LD Fail CycleDown #6
FIP
Refer to 061-CF-005 FIP.

061-954 SOS Long Fail CycleDown #1
FIP
Refer to 061-CF-006 FIP.

061-955 SOS Long Fail CycleDown #2
FIP
Refer to 061-CF-007 FIP.

061-956 SOS Long Fail CycleDown #3
FIP
Refer to 061-CF-008 FIP.

061-957 SOS Long Fail CycleDown #4
FIP
Refer to 061-CF-009 FIP.

061-958 SOS Long Fail CycleDown #5
FIP
Refer to 061-CF-010 FIP.

061-959 SOS Long Fail CycleDown #6
FIP
Refer to 061-CF-011 FIP.

061-960 SOS Short Fail CycleDown #1
FIP
Refer to 061-CF-012 FIP.

061-961 SOS Short Fail CycleDown #2
FIP
Refer to 061-CF-013 FIP.

061-962 SOS Short_H Fail #3
FIP
Refer to 061-CF-014 FIP.

061-963 SOS Short Fail CycleDown #4
FIP
Refer to 061-CF-015 FIP.

061-964 SOS Short Fail CycleDown #5

FIP

Refer to 061-CF-016 FIP.

061-965 SOS Short Fail CycleDown #6

FIP

Refer to 061-CF-017 FIP.

061-966 PolygonMotor Fail CycleDown #1

FIP

Refer to 061-CF-018 FIP.

061-967 PolygonMotor Fail CycleDown #2

FIP

Refer to 061-CF-019 FIP.

061-968 PolygonMotor Fail CycleDown #3

FIP

Refer to 061-CF-020 FIP.

061-969 PolygonMotor Fail CycleDown #4

FIP

Refer to 061-CF-021 FIP.

061-970 PolygonMotor Fail CycleDown #5

FIP

Refer to 061-CF-022 FIP.

061-971 PolygonMotor Fail CycleDown #6

FIP

Refer to 061-CF-023 FIP.

061-972 ROS VDD Down Fail CycleDown #1

FIP

Refer to 061-CF-024 FIP.

061-973 ROS VDD Down Fail CycleDown #2

FIP

Refer to 061-CF-024 FIP.

061-974 ROS VDD Down Fail CycleDown #3

FIP

Refer to 061-CF-024 FIP.

061-975 ROS VDD Down Fail CycleDown #4

FIP

Refer to 061-CF-024 FIP.

061-976 ROS VDD Down_H Fail #5

FIP

Refer to 061-CF-024 FIP.

061-977 ROS VDD Down Fail CycleDown #6

FIP

Refer to 061-CF-024 FIP.

071-101 Tray 1 Feed Out Sensor ON Jam

BSD-ON:CH8.2, CH8.1

The Tray 1 Feed Out Sensor does not turn ON within the specified time during paper feed from Tray 1.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the Usage Environment with the DC140 [007-200/201] (Tray Temp & Humidity) of the Diag. After checking the Usage Environment, perform the following:

- In the case of a high temperature, high humidity environment, fan the Paper to eliminate Paper adhesion.
- Change the operation mode of the Air Assist. (Standard -> Multi-paper supported, Mis-feed supported)
- If the Paper being used is deformed, replace it with fresh paper or a different brand of paper.
- In the case of a low temperature, low humidity environment, flip the paper and check and adjust it manually. If the problem persists, replace the paper with fresh paper or a different brand of paper.

Does an error occur?

Y N

End

Check the HFSI Counter Value of the Feeder Unit, Feed/Retard/Nudger Roll of Tray 1.

- DC135 [007-803] (Tray 1 Feeder Unit)
- DC135 [007-800] (Tray 1 Feed/Retard/Nudger Roll)

Has it reached its Life?

Y N

Replace the part that have reached their Life.

- Feed Roll, Retard Roll, Nudger Roll (PL 10.7, PL 10.10)
- Feeder Assembly (PL 10.5)

Check the paper. **Is the paper a standard 52 to 350 gsm?**

Y N

Perform the following:

- Change the paper to be used with the default paper.
- Correct the Paper Quality Setting or change the paper in Tray 1 to Plain Uncoated.

Fan the Paper to eliminate Paper adhesion. **Does an error occur?**

Y N

End

Check the installation of the Side Guide, End Guide, Skew Weight of Tray 1 and check also if the Pad is coming off. **Are the part correctly installed?**

Y N

Perform the following:

- Correctly install the Side Guide, End Guide, Skew weight. (PL 10.14)
- Correctly install the Pad on the Bottom Plate. (PL 10.14)
- Clean or replace the Bottom Plate. (PL 10.14)

A

Is there any paper remaining in the machine that delays paper feed?

Y N

Remove the remaining paper.

Replace Feed Roll (PL 10.7), Retard Roll (PL 10.10), Nudger Roll (PL 10.7). **Does an error occur?**

Y N

End

Check the following:

- The Tray 1 Feed Out Sensor (DC330 [007-103]) for operation failure. (PL 10.7)
- The Tray 1 Take Away Motor (DC330 [007-028]) for operation failure. (PL 10.8)
- The Tray 1 Feed Motor (DC330 [007-005]) for operation failure. (PL 10.8)

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- Tray 1 Feeder Assembly (PL 10.5)
- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

071-210 Tray 1 Lift Up Fail

BSD-ON:CH7.9

The Tray 1 Level Sensor does not turn ON within the specified time after Tray 1 has begun lifting up. Or Tray 1 Level Sensor is ON before Lift Up is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Tray 1 Level Sensor (DC330 [007-101]) for operation failure. (PL 10.7)
- Operation failure of Tray 1 Lift Motor (DC330 [007-001]). (PL 10.6)
- Operation failure of Tray 1 Nudger Solenoid (DC330 [007-002]) (Down). (PL 10.7)
- Lift Up failure due to disconnected Tray Cable, improper threading, damage, etc.
- Lift Up failure due to deformation or clawing of the Bottom Plate. (PL 10.14)
- Blockage of or presence of foreign matter in the Lift Motor. (PL 10.5, PL 10.6)
- Rotation failure of the Lift Up Shaft.
- The Tray for existence of objects other than Paper.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

071-211 Tray 1 Shift Mech Fail

BSD-ON:CH7.11

A

When any one of the following has occurred:

1. Over run
   The Tray 1 Shift Front Limit Sensor or the Tray 1 Shift Rear Limit Sensor changed from OFF to ON during start of initialization up to completion, start of positioning up to completion, or start of shift return to completion.
2. Shift Mech Fail (1)
   The Tray 1 Shift Front Limit Sensor or the Tray 1 Shift Rear Limit Sensor did not turn OFF within the specified time from turning the Tray 1 Shift Motor ON when the Tray 1 Shift Front Limit Sensor or the Tray 1 Shift Rear Limit Sensor was ON during start of initialization up to completion, or start of shift return to completion.
3. Shift Mech Fail (2)
   The Tray 1 Shift Home Sensor did not turn OFF within the specified time from turning the Tray 1 Shift Motor ON when the Tray 1 Shift Home Sensor was ON during start of initialization up to completion, or start of positioning up to completion.
4. Shift Mech Fail (3)
   The Tray 1 Shift Home Sensor did not turn ON within the specified time from turning the Tray 1 Shift Motor ON when the Tray 1 Shift Home Sensor was OFF during start of initialization up to completion.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 1 Shift Home Sensor (DC330 [007-120]). (PL 10.17)
- Operation failure of Tray 1 Shift Front Limit Sensor (DC330 [007-121]). (PL 10.17)
- Operation failure of Tray 1 Shift Rear Limit Sensor (DC330 [007-122]). (PL 10.17)
- Operation failure of Tray 1 Shift Motor (DC330 [007-025/026] (Front/Rear)). (PL 10.4)
- Blockage of Tray 1 Shift Motor Gear. (PL 10.4)
- Foreign matter on the Tray track.
- Setting mistake of the Tray.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

071-212 Tray 1 Lead Blower Fail

FIP

Refer to 071-CF-001 FIP.

071-213 Tray 1 End Blower Fail

FIP

Refer to 071-CF-001 FIP.

071-214 Tray 1 Front Blower Fail

FIP

Refer to 071-CF-001 FIP.

071-215 Tray 1 Rear Blower Fail

FIP

Refer to 071-CF-001 FIP.

071-216 Tray 1 Lead Shutter Fail

BSD-ON:CH7.15

The level of the Tray 1 Lead Shutter Home Sensor does not change within the specified time after the Tray 1 Lead Shutter operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 1 Lead Shutter Home Sensor (DC330 [007-114]). (PL 10.12)
  - Manually turn the gear of the Tray 1 Lead Shutter Motor and turn the Sensor ON/OFF.
- Operation failure of Tray 1 Lead Shutter Motor (DC330 [007-007]). (PL 10.11)
- Blockage, wear, damage of the Drive Gear.
- Operation failure of the Shutter.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

071-217 Tray 1 End Shutter Fail

BSD-ON:CH7.16

The level of the Tray 1 End Shutter Home Sensor does not change within the specified time after the Tray 1 End Shutter operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 1 End Shutter Home Sensor (DC330 [007-115]). (PL 10.12)
  - Manually turn the gear of the Tray 1 End Shutter Motor and turn the Sensor ON/OFF.
- Operation failure of Tray 1 End Shutter Motor (DC330 [007-010]). (PL 10.11)
- Blockage, wear, damage of the Drive Gear.
- Operation failure of the Shutter.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

071-218 Tray 1 Lead Heater Fail

BSD-ON:CH7.14, CH7.13, CH1.46

The temperature of the Tray 1 Lead Heater does not reach the specified temperature even after the specified time has passed.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn OFF the power. Remove the Connector P/J163 of the Tray 1 Lead Heater Temp Sensor and measure the resistance between Pin1 and Pin2 of J163 (at room temperature 24 degrees, about 5.57 kilo Ohms). **Is the Resistance Value within the range of 15 kilo Ohms (0 degree) to 0.25 kilo Ohms (130 degrees)?**

Y N

Replace the Heater and Duct. (PL 10.11)

Remove the Relay Connector P/J8_1 of the Tray 1 Air Heater PWB and measure the resistance between Pin1 and Pin2 of J8_1. Is the Resistance Value approx. 100 Ohm? **Is the Resistance Value approx. 100 Ohm?**

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Relay Connector J8_1-1 and Tray 1 Air Heater J9_1-1
- Relay Connector J8_1-2 and Tray 1 Air Heater J9_1-2

If no problem is found after checking, replace the Tray 1 Air Heater. (PL 10.11)

Check the following connections for open circuits, short circuits, and poor contacts.

- Between PH_1 MD PWB J678_H1-A5 and Tray 1 Air Heater PWB J7AL-2
- Between DST 3 PWB J1012_3-4 and Tray 1 Air Heater PWB J7AL-1

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- Tray 1 Air Heater PWB (PL 10.17)
- PH_1 MD PWB (PL 18.2)
- DST 3 PWB (PL 18.13)

071-219 Tray 1 Lead Heater Temp Sensor Fail

BSD-ON:CH7.14

The measured temperature value of the Tray 1 Lead Heater Temp Sensor is out of the specification range. (AD value: 909-119 (Temperature 0-130 degrees))

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 071-218 (Tray 1 Lead Heater Fail) FIP.

071-222 Tray 1 Size Sensor Broken

BSD-ON:CH7.3, CH7.4, CH7.5

Paper size that would not be detected in a normal state was detected due to malfunction of one or all of Tray 1 Size Sensor 0-6.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 1 Size Sensor 0 - 6 (DC330 [007-105/106/107/108/109/110/111]). (PL 10.16)
- Clawing or operation failure of the Side Guide, End Guide.
- Installation failure of Tray 1 Size Sensor.
- Deformation, falling off, damage of the Actuator of the Tray 1 Size Sensor.
- The Tray for existence of objects other than Paper.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

071-401 Feed/Retard/Nudger Roll (Tray 1) Life Limit

BSD-ON:CH8.1, CH7.21

It is time to replace the Feed/Retard/Nudger Roll of Tray 1.

Cause/Action

Replace the Tray 1 Feed Roll (PL 10.7), Retard Roll (PL 10.10), Nudger Roll (PL 10.7), and clear the counter value of DC135 [007-800] (Feed/Retard/Nudger Roll (Tray 1)).

071-490 Tray 1 Near Empty

BSD-ON:-

While Tray 1 was being used in a job, it was detected that the remaining paper amount became 1/4 or less.

Cause/Action

Load paper as necessary.

071-901 Tray 1 Feed Out Sensor Static Jam

BSD-ON:CH8.2

Tray 1 Feed Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Tray 1 Feed Out Sensor (DC330 [007-103]) for operation failure. (PL 10.7)

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

071-940 Tray 1 No Paper

BSD-ON:CH7.5, CH7.9

The Job was detected to be unable to continue due to the following condition.

- Tray 1 is empty. Or, Tray 1 has ran out of paper while the Job is in progress and the machine stopped instead of switching to another Tray.
- When Tray 1 was specified from Print Server, the machine stopped instead of switching to another Tray because of a mismatch between the paper attribute and the instruction from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Check that the paper specified by the Job is loaded properly in Tray 1.
- Check that Tray 1 is pushed in securely and installed properly.
- Operation failure of Tray 1 Lower No Paper Sensor (DC330 [007-104]). (PL 10.16)
- Operation failure of Tray 1 Upper No Paper Sensor (DC330 [007-100]). (PL 10.7)
- The Tray 1 Level Sensor (DC330 [007-101]) for operation failure. (PL 10.7)
- Operation failure of Tray 1 Lift Motor (DC330 [007-001]). (PL 10.6)
- Operation failure of Tray 1 Nudger Solenoid (DC330 [007-002]) (Down). (PL 10.7)
- The sensor for contamination and improper installation
- The Sensor Actuator for bent, damage, return failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

071-941 Tray 1 Paper Wrong Position

BSD-ON:CH7.5, CH7.3, CH7.4

The Job was detected to be unable to continue due to the following condition.

- When Tray 1 that contains paper with wrong position was specified from Print Server, the machine stopped instead of switching to another Tray.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Check the position of paper loaded in Tray 1 is correct.
- Check that the paper guides of Tray 1 is correct.
- Operation failure of Tray 1 Size Sensor 0/1/2/3/4/5/6 (DC330 [007-105/106/107/108/109/110/111]). (PL 10.16)
- Operation failure of Tray 1 Lower No Paper Sensor (DC330 [007-104]). (PL 10.16)
- The Tray 1 Front Misset Sensor (DC330 [007-112]) for operation failure. (PL 10.16)
- The sensor for contamination and improper installation
- The Sensor Actuator for bent, damage, return failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

071-942 Tray 1 Parameter Setting in Process

BSD-ON:CH3.4

When any one of the following has occurred:

- When Tray 1 in [Tray is being set] status was specified from Print Server, the machine stopped instead of switching to another Tray.

Cause/Action

1. Check that there is no open Tray 1 related screens on the Print Server.
2. Open and close Tray 1.

071-943 Tray 1 Offline

BSD-ON:CH3.4

When any one of the following has occurred:

- When Tray 1 that was set to Offline was specified from Print Server, the machine stops instead of switching to another Tray.

Cause/Action

1. On the Print Server, check that the [Offline] settings of Tray 1 has been cleared.
2. If Tray 1 was set to [Offline] to prevent it from being used for some reason, check that the Job that attempted to use Tray 1 has been canceled on Print Server, then specify another Tray and try again.

071-944 Tray 1 Not Ready

BSD-ON:CH3.4

The Job was detected to be unable to continue due to the following condition.

- Although Tray 1 was specified from Print Server, the physical status of Tray 1 indicates that the ordered paper is unconfirmed and hence it is considered Not Ready and the Job that uses Tray 1 is unable to continue.
- Unable to transition to another Tray as there is no other Tray with the same settings as Tray 1.

Cause/Action

1. Check that the paper specified by the Job is loaded properly in Tray 1.
2. Check that Tray 1 is pushed in securely and installed properly.
3. Check whether there is another Tray with the same settings as Tray 1.
4. On the Print Server, check for the prompt message: [As ordered paper is loaded, open Tray 1 and check whether the 1st tab is set to the top].

071-945 Tray 1 Not Ready (Support for C13_SQ OFF during Lift Up)

BSD-ON:CH3.4, CH1.27, CH1.83

The Job was detected to be unable to continue due to the following condition.

- Although Tray 1 was specified from Print Server, due to Tray 1 being C13_SQ OFF during Lift Up, hence, Not Ready, the Job that uses Tray 1 is unable to continue.
- Unable to transition to another Tray as there is no other Tray with the same settings as Tray 1.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. On the Print Server, check for the message: [Press confirm] and then select the button.
2. Check on the Print Server, the message, [As Lift Up is interrupted, the Tray needs to be removed/inserted].
3. With respect to the new internal safety standard C13-related signals, check that the PH_1 MD PWB J674_H1-2 pin signal is ON (H) +24VDC.
4. Check whether there is another Tray with the same settings as Tray 1.

071-946 Tray 1 No Paper - Scheduling Not Possible

BSD-ON:CH3.4

When Tray 1 Near Empty is detected and switching to another Tray, the Feed order of Tray 1 and the Tray it is switching to gets reversed and Tray 1 Empty was detected before all the paper that had undergone scheduling at Tray 1 was fed.

Cause/Action

1. On the Print Server, check for the message: [Press confirm] and then select the button.
2. On the UI media settings, change the [Remaining Paper Detection Level] and check that the error has improved.

071-947 Tray 1 No Paper - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- Although Tray 1 Empty or Near Empty was detected while Tray 1 is in use, it was also detected that it is unable to transition to another Tray because it is in the middle of an ordered paper scheduling.
- Although Tray 1 Empty or Near Empty was detected while Tray 1 is in use, it was also detected that it is unable to transition to another Tray because Tray 1 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

Load paper in Tray 1.

071-948 Tray 1 Parameter Setting in Process - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- Although Tray 1 was pulled out while Tray 1 is in use, it was detected that it is unable to transition to another Tray because it is in the middle of an ordered paper scheduling.
- Although Tray 1 missing was detected while Tray 1 is in use, it was also detected that it is unable to transition to another Tray because Tray 1 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

1. Check that there is no open Tray 1 related screens on the PC-UI.
2. Open and close Tray 1.

071-949 Tray 1 Broken - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- Although Tray 1 has failed while Tray 1 is in use, it was detected that it is unable to transition to another Tray because it is in the middle of an ordered paper scheduling.
- Although Tray 1 has failed while Tray 1 is in use, it was also detected that it is unable to transition to another Tray because Tray 1 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

Enter DC122 Shutdown History. Check for Tray 1 related Fail and fix the problem.

071-960 Tray 1 Not Ready - ATS Not Possible

BSD-ON:CH3.4

The Job was detected to be unable to continue due to the following condition.

- Although Tray 1 was specified from Print Server, the physical status of Tray 1 indicates that the ordered paper is unconfirmed and hence it is considered to be in Not Ready status and the Job that uses Tray 1 is unable to continue.
- Tray 1 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

1. Check that the paper specified by the Job is loaded properly in Tray 1.
2. Check that Tray 1 is pushed in securely and installed properly.
3. On the PC-UI, check for the prompt message: [As ordered paper is loaded, open Tray 1 and check whether the 1st tab is set to the top].

071-961 Tray 1 Paper Wrong Position - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- When paper has ran out, etc. while Tray 1 is in use and after it was stopped by setting Tray 1 or all other Trays to ATS Prohibited status via the Allow/Prohibit ATS settings, it was detected that paper was loaded to the wrong position in Tray 1.
- Although Tray 1 with paper loaded in the wrong position was specified from Print Server, it was detected that it is unable to transition to another Tray because Tray 1 or all other Trays are in ATS Prohibited status.

Cause/Action

1. Check the position of paper that was loaded in Tray 1.
2. Check that the paper guides of Tray 1 is correct.

071-962 Tray 1 Offline - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- When paper has ran out, etc. while Tray 1 is in use and after it was stopped by setting Tray 1 or all other Trays to ATS Prohibited status via the Allow/Prohibit ATS settings, the Tray was disabled from use.
- Although Tray 1 that was set to Offline was specified from Print Server, it was detected that it is unable to transition to another Tray because Tray 1 or all other Trays are in ATS Prohibited status.

Cause/Action

1. On the PC-UI, check that the [Offline] settings of Tray 1 has been cleared.
2. If Tray 1 was set to [Offline] to prevent it from being used for some reason, check that the Job that attempted to use Tray 1 has been canceled on PC-UI, then specify another Tray and try again.

072-101 Tray 2 Feed Out Sensor ON Jam

BSD-ON:CH8.4, CH8.3

The Tray 2 Feed Out Sensor does not turn ON within the specified time during paper feed from Tray 2.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the Usage Environment with the DC140 [007-200/201] (Tray Temp & Humidity) of the Diag. After checking the Usage Environment, perform the following:

- In the case of a high temperature, high humidity environment, fan the Paper to eliminate Paper adhesion.
- Change the operation mode of the Air Assist. (Standard -> Multi-paper supported, Mis-feed supported)
- If the Paper being used is deformed, replace it with fresh paper or a different brand of paper.
- In the case of a low temperature, low humidity environment, flip the paper and check and adjust it manually. If the problem persists, replace the paper with fresh paper or a different brand of paper.

Does an error occur?

Y N

End

Check the HFSI Counter Value of the Feeder Unit, Feed/Retard/Nudger Roll of Tray 2.

- DC135 [007-804] (Tray 2 Feeder Unit)
- DC135 [007-801] (Tray 2 Feed/Retard/Nudger Roll)

Has it reached its Life?

Y N

Replace the part that have reached their Life.

- Feed Roll, Retard Roll, Nudger Roll (PL 10.7, PL 10.10)
- Feeder Assembly (PL 10.5)

Check the paper. **Is the paper a standard 52 to 350 gsm?**

Y N

Perform the following:

- Change the paper to be used with the default paper.
- Correct the Paper Quality Setting or change the paper in Tray 2 to Plain Uncoated.

Fan the Paper to eliminate Paper adhesion. **Does an error occur?**

Y N

End

Check the installation of the Side Guide, End Guide, Skew Weight of Tray 2 and check also if the Pad is coming off. **Are the part correctly installed?**

Y N

Perform the following:

- Correctly install the Side Guide, End Guide, Skew weight. (PL 10.14)
- Correctly install the Pad on the Bottom Plate. (PL 10.14)
- Clean or replace the Bottom Plate. (PL 10.14)

A

Is there any paper remaining in the machine that delays paper feed?

Y N

Remove the remaining paper.

Replace Feed Roll (PL 10.7), Retard Roll (PL 10.10), Nudger Roll (PL 10.7). **Does an error occur?**

Y N

End

Check the following:

- The Tray 2 Feed Out Sensor (DC330 [007-126]) for operation failure. (PL 10.7)
- The Tray 2 Take Away Motor (DC330 [007-056]) for operation failure. (PL 10.8)
- The Tray 2 Feed Motor (DC330 [007-033]) for operation failure. (PL 10.8)

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- Tray 2 Feeder Assembly (PL 10.5)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

072-210 Tray 2 Lift Up Fail

BSD-ON:CH7.10

The Tray 2 Level Sensor does not turn ON within the specified time after Tray 2 has begun lifting up. Or Tray 2 Level Sensor is ON before Lift Up is started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Tray 2 Level Sensor (DC330 [007-124]) for operation failure. (PL 10.7)
- Operation failure of Tray 2 Lift Motor (DC330 [007-029]). (PL 10.6)
- Operation failure of Tray 2 Nudger Solenoid (DC330 [007-030]) (Down). (PL 10.7)
- Lift Up failure due to disconnected Tray Cable, improper threading, damage, etc.
- Lift Up failure due to deformation or clawing of the Bottom Plate. (PL 10.14)
- Blockage of or presence of foreign matter in the Lift Motor. (PL 10.5, PL 10.6)
- Rotation failure of the Lift Up Shaft.
- The Tray for existence of objects other than Paper.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

072-211 Tray 2 Shift Mech Fail

BSD-ON:CH7.12

A

When any one of the following has occurred:

1. Over run
   The Tray 2 Shift Front Limit Sensor or the Tray 2 Shift Rear Limit Sensor changed from OFF to ON during start of initialization up to completion, start of positioning up to completion, or start of shift return to completion.
2. Shift Mech Fail (1)
   The Tray 2 Shift Front Limit Sensor or the Tray 2 Shift Rear Limit Sensor did not turn OFF within the specified time from turning the Tray 2 Shift Motor ON when the Tray 2 Shift Front Limit Sensor or the Tray 2 Shift Rear Limit Sensor was ON during start of initialization up to completion, or start of shift return to completion.
3. Shift Mech Fail (2)
   The Tray 2 Shift Home Sensor did not turn OFF within the specified time from turning the Tray 2 Shift Motor ON when the Tray 2 Shift Home Sensor was ON during start of initialization up to completion, or start of positioning up to completion.
4. Shift Mech Fail (3)
   The Tray 2 Shift Home Sensor did not turn ON within the specified time from turning the Tray 2 Shift Motor ON when the Tray 2 Shift Home Sensor was OFF during start of initialization up to completion.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 2 Shift Home Sensor (DC330 [007-143]). (PL 10.17)
- Operation failure of Tray 2 Shift Front Limit Sensor (DC330 [007-144]). (PL 10.17)
- Operation failure of Tray 2 Shift Rear Limit Sensor (DC330 [007-145]). (PL 10.17)
- Operation failure of Tray 2 Shift Motor (DC330 [007-053/054] (Front/Rear)). (PL 10.4)
- Blockage of Tray 2 Shift Motor Gear. (PL 10.4)
- Foreign matter on the Tray track.
- Setting mistake of the Tray.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

072-212 Tray 2 Lead Blower Fail

FIP

Refer to 072-CF-001 FIP.

072-213 Tray 2 End Blower Fail

FIP

Refer to 072-CF-001 FIP.

072-214 Tray 2 Front Blower Fail

FIP

Refer to 072-CF-001 FIP.

072-215 Tray 2 Rear Blower Fail

FIP

Refer to 072-CF-001 FIP.

072-216 Tray 2 Lead Shutter Fail

BSD-ON:CH7.17

The level of the Tray 2 Lead Shutter Home Sensor does not change within the specified time after the Tray 2 Lead Shutter operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 2 Lead Shutter Home Sensor (DC330 [007-137]). (PL 10.12)
  - Manually turn the gear of the Tray 2 Lead Shutter Motor and turn the Sensor ON/OFF.
- Operation failure of Tray 2 Lead Shutter Motor (DC330 [007-035]). (PL 10.11)
- Blockage, wear, damage of the Drive Gear.
- Operation failure of the Shutter.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

072-217 Tray 2 End Shutter Fail

BSD-ON:CH7.18

The level of the Tray 2 End Shutter Home Sensor does not change within the specified time after the Tray 2 End Shutter operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 2 End Shutter Home Sensor (DC330 [007-138]). (PL 10.12)
  - Manually turn the gear of the Tray 2 End Shutter Motor and turn the Sensor ON/OFF.
- Operation failure of Tray 2 End Shutter Motor (DC330 [007-038]). (PL 10.11)
- Blockage, wear, damage of the Drive Gear.
- Operation failure of the Shutter.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

072-218 Tray 2 Lead Heater Fail

BSD-ON:CH7.14, CH7.13, CH1.46

The temperature of the Tray 2 Lead Heater does not reach the specified temperature even after the specified time has passed.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence. P/J163*

Procedure

Turn OFF the power. Remove the Connector P/J163 of the Tray 2 Lead Heater Temp Sensor and measure the resistance between Pin1 and Pin2 of J163 (at room temperature 24 degrees, about 5.57 kilo Ohms). **Is the Resistance Value within the range of 15 kilo Ohms (0 degree) to 0.25 kilo Ohms (130 degrees)?**

Y N

Replace the Heater and Duct. (PL 10.11)

Remove the Relay Connector P/J8_2 of the Tray 2 Air Heater PWB and measure the resistance between Pin1 and Pin2 of J8_2. **Is the Resistance Value approx. 100 Ohm?**

Y N

Check the following connections for open circuits, short circuits, and poor contacts.

- Relay Connector J8_2-1 and Tray 2 Air Heater J9_2-1
- Relay Connector J8_2-2 and Tray 2 Air Heater J9_2-2

If no problem is found after checking, replace the Tray 2 Air Heater. (PL 10.11)

Check the following connections for open circuits, short circuits, and poor contacts.

- Between PH_2 MD PWB J678_H2-A5 and Tray 2 Air Heater PWB J7AR-2
- Between DST 3 PWB J1012_3-4 and Tray 2 Air Heater PWB J7AR-1

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- Tray 2 Air Heater PWB (PL 10.17)
- PH_2 MD PWB (PL 18.2)
- DST 3 PWB (PL 18.13)

072-219 Tray 2 Lead Heater Temp Sensor Fail

BSD-ON:CH7.14

The measured temperature value of the Tray 2 Lead Heater Temp Sensor is out of the specification range. (AD value: 909-119 (Temperature 0-130 degrees))

Cause/Action

Refer to 072-218 (Tray 2 Lead Heater Fail) FIP.

072-222 Tray 2 Size Sensor Broken

BSD-ON:CH7.6, CH7.7, CH7.8

Paper size that would not be detected in a normal state was detected due to malfunction of one or all of Tray 2 Size Sensor 0-6.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Tray 2 Size Sensor 0 - 6 (DC330 [007-128/129/130/131/132/133/134]). (PL 10.16)
- Clawing or operation failure of the Side Guide, End Guide.
- Installation failure of Tray 2 Size Sensor.
- Deformation, falling off, damage of the Actuator of the Tray 2 Size Sensor.
- The Tray for existence of objects other than Paper.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

072-401 Feed/Retard/Nudger Roll (Tray 2) Life Limit

BSD-ON:CH8.3, CH7.21

It is time to replace the Feed/Retard/Nudger Roll of Tray 2.

Cause/Action

Replace the Tray 2 Feed Roll (PL 10.7), Retard Roll (PL 10.10), Nudger Roll (PL 10.7), and clear the counter value of DC135 [007-801] (Feed/Retard/Nudger Roll (Tray 2)).

072-490 Tray 2 Near Empty

BSD-ON:-

While Tray 2 was being used in a job, it was detected that the remaining paper amount became 1/4 or less.

Cause/Action

Load paper as necessary.

072-901 Tray 2 Feed Out Sensor Static Jam

BSD-ON:CH8.4

Tray 2 Feed Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Tray 2 Feed Out Sensor (DC330 [007-126]) for operation failure. (PL 10.7)

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

072-940 Tray 2 No Paper

BSD-ON:CH7.8, CH7.10

The Job was detected to be unable to continue due to the following condition.

- Tray 2 is empty. Or, Tray 2 has ran out of paper while the Job is in progress and the machine stopped instead of switching to another Tray.
- When Tray 2 was specified from Print Server, the machine stopped instead of switching to another Tray because of a mismatch between the paper attribute and the instruction from Print Server.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Check that the paper specified by the Job is loaded properly in Tray 2.
- Check that Tray 2 is pushed in securely and installed properly.
- Operation failure of Tray 2 Lower No Paper Sensor (DC330 [007-127]). (PL 10.16)
- Operation failure of Tray 2 Upper No Paper Sensor (DC330 [007-123]). (PL 10.7)
- The Tray 2 Level Sensor (DC330 [007-124]) for operation failure. (PL 10.7)
- Operation failure of Tray 2 Lift Motor (DC330 [007-029]). (PL 10.6)
- Operation failure of Tray 2 Nudger Solenoid (DC330 [007-030]) (Down). (PL 10.7)
- The sensor for contamination and improper installation
- The Sensor Actuator for bent, damage, return failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

072-941 Tray 2 Paper Wrong Position

BSD-ON:CH7.8, CH7.6, CH7.7

The Job was detected to be unable to continue due to the following condition.

- When Tray 2 that contains paper with wrong position was specified from Print Server, the machine stopped instead of switching to another Tray.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Check the position of paper loaded in Tray 2 is correct.
- Check that the paper guides of Tray 2 is correct.
- Operation failure of Tray 2 Size Sensor 0/1/2/3/4/5/6 (DC330 [007-128/129/130/131/132/133/134]). (PL 10.16)
- Operation failure of Tray 2 Lower No Paper Sensor (DC330 [007-127]). (PL 10.16)
- The Tray 2 Front Misset Sensor (DC330 [007-135]) for operation failure. (PL 10.16)
- The sensor for contamination and improper installation
- The Sensor Actuator for bent, damage, return failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

072-942 Tray 2 Parameter Setting in Process

BSD-ON:CH3.4

When any one of the following has occurred:

- When Tray 2 in [Tray is being set] status was specified from Print Server, the machine stopped instead of switching to another Tray.

Cause/Action

1. Check that there is no open Tray 2 related screens on the Print Server.
2. Open and close Tray 2.

072-943 Tray 2 Offline

BSD-ON:CH3.4

When any one of the following has occurred:

- When Tray 2 that was set to Offline was specified from Print Server, the machine stops instead of switching to another Tray.

Cause/Action

1. On the Print Server, check that the [Offline] settings of Tray 2 has been cleared.
2. If Tray 2 was set to [Offline] to prevent it from being used for some reason, check that the Job that attempted to use Tray 2 has been canceled on Print Server, then specify another Tray and try again.

072-944 Tray 2 Not Ready

BSD-ON:CH3.4

The Job was detected to be unable to continue due to the following condition.

- Although Tray 2 was specified from Print Server, the physical status of the Tray 2 indicates that the ordered paper is unconfirmed and hence it is considered Not Ready and the Job that uses Tray 2 is unable to continue.
- Unable to transition to another Tray as there is no other Tray with the same settings as Tray 2.

Cause/Action

1. Check that the paper specified by the Job is loaded properly in Tray 2.
2. Check that Tray 2 is pushed in securely and installed properly.
3. Check whether there is another Tray with the same settings as Tray 2.
4. On the Print Server, check for the prompt message: [As ordered paper is loaded, open Tray 2 and check whether the 1st tab is set to the top].

072-945 Tray 2 Not Ready (Support for C13_SQ OFF during Lift Up)

BSD-ON:CH3.4, CH1.27, CH1.83

The Job was detected to be unable to continue due to the following condition.

- Although Tray 2 was specified from Print Server, due to Tray 2 being C13_SQ OFF during Lift Up, hence, Not Ready, the Job that uses Tray 2 is unable to continue.
- Unable to transition to another Tray as there is no other Tray with the same settings as Tray 2.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. On the Print Server, check for the message: [Press confirm] and then select the button.
2. Check on the Print Server, the message, [As Lift Up is interrupted, the Tray needs to be removed/inserted].
3. With respect to the new internal safety standard C13-related signals, check that the PH_2 MD PWB J674_H2-2 pin signal is ON (H) +24VDC.
4. Check whether there is another Tray with the same settings as Tray 2.

072-946 Tray 2 No Paper - Scheduling Not Possible

BSD-ON:-

When Tray 2 Near Empty is detected and switching to another Tray, the Feed order of Tray 2 and the Tray it is switching to gets reversed and Tray 2 Empty was detected before all the paper that had undergone scheduling at Tray 1 was fed.

Cause/Action

1. On the Print Server, check for the message: [Press confirm] and then select the button.
2. On the UI media settings, change the [Reaaining Paper Detection Level] and check that the error has improved.

072-947 Tray 2 No Paper - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- Although Tray 2 Empty or Near Empty was detected while Tray 2 is in use, it was also detected that it is unable to transition to another Tray because it is in the middle of an ordered paper scheduling.
- Although Tray 2 Empty or Near Empty was detected while Tray 2 is in use, it was also detected that it is unable to transition to another Tray because Tray 2 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

Load paper in Tray 2.

072-948 Tray 2 Parameter Setting in Process - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- Although Tray 2 was pulled out while Tray 2 is in use, it was detected that it is unable to transition to another Tray because it is in the middle of an ordered paper scheduling.
- Although Tray 2 missing was detected while Tray 2 is in use, it was also detected that it is unable to transition to another Tray because Tray 2 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

1. Check that there is no open Tray 2 related screens on the PC-UI.
2. Open and close Tray 2.

072-949 Tray 2 Broken - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- Although Tray 2 has failed while Tray 2 is in use, it was detected that it is unable to transition to another Tray because it is in the middle of an ordered paper scheduling.
- Although Tray 2 has failed while Tray 2 is in use, it was also detected that it is unable to transition to another Tray because Tray 2 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

Enter DC122 Shutdown History. Check for Tray 2 related Fail and fix the problem.

072-960 Tray 2 Not Ready - ATS Not Possible

BSD-ON:CH3.4

The Job was detected to be unable to continue due to the following condition.

- Although Tray 2 was specified from Print Server, the physical status of Tray 2 indicates that the ordered paper is unconfirmed and hence it is considered to be in Not Ready status and the Job that uses Tray 2 is unable to continue.
- Tray 2 or all other Trays are set to ATS Prohibited status by the Allow/Prohibit ATS settings.

Cause/Action

1. Check that the paper specified by the Job is loaded properly in Tray 2.
2. Check that Tray 2 is pushed in securely and installed properly.
3. On the PC-UI, check for the prompt message: [As ordered paper is loaded, open Tray 2 and check whether the 1st tab is set to the top].

072-961 Tray 2 Paper Wrong Position - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- When paper has ran out, etc. while Tray 2 is in use and after it was stopped by setting Tray 2 or all other Trays to ATS Prohibited status via the Allow/Prohibit ATS settings, it was detected that paper was loaded to the wrong position in Tray 2.
- Although Tray 2 with paper loaded in the wrong position was specified from Print Server, it was detected that it is unable to transition to another Tray because Tray 2 or all other Trays are in ATS Prohibited status.

Cause/Action

1. Check the position of paper that was loaded in Tray 2.
2. Check that the paper guides of Tray 2 is correct.

072-962 Tray 2 Offline - ATS Not Possible

BSD-ON:CH3.4

When any one of the following has occurred:

- When paper has ran out, etc. while Tray 2 is in use and after it was stopped by setting Tray 2 or all other Trays to ATS Prohibited status via the Allow/Prohibit ATS settings, the Tray was disabled from use.
- Although Tray 2 that was set to Offline was specified from Print Server, it was detected that it is unable to transition to another Tray because Tray 2 or all other Trays are in ATS Prohibited status.

Cause/Action

1. On the PC-UI, check that the [Offline] settings of Tray 2 has been cleared.
2. If Tray 2 was set to [Offline] to prevent it from being used for some reason, check that the Job that attempted to use Tray 2 has been canceled on PC-UI, then specify another Tray and try again.

073-900 Dup In Sensor Static Jam

BSD-ON:CH10.44

When the power was turned ON or the operation was started, the Dup In Sensor detected paper.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Dup In Sensor (DC330 [008-134]) for operation failure. (PL 14.7)
- Improper installation of sensor.
- Paper dust contamination of the Sensor Detection part.
- Foreign matter contamination of the Sensor Detection part.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 1 SNR PWB (PL 18.7)

073-901 Dup Out Sensor Static Jam

BSD-ON:CH10.45

When the power was turned ON or the operation was started, the Dup Out Sensor detected paper.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Dup Out Sensor (DC330 [008-135]) for operation failure. (PL 14.7)
- Improper installation of sensor.
- Paper dust contamination of the Sensor Detection part.
- Foreign matter contamination of the Sensor Detection part.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 1 SNR PWB (PL 18.7)

077-100 Feed Out Sensor 1 ON Jam

BSD-ON:CH8.5, CH8.2

After paper has started feeding from Tray 1, the J-Tra 1 Feed Out Sensor does not turn ON within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The J-Tra 1 Feed Out Sensor (DC330 [008-113]) for operation failure. (PL 11.8)
- The J-Tra 1 Motor (DC330 [008-039]) for operation failure. (PL 11.8)
- The Tray 1 T/A Motor (DC330 [007-028]) for operation failure. (PL 10.8)
- The J-Tra Roll 1, T/A Roll 1, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-101 Feed Out Sensor 2 ON Jam

BSD-ON:CH8.6, CH8.4

After paper has started feeding from Tray 2, the J-Tra 2 Feed Out Sensor does not turn ON within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The J-Tra 2 Feed Out Sensor (DC330 [008-114]) for operation failure. (PL 11.10)
- The J-Tra 2 Motor (DC330 [008-040]) for operation failure. (PL 11.10)
- The Tray 2 T/A Motor (DC330 [007-056]) for operation failure. (PL 10.8)
- The J-Tra Roll 2, T/A Roll 2, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-102 H-Tra Path Sensor 5 ON Jam (Simplex)

BSD-ON:CH8.7, CH8.6

The H-Tra Path Sensor 5 does not turn ON within the specified time when paper started feeding from Tray 2.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H-Tra Path Sensor 5 (DC330 [008-119]) for operation failure. (PL 11.7)
- The H-Tra 2 In Motor (DC330 [008-045]) for operation failure. (PL 11.7)
- The J-Tra 2 Motor (DC330 [008-040]) for operation failure. (PL 11.10)
- The H-Tra Roll 10, J-Tra Roll 2, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-103 H-Tra Path Sensor 5 ON Jam (Duplex)

BSD-ON:CH8.7, CH10.45, CH10.44

The H-Tra Path Sensor 5 does not turn ON within the specified time during paper feeding for 2 Sided Printing.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H-Tra Path Sensor 5 (DC330 [008-119]) for operation failure. (PL 11.7)
- The H-Tra 2 In Motor (DC330 [008-045]) for operation failure. (PL 11.7)
- The Dup Out Motor (DC330 [008-068]) for operation failure. (PL 14.7)
- The Duplex Motor (DC330 [008-066]) for operation failure. (PL 14.7)
- The H-Tra Roll 10, Dup Out Roll, Dup Path Roll, Dup In Roll, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-104 Burr Press Path Sensor ON Jam (Simplex)

BSD-ON:CH8.9, CH8.5, CH8.8, CH8.7

The Burr Press Path Sensor does not turn ON within the specified time during paper feeding from Tray 1/2.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Burr Press Path Sensor (DC330 [010-112]) for operation failure. (PL 12.3)
- The Burr Press Motor (DC330 [010-039]) for operation failure. (PL 12.6)
- The J-Tra 1 Motor (DC330 [008-039]) for operation failure. (PL 11.8)
- The H-Tra 2 Out Motor (DC330 [008-412]) for operation failure. (PL 11.6)
- The H-Tra 2 In Motor (DC330 [008-045]) for operation failure. (PL 11.7)
- The Burr Press T/A Roll, J-Tra Roll 1, H-Tra Path Roll 5-9, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-105 H-Tra Path Sensor 1 ON Jam

BSD-ON:CH8.12, CH8.11

The H-Tra Path Sensor 1 does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H-Tra Path Sensor 1 (DC330 [008-115]) for operation failure. (PL 11.3)
- The H-Tra 1 Motor 1 (DC330 [008-041]) for operation failure. (PL 11.3)
- The H-Tra 1 Motor 2 (DC330 [008-043]) for operation failure. (PL 11.4)
- The H-Tra 1 Clutch (DC330 [008-044]) for operation failure. (PL 11.4)
- The H-Tra Roll 2-4 and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-106 H-Tra Path Sensor 2 ON Jam

BSD-ON:CH8.11, CH8.9, CH8.10

The H-Tra Path Sensor 2 does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The H-Tra Path Sensor 2 (DC330 [008-116]) for operation failure. (PL 11.4)
- The H-Tra 1 Motor 2 (DC330 [008-043]) for operation failure. (PL 11.4)
- The H-Tra 1 Clutch (DC330 [008-044]) for operation failure. (PL 11.4)
- The Burr Press Motor (DC330 [010-039]) for operation failure. (PL 12.6)
- Burr Press Retract Motor (DC330 [010-040] (Retract/Contact Cycle) for operation failure. (PL 12.4)

- The H-Tra Roll 4, Burr Press Roll, Burr T/A Roll, and Pinch Roll for contamination, wear, and revolution failure.
- The Burr Press Roll (Idler) for poor contact.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-107 Pre Regi In Sensor ON Jam (IOT)

BSD-ON:CH8.14, CH8.12

The Pre Regi In Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Pre Regi In Sensor (DC330 [008-121]). (PL 15.3)
- The Transport Motor (DC330 [008-049]) for operation failure. (PL 15.5)
- The H-Tra 1 Motor 1 (DC330 [008-041]) for operation failure. (PL 11.3)
- The Transport Roll, H-Tra Roll 1-2, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-108 Pre Regi In Sensor ON Jam (HCF)

BSD-ON:CH8.14, CH8.13

The Pre Regi In Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Pre Regi In Sensor (DC330 [008-121]). (PL 15.3)
- The Transport Motor (DC330 [008-049]) for operation failure. (PL 15.5)
- The I-Tra Motor (DC330 [008-047]) for operation failure. (PL 11.12)
- The Transport Roll, I-Tra Roll 1-2, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- The HCF for improper docking.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-109 Pre Regi Out Sensor ON Jam

BSD-ON:CH8.16, CH8.15, CH8.14

The Pre Regi Out Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Pre Regi Out Sensor (DC330 [008-123]) for operation failure. (PL 15.3)
- The Pre Regi Motor 2 (DC330 [008-053]) for operation failure. (PL 15.5)
- The Pre Regi Motor 1 (DC330 [008-051]) for operation failure. (PL 15.5)
- The Transport Motor (DC330 [008-049]) for operation failure. (PL 15.5)
- The Pre Regi Roll 1-2, Transport Roll, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-110 Regi In Sensor ON Jam

BSD-ON:CH8.29, CH8.25, CH8.20

The Regi In Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Regi In Sensor (DC330 [008-147]). (PL 15.10)
- The Aligner Drive Motor (DC330 [008-079]) for operation failure. (PL 15.12)
- The Pre Aligner Drive Motor Front (DC330 [008-080]) for operation failure. (PL 15.9)
- The Pre Aligner Drive Motor Rear (DC330 [008-080]) for operation failure. (PL 15.9)
- The Aligner Roll 1-3, Pre Aligner Roll F/R, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-112 Regi Out Sensor ON Jam

BSD-ON:CH8.29, CH8.30, CH8.25, CH8.20

The Regi Out Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Regi Out Sensor (DC330 [008-148]) for operation failure. (PL 15.15)
- The Regi Motor (DC330 [008-089]) for operation failure. (PL 15.13)
- The Regi N/R Motor (DC330 [008-095/096] (Up/Down)) for operation failure. (PL 15.13)
- The Aligner Drive Motor (DC330 [008-079]) for operation failure. (PL 15.12)
- The Pre Aligner Drive Motor Front (DC330 [008-080]) for operation failure. (PL 15.9)
- The Pre Aligner Drive Motor Rear (DC330 [008-080]) for operation failure. (PL 15.9)
- The Regi Roll, Aligner Roll 1-3, Pre Aligner Roll F/R, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-113 V-Tra Sensor 1 ON Jam

BSD-ON:CH10.1, CH10.5, CH9.63, CH9.60

The V-Tra Sensor 1 does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The V-Tra Sensor 1 (DC330 [008-151]) for operation failure. (PL 6.22)
- The V-Tra Motor 1 (DC330 [008-098]) for operation failure. (PL 6.22)
- The V-Tra Fan 1 (DC330 [008-402]) for operation failure. (PL 6.29)
- The 2nd BTB Motor (DC330 [009-441]) for operation failure. (PL 6.24)
- The 2nd BTB Cnt/Ret Motor (DC330 [009-439/440] (Contact/Retract)) for operation failure. (PL 6.23)
- The V-Tra 1 Drive Roll and Idler Roll for contamination, wear, and revolution failure.
- The 2nd BTB Drive Roll for contamination, wear, or revolution failure.
- The Drive Gear for wear and damage.
- The V-Tra 1 Belt, 2nd BTB Belt for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)
- MK_EPG 2 MD PWB (PL 18.3)
- MK_EPG Core PWB (PL 18.3)

077-114 V-Tra Sensor 5 ON Jam

BSD-ON:CH10.3, CH10.2, CH10.1, CH10.6, CH10.5

The V-Tra Path Sensor 5 does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The V-Tra Sensor 5 (DC330 [008-155]) for operation failure. (PL 6.22)
- The V-Tra Motor 3 (DC330 [008-400]) for operation failure. (PL 6.22)
- The V-Tra Motor 2 (DC330 [008-099]) for operation failure. (PL 6.22)
- The V-Tra Motor 1 (DC330 [008-098]) for operation failure. (PL 6.22)
- The V-Tra Fan 1/2/3 (DC330 [008-402/404/406]) for operation failure. (PL 6.29)
- The V-Tra 1/2/3 Drive Roll and Idler Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- The Belt for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-115 V-Tra Sensor 7 ON Jam

BSD-ON:CH10.4, CH10.6, CH10.3

The V-Tra Path Sensor 7 does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The V-Tra Sensor 7 (DC330 [008-157]) for operation failure. (PL 7.5)
- The V-Tra Motor 4 (DC330 [008-401]) for operation failure. (PL 7.5)
- The V-Tra Fan 4 (DC330 [010-060]) for operation failure. (PL 7.3)
- The V-Tra Motor 3 (DC330 [008-400]) for operation failure. (PL 6.22)
- The V-Tra Fan 3 (DC330 [010-406]) for operation failure. (PL 6.29)
- The V-Tra 3/4 Drive Roll and Idler Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- The V-Tra 3/4 Belt for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)

077-116 Fusing Unit Exit Sensor ON Jam

BSD-ON:CH10.18, CH10.7, CH10.8, CH10.4, CH10.19

The Fusing Unit Exit Sensor does not turn ON within the specified time during the paper transportation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Fusing Unit Exit Sensor (DC330 [010-108]) for operation failure. (PL 7.6)
- The Exit V-Tra Motor (DC330 [010-005]) for operation failure. (PL 7.6)
- The Fusing Motor (DC330 [010-001]) for operation failure. (PL 7.12)
- The E/R Motor (DC330 [010-061]) for operation failure. (PL 7.15)
- The V-Tra Motor 4 (DC330 [008-401]) for operation failure. (PL 7.5)
- The Exit V-Tra Fan 1/2 (DC330 [010-006]) for operation failure. (PL 7.6)
- The Fusing Belt for wound up, stuck paper.
- Contamination of the Fusing Unit Exit Sensor.
- The V-Tra 4 Drive Roll, Exit V-Tra Drive Roll, and Idler Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- The Pulley for wear and damage.
- The Trim (V-Tra Belt Exit), V-Tra Belt 4 for wear and damage.
- Transportation failure due to a foreign substance on the paper path.

- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-117 Fusing Unit Exit Sensor OFF Jam

BSD-ON:CH10.18, CH10.19, CH10.25, CH10.27

The Fusing Unit Exit Sensor does not turn OFF within the specified time during the paper transportation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Fusing Unit Exit Sensor (DC330 [010-108]) for operation failure. (PL 7.6)
- The Exit V-Tra Motor (DC330 [010-005]) for operation failure. (PL 7.6)
- The Exit V-Tra Fan 1/2 (DC330 [010-006]) for operation failure. (PL 7.6)
- Cooling Upper Motor (DC330 [010-037]) for operation failure. (PL 16.27)
- Cooling Lower Motor (DC330 [010-038]) for operation failure. (PL 16.27)
- The Exit V-Tra Drive Roll, Cooling Upper/Lower Drive Roll, and Idler Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- The Trim (V-Tra Belt Exit) for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-119 Decurler Exit Sensor ON Jam

BSD-ON:CH10.30, CH10.29, CH10.25, CH10.27

The Decurler Exit Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Decurler Exit Sensor (DC330 [010-115]). (PL 16.22)
- Decurler Roll Drive Motor (DC330 [010-043]) for operation failure. (PL 16.25)
- Decurler Belt Drive Motor (DC330 [010-044]) for operation failure. (PL 16.27)
- Cooling Upper Motor (DC330 [010-037]) for operation failure. (PL 16.27)
- Cooling Lower Motor (DC330 [010-038]) for operation failure. (PL 16.27)
- The Decurler Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The Belt Decurler Drive Roll, Belt Entrance Roll for contamination, wear, or revolution failure.
- The CLG Upper/Lower Drive Roll for contamination, wear, or revolution failure.
- The Drive Gear for wear and damage.
- The Belt for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-120 Decurler Exit Sensor OFF Jam

BSD-ON:CH10.30, CH10.29, CH10.33, CH10.34, CH10.36

The Decurler Exit Sensor does not turn OFF within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Decurler Exit Sensor (DC330 [010-115]). (PL 16.22)
- Decurler Roll Drive Motor (DC330 [010-043]) for operation failure. (PL 16.25)
- Decurler Belt Drive Motor (DC330 [010-044]) for operation failure. (PL 16.27)
- Operation failure of Invert Entrance Motor (DC330 [008-07]). (PL 16.20)
- Operation failure of Invert Upper Motor (DC330 [008-013]). (PL 16.20)
- The Invert In Motor (DC330 [008-023]) for operation failure. (PL 16.20)
- The Belt Decurler Drive Roll, Decurler Exit Roll, Invert Entrance Roll, Invert Upper Roll, Invert In Roll, and Pinch Roll for contamination, wear, and revolution failure
- The Drive Gear for wear and damage.

- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV_1 Sensor PWB (PL 18.7)

077-121 Invert In Sensor ON Jam

BSD-ON:CH10.36, CH10.35, CH10.33, CH10.30

The Invert In Sensor does not turn ON within the specified time during paper feeding for 2 Sided Printing or Invert output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Invert In Sensor (DC330 [008-106]) for operation failure. (PL 16.15)
- The Invert In Motor (DC330 [008-023]) for operation failure. (PL 16.20)
- The Invert Gate Motor (DC330 [008-034/035] (Exit/Invert)) for operation failure. (PL 16.13)
- Operation failure of Invert Entrance Motor (DC330 [008-008]). (PL 16.20)
- Decurler Roll Drive Motor (DC330 [008-043]) for operation failure. (PL 16.25)
- The Invert In Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Invert Entrance Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Decurler Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The Inverter In Gate for operation failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.17)
- FSR/INV_1 MD PWB (PL 18.17)
- FSR/INV Core PWB (PL 18.17)

077-122 Invert Sensor ON Jam

BSD-ON:CH10.37, CH10.36, CH10.40

The Invert Sensor does not turn ON within the specified time during paper feeding for 2 Sided Printing or Invert output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Invert Sensor (DC330 [008-107]). (PL 16.11)
- The Invert Motor (DC330 [008-027]) for operation failure. (PL 16.13)
- The Invert In Motor (DC330 [008-023]) for operation failure. (PL 16.20)
- The Invert Path Motor (DC330 [008-032]) for operation failure. (PL 16.19)
- The Invert Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Invert In Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Invert Path Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Belt for wear and damage.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.17)
- FSR/INV_2 MD PWB (PL 18.17)
- FSR/INV Core PWB (PL 18.17)

077-123 Invert Out Sensor ON Jam

BSD-ON:CH10.34, CH10.37

The Invert Out Sensor does not turn ON within the specified time during paper feeding for Invert output of 1 Sided or 2 Sided Printing.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Invert Out Sensor (DC330 [008-110]). (PL 16.14)
- Operation failure of Invert Upper Motor (DC330 [008-013]). (PL 16.20)
- The Invert Motor (DC330 [008-027]) for operation failure. (PL 16.13)
- The Invert Out Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Invert Roll and Pinch Roll for contamination, wear, and revolution failure.

- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.17)
- FSR/INV_2 MD PWB (PL 18.17)
- FSR/INV Core PWB (PL 18.17)

077-124 IOT Exit Sensor ON Jam

BSD-ON:CH10.39, CH10.34, CH10.33, CH10.37

The IOT Exit Sensor does not turn ON within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The IOT Exit Sensor (DC330 [008-105]) for operation failure. (PL 17.1)
- The IOT Exit Motor (DC330 [008-019]) for operation failure. (PL 17.1)
- Operation failure of Invert Upper Motor (DC330 [008-013]). (PL 16.20)
- Operation failure of Invert Entrance Motor (DC330 [008-007]). (PL 16.20)
- The Invert Motor (DC330 [008-028]) for operation failure. (PL 16.13)
- The IOT Exit Roll, Invert Upper Roll, Invert Entrance Roll, Invert Out Roll, Invert Roll, and Pinch Roll for contamination, wear, and revolution failure
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV 2 Sensor PWB (PL 18.7)

077-125 IOT Exit Sensor OFF Jam

BSD-ON:CH10.39

The IOT Exit Sensor does not turn OFF within the specified time during paper feeding.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The IOT Exit Sensor (DC330 [008-105]) for operation failure. (PL 17.1)
- The IOT Exit Motor (DC330 [008-019]) for operation failure. (PL 17.1)
- The CDM Transport Motor (DC330 [048-001]) for operation failure. (PL 43.10b) (See the separate Finisher Service Manual)
- The IOT Exit Roll and Pinch Roll for contamination, wear, and revolution failure
- The CDM Transport Roll and Pinch Roll for contamination, wear, and revolution failure
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.
- The Main Unit and CDM for improper docking.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-126 D-Tra Sensor 1 ON Jam

BSD-ON:CH10.41, CH10.40, CH10.37, CH10.38

The D-Tra Sensor 1 does not turn ON within the specified time during paper feeding for 2 Sided Printing or Invert output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The D-Tra Sensor 1 (DC330 [008-130]) for operation failure. (PL 14.2)
- The D-Tra Motor 1 (DC330 [008-061]) for operation failure. (PL 14.3)
- The Invert Path Motor (DC330 [008-032]) for operation failure. (PL 16.19)
- The Invert Motor (DC330 [008-027]) for operation failure. (PL 16.13)
- The Invert N/R Motor (DC330 [008-036/037] (Nip/Release)) for operation failure. (PL 16.12)
- The D-Tra Roll 1, Invert Path Roll 1-3, Invert Roll, and Pinch Roll for contamination, wear, and revolution failure.
- The Pulley for wear and damage.
- The Ball Bearing for wear and damage.
- The Belt for wear and damage.

- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-127 Dup Invert Sensor ON Jam

BSD-ON:CH10.42, CH10.41

The Dup Invert Sensor does not turn ON within the specified time during paper feeding for 2 Sided Printing or Invert output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Dup Invert Sensor (DC330 [008-132]) for operation failure. (PL 14.4)
- The D-Tra Motor 2 (DC330 [008-062]) for operation failure. (PL 14.4)
- The D-Tra Motor 1 (DC330 [008-061]) for operation failure. (PL 14.3)
- The D-Tra Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Pulley for wear and damage.
- The Ball Bearing for wear and damage.
- The Belt for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-128 Dup Path Sensor ON Jam

BSD-ON:CH10.43, CH10.42

The Dup Path Sensor does not turn ON within the specified time during paper feeding for 2 Sided Printing or Invert output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Dup Path Sensor (DC330 [008-133]) for operation failure. (PL 14.6)
- The Dup Invert Motor (DC330 [008-063]) for operation failure. (PL 14.6)
- The D-Tra Motor 2 (DC330 [008-062]) for operation failure. (PL 14.4)
- The Dup Invert Roll and Pinch Roll for contamination, wear, and revolution failure.
- The D-Tra Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Pulley for wear and damage.
- The Belt for wear and damage.
- The Duplex Gate for drag.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-129 Dup In Sensor ON Jam

BSD-ON:CH10.44, CH10.43

The Dup In Sensor does not turn ON within the specified time during paper feeding for 2 Sided Printing.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Dup In Sensor (DC330 [008-134]) for operation failure. (PL 14.7)
- The Duplex Motor (DC330 [008-066]) for operation failure. (PL 14.7)
- The Dup Invert Motor (DC330 [008-063]) for operation failure. (PL 14.6)
- The Dup In Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Dup Path Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Dup Invert Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Pulley for wear and damage.
- The Belt for wear and damage.
- The Duplex Gate for drag.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.

- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-130 Dup Out Sensor ON Jam

BSD-ON:CH10.45, CH10.44

The Dup Out Sensor does not turn ON within the specified time during paper feeding for 2 Sided Printing.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Dup Out Sensor (DC330 [008-135]) for operation failure. (PL 14.7)
- The Dup Out Motor (DC330 [008-068]) for operation failure. (PL 14.7)
- The Duplex Motor (DC330 [008-066]) for operation failure. (PL 14.7)
- The Dup Out Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Dup In Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Dup Path Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Pulley for wear and damage.
- The Belt for wear and damage.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-131 Paper Multi Feed

BSD-ON:CH8.14

Multiple feed of paper was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Delete paper. If Fail occurs even after deletion, check the following.

- Is the paper setting of paper in Tray correct?
- The Multi Feed Sensor (DC330 [008-200]) for operation failure. (PL 15.3)
- The Transport Motor (DC330 [008-049]) for operation failure. (PL 15.5)
- The Transport Roll and Pinch Roll for contamination, wear, and installation failure.
- The Retard Roll for wear and damage.
- The vertical movement of Retard Roll for operation failure and state of Nip to Feed Roll.
- The driving part from Feed Motor to Retard Roll for wear and damage.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

- As operation failure of air assist may occur when coated paper, or plain paper of 221 gsm or more is fed, check the same electrical part as the following Fail.
  - 071/072-212: Tray 1/2 Lead Blower Fail
  - 071/072-213: Tray 1/2 End Blower Fail
  - 071/072-214: Tray 1/2 Front Blower Fail
  - 071/072-215: Tray 1/2 Rear Blower Fail
  - 071/072-216: Tray 1/2 Lead Shutter Fail
  - 071/072-217: Tray 1/2 End Shutter Fail
  - 071/072-218: Tray 1/2 Lead Heater Fail
  - 071/072-219: Tray 1/2 Lead Heater Temp Sensor Fail

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-132 Previous Multi Feed

BSD-ON:CH8.14

Multiple feed of previous paper was detected.

Cause/Action

Refer to 077-131 (Paper Multi Feed) FIP.

077-135 CIS Side Regi Error

BSD-ON:CH8.28

CIS Detect Low Fail, CIS Detect High Fail, CIS Detect Reverse Fail, CIS Side Edge Detect Fail, or CIS Side Edge Out of Range has occurred.

Cause/Action

Enter [Shutdown History] and check if the following Fail has occurred. If any has occurred, go to the relevant FIP.

- 077-610: CIS Side Edge Detect Fail
- 077-611: CIS Detect Low Fail
- 077-312: CIS Detect High Fail
- 077-613: CIS Detect Reverse Fail
- 077-614: CIS Side Edge Out of Range

077-136 D-Tra Sensor 3 ON Jam

BSD-ON:CH10.41, CH10.40

The D-Tra Sensor 3 does not turn ON within the specified time during paper feeding for 2 Sided Printing or Invert output.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The D-Tra Sensor 3 (DC330 [008-131]) for operation failure. (PL 14.2)
- The D-Tra Motor 1 (DC330 [008-061]) for operation failure. (PL 14.3)
- The Invert Path Motor (DC330 [008-029]) for operation failure. (PL 16.19)
- The D-Tra Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Invert Path Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Pulley for wear and damage.
- The Belt for wear and damage.
- The Ball Bearing for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV_1 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-137 POB V-Tra Sensor 1 ON Jam

BSD-ON:CH10.1, CH10.5, CH9.63

The Sensor turned from ON to OFF within the specified monitoring time due to paper attached to the IBT Belt after the V-Tra Sensor 1 detected the paper (ON).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The V-Tra Sensor 1 (DC330 [008-151]) for operation failure. (PL 6.22)
- The V-Tra Motor 1 (DC330 [008-098]) for operation failure. (PL 6.22)
- The V-Tra Fan 1 (DC330 [008-402]) for operation failure. (PL 6.29)
- The 2nd BTB Motor (DC330 [009-441]) for operation failure. (PL 6.24)
- The BTB Drive Roll for contamination, wear, or revolution failure.
- The Belt for wear and damage.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-138 POB V-Tra Sensor 1 OFF Jam

BSD-ON:CH10.1, CH10.5

The Sensor turned from OFF to ON within the specified monitoring time from the end of detection due to paper attached to the IBT Belt after the V-Tra Sensor 1 detected the paper (ON).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The V-Tra Sensor 1 (DC330 [008-151]) for operation failure. (PL 6.22)
- The V-Tra Motor 1 (DC330 [008-098]) for operation failure. (PL 6.22)
- The V-Tra Fan 1 (DC330 [008-402]) for operation failure. (PL 6.29)
- The V-Tra 1 Drive Roll and Idler Roll for contamination, wear, and revolution failure.
- The Belt for wear and damage.
- The Drive Gear for wear and damage.

- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-139 POB V-Tra Sensor 2 ON Jam

BSD-ON:CH10.1, CH10.5

The Sensor turned from ON to OFF within the specified monitoring time due to paper attached to the IBT Belt after the V-Tra Sensor 2 detected the paper (ON).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The V-Tra Sensor 2 (DC330 [008-152]) for operation failure. (PL 6.22)
- The V-Tra Motor 1 (DC330 [008-098]) for operation failure. (PL 6.22)
- The V-Tra Fan 1 (DC330 [008-402]) for operation failure. (PL 6.29)
- The V-Tra 1 Drive Roll and Idler Roll for contamination, wear, and revolution failure.
- The Belt for wear and damage.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-140 Regi Sync Not Found

BSD-ON:CH3.22, CH8.29

The Regi Sync signal of the corresponding paper does not come when Regi Out Sensor is ON.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The connection between the IOT Main PWB J633 and the PH Core PWB J651_H for open circuit, short circuit, and poor contact.
- The Regi Out Sensor (DC330 [008-148]) for operation failure. (PL 15.15)

If no problem is found, replace the PH Core PWB. (PL 18.2)

077-141 Burr Press Path Sensor ON Jam (Duplex)

BSD-ON:CH8.9, CH8.8, CH8.7

The Burr Press Path Sensor does not turn ON within the specified time during paper feeding from Tray 1/2.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Burr Press Path Sensor (DC330 [010-112]) for operation failure. (PL 12.3)
- The Burr Press Motor (DC330 [010-039]) for operation failure. (PL 12.6)
- The H-Tra 2 Out Motor (DC330 [008-412]) for operation failure. (PL 11.6)
- The H-Tra 2 In Motor (DC330 [008-045]) for operation failure. (PL 11.7)
- The Burr Press T/A Roll, H-Tra Path Roll 5-10, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-170 H-Tra Path Sensor 5 ON Jam (UpPurge)

BSD-ON:CH8.7

The H-Tra Path Sensor 5 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-102 (H-Tra Path Sensor 5 ON Jam (Simplex)) FIP.

077-171 Burr Press Path Sensor ON Jam (UpPurge)

BSD-ON:CH8.9

The Burr Press Path Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-104 (Burr Press Path Sensor ON Jam (Simplex)) FIP.

077-172 H-Tra Path Sensor 2 ON Jam (UpPurge)

BSD-ON:CH8.11

The H-Tra Path Sensor 2 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-106 (H-Tra Path Sensor 2 ON Jam) FIP.

077-173 H-Tra Path Sensor 1 ON Jam (UpPurge)

BSD-ON:CH8.12

The H-Tra Path Sensor 1 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-105 (H-Tra Path Sensor 1 ON Jam) FIP.

077-174 Pre Regi In Sensor ON Jam (UpPurge)

BSD-ON:CH8.14

The Pre Regi In Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-107 (Pre Regi In Sensor ON Jam (IOT)) FIP.

077-175 Pre Regi Out Sensor ON Jam (UpPurge)

BSD-ON:CH8.16

The Pre Regi Out Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-109 (Pre Regi Out Sensor ON Jam) FIP.

077-177 Regi Out Sensor ON Jam (UpPurge)

BSD-ON:CH8.29

The Regi Out Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-112 (Regi Out Sensor ON Jam) FIP.

077-178 V-Tra Sensor 1 ON Jam (UpPurge)

BSD-ON:CH10.1

The V-Tra Sensor 1 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-113 (V-Tra Sensor 1 ON Jam) FIP.

077-179 V-Tra Sensor 5 ON Jam (UpPurge)

BSD-ON:CH10.3

The V-Tra Sensor 5 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-114 (V-Tra Sensor 5 ON Jam) FIP.

077-180 V-Tra Sensor 7 ON Jam (UpPurge)

BSD-ON:CH10.4

The V-Tra Sensor 7 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-115 (V-Tra Sensor 7 ON Jam) FIP.

077-181 Fusing Unit Exit Sensor ON Jam (UpPurge)

BSD-ON:CH10.18

The Fusing Exit Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-116 (Fusing Unit Exit Sensor ON Jam) FIP.

077-182 Decurler Exit Sensor ON Jam (UpPurge)

BSD-ON:CH10.30

The Decurler Exit Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-119 (Decurler Exit Sensor ON Jam) FIP.

077-183 IOT Exit Sensor ON Jam (UpPurge)

BSD-ON:CH10.39

The IOT Exit Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-124 (IOT Exit Sensor ON Jam) FIP.

077-184 IOT Exit Sensor OFF Jam (UpPurge)

BSD-ON:CH10.39

The IOT Exit Sensor does not turn OFF within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-125 (IOT Exit Sensor OFF Jam) FIP.

077-185 D-Tra Sensor 1 ON Jam (UpPurge)

BSD-ON:CH10.41

The D-Tra Sensor 1 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-126 (D-Tra Sensor 1 ON Jam) FIP.

077-186 D-Tra Sensor 3 ON Jam (UpPurge)

BSD-ON:CH10.41

The D-Tra Sensor 3 does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-136 (D-Tra Sensor 3 ON Jam) FIP.

077-187 Dup Invert Sensor ON Jam (UpPurge)

BSD-ON:CH10.42

The Dup Invert Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-127 (Dup Invert Sensor ON Jam) FIP.

077-188 Dup Path Sensor ON Jam (UpPurge)

BSD-ON:CH10.43

The Dup Path Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-128 (Dup Path Sensor ON Jam) FIP.

077-189 Dup In Sensor ON Jam (UpPurge)

BSD-ON:CH10.44

The Dup In Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-129 (Dup In Sensor ON Jam) FIP.

077-190 Dup Out Sensor ON Jam (UpPurge)

BSD-ON:CH10.45

The Dup Out Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-130 (Dup Out Sensor ON Jam) FIP.

077-191 Lead Regi Error Over

BSD-ON:CH8.29

The Regi Out Sensor does not turn ON within the specified time during Registration operation.

NOTE: *This Fail becomes a hidden Fail when NVM [742-339] (Lead Regi Error Switch) is [0] and becomes Jam (Dynamic) Fail when it is [1].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Regi Out Sensor (DC330 [008-148]) for operation failure. (PL 15.15)
- The Regi Motor (DC330 [008-089]) for operation failure. (PL 15.13)
- The Aligner Roll 1-3, Regi Roll, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-192 Lead Regi Error Under

BSD-ON:CH8.29

The Regi Out Sensor turned ON before the specified time during Registration operation.

NOTE: *This Fail becomes a hidden Fail when NVM [742-339] (Lead Regi Error Switch) is [0] and becomes Jam (Dynamic) Fail when it is [1].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Regi Out Sensor (DC330 [008-148]) for operation failure. (PL 15.15)
- The Regi Motor (DC330 [008-089]) for operation failure. (PL 15.13)
- The Aligner Roll 1-3, Regi Roll, and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Usage of out of spec paper.

If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_1 MD PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-193 Regi In Sensor ON Jam (Up Purge)

BSD-ON:CH8.29

The Regi In Sensor does not turn ON within the specified time during the transportation (UpPurge) of Output Paper.

Cause/Action

Refer to 077-110 (Regi In Sensor ON Jam) FIP.

077-210 OCT Offset Fail

BSD-ON:CH10.47

The Offset device of Offset Catch Tray has failed.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The OCT Front Position Sensor (DC330 [008-100]) for operation failure. (PL 17.3)
- The OCT Rear Position Sensor (DC330 [008-101]) for operation failure. (PL 17.3)
- The OCT Motor (DC330 [008-001/002] (Rear/Front)) for operation failure. (PL 17.3)
- The J-Tra Roll 1, T/A Roll 1, and Pinch Roll for contamination, wear, and revolution failure.
- The Rack and Pinion for operation failure.

If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

077-212 Multi Feed Sensor Broken Fail

BSD-ON:CH8.14

Multi Feed Sensor failure (unable to detect multi feed) was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Multi Feed Sensor (DC140 [008-200]) for operation failure. (PL 15.3)
- The Transport Motor (DC330 [008-049]) for operation failure. (PL 15.5)
- The Transport Roll and Pinch Roll for contamination, wear, and revolution failure.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_ADC PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-300 J-Tra 1 Chute Open

BSD-ON:CH8.5

The output of J-Tra 1 Chute Open Switch is Open (J1 Open Chute Assembly is open).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

The J-Tra 1 Chute Open Switch (DC330 [008-127]) for operation failure and installation failure. (PL 11.8)

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-301 J-Tra 2 Chute Open

BSD-ON:CH8.6

The output of J-Tra 2 Chute Open Switch is Open (J2 Open Chute Assembly is open).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

The J-Tra 2 Chute Open Switch (DC330 [008-128]) for operation failure and installation failure. (PL 11.10)

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-302 I-Tra Chute Open

BSD-ON:CH8.13

The output of I-Tra Chute Open Switch is Open (I-Tra Upper Transport Assembly is open).

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

The I-Tra Chute Open Switch (DC330 [008-129]) for operation failure and installation failure. (PL 11.12)

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-303 IOT-L Front Interlock Open

BSD-ON:CH1.25

The IOT-L Front Door is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The IOT_L F_Cover Intlk SW L (DC330 [004-300]) for operation failure. (PL 19.1)
- The IOT_L F_Cover Intlk SW R (DC330 [004-300]) for operation failure. (PL 19.1)
- The IOT-L Front Left/Right Door and Interlock Switch for installation failure.
- The IOT-L Front Left/Right Door Actuator for damage.

If no problem are found, replace the MK_EPG 1 MD PWB. (PL 18.3)

077-304 IOT-R Front Interlock Open

BSD-ON:CH1.25

The IOT-R Front Door is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The IOT_R F_Cover Intlk SW L (DC330 [004-301]) for operation failure. (PL 18.10)
- The IOT_R F_Cover Intlk SW R (DC330 [004-301]) for operation failure. (PL 18.10)
- The IOT-R Front Left/Right Cover and Interlock Switch for installation failure.
- The IOT-R Front Left/Right Cover Actuator for damage.

If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

077-305 Exit Drawer Interlock Open

BSD-ON:CH1.25

Exit Drawer is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Exit Drawer Intlk SW (Logic) (DC330 [004-309]) for operation failure. (PL 16.26)
- The Exit Drawer Intlk SW (Logic) for installation failure.
- Broken/bent pins, burn damage, and foreign matters of the Drawer Connector DP/DJ844 between the main unit and the Exit Drawer.
- Open circuit, short circuit or poor contact of the connection between FSR/INV_1 MD PWB J667_F1-A15, A14 and Relay Connector J973-2, 1.

If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

077-306 Big Module Interlock Open

BSD-ON:CH1.19, CH1.27

Big Module is not set in place.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The BGM Intlk Switch 2 (DC330 [004-307]) for operation failure. (PL 9.5)
- The BGM Intlk Switch 2 for installation failure.
- Mechanical part of IBT Drawer (Big Module) Handle mechanism for damage and installation failure.

If no problem are found, replace the MK_EPG 1 MD PWB. (PL 18.3)

077-307 Service Interlock Open

BSD-ON:CH1.14, CH1.15

Detected that the Service Interlock was cheated.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Service Interlock Switch (DC330 [004-310]) for operation failure. (PL 18.10)
- The Service Interlock Switch for installation failure.

If no problem is found, replace the IOT Main PWB. (PL 18.14)

077-310 Side Shift Home Fail

BSD-ON:CH8.27

The Regi Side Shift Home Sensor does not turn ON within the specified time after the Regi Side Shift Motor operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Regi Side Shift Home Sensor (DC330 [008-149]) for operation failure. (PL 15.14)
- The Regi Side Shift Motor (DC330 [008-092/093/094)] (F to R/R to F/Cycle)) for operation failure. (PL 15.14)
- The Drive Gear for wear and damage.
- Improper installation of sensor.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-311 Regi Nip/Release Fail

BSD-ON:CH8.30

The output of the Regi N/R Home Sensor does not change within the specified time from the start of Regi N/R Motor operation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Regi N/R Home Sensor (DC330 [008-150]) for operation failure. (PL 15.13)
- The Regi N/R Motor (DC330 [008-095/096/097] (Release/Nip/Initialize)) for operation failure. (PL 15.13)
- The Regi N/R Home Sensor for installation failure.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-320 Aligner Shift Fail

BSD-ON:CH8.26

- Aligner Shift Rear Limit Sensor turned ON during initialization, Shift operation, and Quick Shift operation.
- The Aligner Shift Rear Limit Sensor, which is ON during initialization, does not turn OFF within the specified time after the Aligner Shift Motor Pulse is turned ON.
- The Aligner Shift Home Sensor, which is ON during initialization and Shift operation, and when the Aligner Shift Rear Limit Sensor is OFF, does not turn OFF within the specified time after the Aligner Shift Motor Pulse is turned ON.
- The Aligner Shift Home Sensor, which is OFF during initialization, does not turn ON within the specified time after the Aligner Shift Motor Pulse is turned ON.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

- The Aligner Shift Home Sensor (DC330 [008-143]) for operation failure. (PL 15.10)
- The Aligner Shift Rear Limit Sensor (DC330 [008-145]) for operation failure. (PL 15.10)
- The Aligner Shift Motor (DC330 [008-086/088] (Initialize/Shift Max)) for operation failure. (PL 15.11)
- The Aligner Shift Motor Belt for wear and damage.
- Is it heavy by turning Shift Screw (Rear side) of the Aligner Lower Chute Assembly with BOX driver (manual)?
- Springiness of Spring Plate of the Aligner Move Frame Assembly.
- Damage of Aligner Move Frame Assembly Shaft Screw threads and grease application.
- Deformation of Sensor Actuator.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-321 Invert Roll Release Fail

BSD-ON:CH10.38

The Output of Invert N/R Sensor does not change after the specified time has passed from turning the Invert N/R Motor ON. (It does not become the Release state)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Invert N/R Sensor (DC330 [008-112]) for operation failure. (PL 16.12)
- The Invert N/R Motor (DC330 [008-036/037] (Nip/Release)) for operation failure. (PL 16.12)
- Improper installation of sensor.
- The Invert Pinch Roll for installation failure.
- The Pulley for wear and damage.
- The Lever for damage.
- The Belt for wear and damage.
- The Cam for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-322 Inv In Gate Fail

BSD-ON:CH10.35

The logic change of the Invert In Gate Sensor was not detected within the specified time after the Invert In Gate Motor was turned ON.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Invert Gate Sensor (DC330 [008-111]) for operation failure. (PL 16.13)
- The Invert Gate Motor (DC330 [008-034/035] (Exit/Invert)) for operation failure. (PL 16.13)
- Improper installation of sensor.
- The Pulley for wear and damage.
- The Belt for wear and damage.
- The Cam for wear and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV_2 MD PWB (PL 18.7)
- FSR/INV Core PWB (PL 18.7)

077-323 All Tray Fail

BSD-ON:CH3.4

All Trays can not be used.

Cause/Action

Enter [Shutdown History], and proceed to FIP of Paper Tray in which Fail has occurred.

077-324 CIS SubSystem Fail

BSD-ON:CH8.28

CIS Dark Level Error, CIS White Level Error, CIS LED Power Control Fail, CIS Shading Data Fail, CIS FPGA Fail, or CIS Communication Fail has occurred.

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

Cause/Action

Enter [Shutdown History] and check if the following Fail has occurred. If any has occurred, go to the relevant FIP.

- 077-603: CIS Dark Level Error
- 077-604: CIS White Level Error
- 077-605: CIS LED Power Control Fail
- 077-606: CIS Shading Data Fail
- 077-607: CIS FPGA Fail
- 077-608: CIS Communication Fail

077-330 Feeder Comm Fail

BSD-ON:CH3.17

Communication failure between the IOT and the HCF was detected.

NOTE: *For more information on the HCF PWB, refer to the HCF Supplementary Service Manual.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power and check the following:
   - Check the connection between the PH Core PWB J656_H and HCF A3 PWB J822 for open circuit, short circuit, or poor contact.
   - Broken/bent pins, burn damage, and foreign matter of the Lattice Connector DJ970/DJ678.
   - The power supply at the HCF.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - PH Core PWB (PL 18.2)
   - HCF A3 PWB (PL 32.20)

077-331 Pre Regi Roll 1 Up/Down Fail

BSD-ON:CH8.17

The P-Regi Roll 1 N/R Sensor could not detect the Nip or Release status within the specified time after the P-Regi Roll 1 N/R Motor operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The P-Regi Roll 1 N/R Sensor (DC330 [008-125]) for operation failure. (PL 15.4)
- The P-Regi Roll 1 N/R Motor (DC330 [008-055/056/057] (Release/Nip/Cycle)) for operation failure. (PL 15.3)
- Improper installation of sensor.
- The Actuator for an improper installation and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-332 Pre Regi Roll 2 Up/Down Fail

BSD-ON:CH8.18

The P-Regi Roll 2 N/R Sensor could not detect the Nip or Release status within the specified time after the P-Regi Roll 2 N/R Motor operation has started.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The P-Regi Roll 2 N/R Sensor (DC330 [008-126]) for operation failure. (PL 15.4)
- The P-Regi Roll 2 N/R Motor (DC330 [008-058/059/060] (Release/Nip/Cycle)) for operation failure. (PL 15.3)
- Improper installation of sensor.
- The Actuator for an improper installation and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-333 Aligner Up/Down 1 Fail

BSD-ON:CH8.22

The Aligner Crossed N/R Sensor 1 could not detect the Nip or Release status within the specified time after the Aligner Crossed N/R Motor 1 operation has started.

NOTE: *When NVM [743-158] (Aligner Nip/Release Fail Switch) is [0], Aligner Nip/Release 1 Fail (Hidden Fail) is sent, and when it is [1], Fail (Sub System Fail) is sent.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Aligner Crossed N/R Sensor 1 (DC330 [008-139]) for operation failure. (PL 15.16)
- The Aligner Crossed N/R Motor 1 (DC330 [008-070/076] (Initialize/Nip Max)) for operation failure. (PL 15.16)
- Improper installation of sensor.
- The Spring for installation failure.
- The Actuator for an improper installation and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-334 Aligner Up/Down 2 Fail

BSD-ON:CH8.23

The Aligner Crossed N/R Sensor 2 could not detect the Nip or Release status within the specified time after the Aligner Crossed N/R Motor 2 operation has started.

NOTE: *When NVM DC330 [743-158] (Aligner Nip/Release Fail Switch) is [0], Aligner Nip/Release 2 Fail (Hidden Fail) is sent, and when it is [1], Fail (Sub System Fail) is sent.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Aligner Crossed N/R Sensor 2 (DC330 [008-140]) for operation failure. (PL 15.16)
- The Aligner Crossed N/R Motor 2 (DC330 [008-071/077] (Initialize/Nip Max)) for operation failure. (PL 15.16)
- Improper installation of sensor.
- The Spring for installation failure.
- The Actuator for an improper installation and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-335 Aligner Up/Down 3 Fail

BSD-ON:CH8.24

The Aligner Crossed N/R Sensor 3 could not detect the Nip or Release status within the specified time after the Aligner Crossed N/R Motor 3 operation has started.

NOTE: *When NVM [743-158] (Aligner Nip/Release Fail Switch) is [0], Aligner Nip/Release 3 Fail (Hidden Fail) is sent, and when it is [1], Fail (Sub System Fail) is sent.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Aligner Crossed N/R Sensor 3 (DC330 [008-141]) for operation failure. (PL 15.16)
- The Aligner Crossed N/R Motor 3 (DC330 [008-072/078] (Initialize/Nip Max)) for operation failure. (PL 15.16)
- Improper installation of sensor.
- The Spring for installation failure.
- The Actuator for an improper installation and damage.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-336 Pre Aligner Up/Down Fail

BSD-ON:CH8.19

The level of the Pre Aligner N/R Sensor does not change within the specified time from the start of driving the Pre Aligner N/R Motor.

NOTE: *When NVM [743-159] (Pre Aligner Nip/Release Fail Switch) is [0], Pre Aligner Nip/Release Fail (Hidden Fail) is sent, and when it is [1], Fail (Sub System Fail) is sent.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The P-Aligner N/R Sensor (DC330 [008-146]) for operation failure. (PL 15.8)
- The Pre Aligner N/R Motor (DC330 [008-081/082/083/084] (Initialize/Release/Nip/Cycle)) for operation failure. (PL 15.8)
- Improper installation of sensor.
- The Spring for installation failure.
- The Actuator for an improper installation and damage.
- The P-Aligner Pinch Roll for installation failure.
- The Drive Gear for wear and damage.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-400 Air Assist Warm Up

BSD-ON: -

A job start operation was performed during Air Assist Warm Up.

NOTE: *The Heater is turned OFF as a measure against density unevenness of image quality, but when Heater is turned ON after that, it takes time for Heater Warm Up and this Fail may occur.*

Cause/Action

Enter [Shutdown History], and proceed to FIP of the corresponding Tray.

- Tray 1: 071-218 Tray 1 Lead Heater Fail
- Tray 2: 072-218 Tray 2 Lead Heater Fail

077-402 Paper Shut Down

BSD-ON: -

Stop due to Paper Optional Position Stop Function was detected.

Cause/Action

Power Off/On, and check if Fail has disappeared.

077-403 CIS Setup Error Information

BSD-ON:CH8.28

CIS Dark Level Error, CIS White Level Error, CIS LED Power Control Fail, CIS Shading Data Fail, CIS FPGA Fail, or CIS Communication Fail has occurred.

NOTE: *When the above hidden Fail has occurred, select whether to generate this Fail by NVM [743-672] (CIS Setup Error Information Detection).*

Cause/Action

Enter [Shutdown History] and check if the following Fail has occurred. If any has occurred, go to the relevant FIP.

- 077-603: CIS Dark Level Error
- 077-604: CIS White Level Error
- 077-605: CIS LED Power Control Fail
- 077-606: CIS Shading Data Fail
- 077-607: CIS FPGA Fail
- 077-608: CIS Communication Fail

077-404 CIS Side Regi Error Information

BSD-ON:CH8.28

CIS Detect Low Fail, CIS Detect High Fail, CIS Detect Reverse Fail, or CIS Side Edge Detect Fail, CIS Side Edge Out of Range has occurred.

NOTE: *When the above hidden Fail has occurred, select whether to generate this Fail by NVM [743-670] (CIS Side Regi Error Information Occurrence Count).*

Cause/Action

Enter [Shutdown History] and check if the following Fail has occurred. If any has occurred, go to the relevant FIP.

- 077-610: CIS Side Edge Detect Fail
- 077-611: CIS Detect Low Fail
- 077-612: CIS Detect High Fail
- 077-613: CIS Detect Reverse Fail
- 077-614: CIS Side Edge Out of Range

077-405 Trim (Aligner) Life Limit

BSD-ON: -

It is time to replace the Trim (Aligner).

Cause/Action

Replace the Aligner, and clear the counter value of DC135 [008-832] (Trim (Aligner)).

077-600 Tray Temp Sensor Fail

BSD-ON:CH7.14

Ambient temperature around Tray 1, 2 deviated from the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Temp & Humidity Sensor (DC140 [007-200]) for operation failure. (PL 10.17)
- Paper dust contamination of the Sensor Detection part.
- Foreign matter contamination of the Sensor Detection part.

If no problem is found, replace the PH_ADC PWB. (PL 18.2)

077-602 Tray Humidity Sensor Fail

BSD-ON:CH7.14

The temperature around Tray 1, 2 deviated from the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Temp & Humidity Sensor (DC140 [007-201]) for operation failure. (PL 10.17)
- Paper dust contamination of the Sensor Detection part.
- Foreign matter contamination of the Sensor Detection part.

If no problem is found, replace the PH_ADC PWB. (PL 18.2)

077-603 CIS Dark Level Error

BSD-ON:CH8.28

The black level is abnormal. During the brightness correction, the standard black reference data obtained while the driving current of the LED was changed was found to be '10' or less 3 times in a row for the average output value of all pixels (1216 pixels).

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Set the NVM [742-629] (Number of Times to Perform Brightness Correction) to [0] and perform [DC750: CIS Setup Cycle] (ADJ 15.15.1). If the result is NG, go to Step 2.
2. Turn the Power OFF and check the connection between PH Core PWB J654_H and CIS Control PWB J425 and between CIS Control PWB J426 and CIS J190 for open circuit, short circuit, and poor contact.
3. Check the Drawer Connector (DP797/ DJ797) for poor contact.
4. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - CIS (PL 15.15)

     NOTE: *After replacing CIS, set the NVM [742-629] (Number of Times to Perform Brightness Correction) to [0] and perform [DC750: CIS Setup Cycle] (ADJ 15.15.1).*

   - CIS Control PWB (PL 15.13)
   - PH Core PWB (PL 18.2)

077-604 CIS White Level Error

BSD-ON:CH8.28

The white level is abnormal. During the brightness correction, the standard white reference data obtained while the driving current of the LED was changed was found to be equal to or lower than the setting value of NVM [742-625] (White Reference Threshold Value for Brightness Correction) 3 times in a row for the average output value of all pixels (1216 pixels).

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag Mode, and turn DC330 [008-411] (CIS LED Light) ON. **Does the CIS LED light up?**

Y **N**

Check the following:

- Supply voltage of 5VDC and +12VDC to CIS Control PWB.
- Turn the Power OFF and check the connection between PH Core PWB J654_H and CIS Control PWB J425 and between CIS Control PWB J426 and CIS J190 for open circuit, short circuit, and poor contact.
- Poor contact of Drawer Connector (DP797/ DJ797).

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- CIS Control PWB (PL 15.13)
- PH Core PWB (PL 18.2)

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Set the Paper (completely cover the Paper Sensor Surface), and perform [DC750: CIS Setup Cycle] (ADJ 15.15.1). If the problem persists, replace the CIS. (PL 15.15)

NOTE: *After replacing CIS, set the NVM [742-629] (Number of Times to Perform Brightness Correction) to [0] and perform [DC750: CIS Setup Cycle] (ADJ 15.15.1).*

077-605 CIS LED Power Control Fail

BSD-ON:CH8.28

The brightness cannot be corrected due to LED not turning ON, etc. The brightness correction control did not end within the limit count (NVM [742-642] (Brightness Adjustment Threshold Value)).

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

Cause/Action

Refer to 077-604 (CIS White Level Error) FIP.

077-606 CIS Shading Data Fail

BSD-ON:CH8.28

In the shading correction, the data (1st pixel to 1216th pixel) that forms the reference to calculate the correction coefficient was '0' or less for 1 or more pixels.

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

Cause/Action

Refer to 077-604 (CIS White Level Error) FIP.

077-607 CIS FPGA Fail

BSD-ON:CH8.28

An operation failure of the CIS FPGA. The CIS_STATUS register value does not change to '1' when the black reference data, the white reference data, or the edge data is read.

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, replace the CIS Control PWB. (PL 15.13)

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077-608 CIS Communication Fail

BSD-ON:CH8.28

Communication failure occurred between PH Core PWB and CIS Control PWB.

NOTE: *This Fail becomes a hidden Fail when NVM [743-673] (CIS Subsystem Fail Detection) is [0] and becomes CIS SubSystem Fail when it is [1].*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn OFF the power and check the connection between the PH Core PWB J654_H and CIS Control PWB J425 for open circuit, short circuit, and poor contact.
2. Check the Drawer Connector (DP797/ DJ797) for poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - CIS Control PWB (PL 15.13)
   - PH Core PWB (PL 18.2)

077-609 CIS Hard Fail

BSD-ON:CH8.28

The CIS control function has malfunctioned.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the Power OFF and check the connection between PH Core PWB J654_H and CIS Control PWB J425 and between CIS Control PWB J426 and CIS J190 for open circuit, short circuit, and poor contact.
3. Check the Drawer Connector (DP797/ DJ797) for poor contact.
4. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - CIS Control PWB (PL 15.13)
   - PH Core PWB (PL 18.2)

077-610 CIS Side Edge Detect Fail

BSD-ON:CH8.28

Abnormality of Edge Data (CIS Detect Low/High/Reverse Fail, CIS Side Edge Out of Range) occurred more than 3 times in 1 Job.

Cause/Action

Perform [DC750: CIS Setup Cycle] (ADJ 15.15.1).

- If it is OK: No special action necessary.
- If it is NG: Replace the CIS. (PL 15.15)

  NOTE: *After replacing CIS, set the NVM [742-629] (Number of Times to Perform Brightness Correction) to [0] and perform [DC750: CIS Setup Cycle].*

077-611 CIS Detect Low Fail

BSD-ON:CH8.28

The paper edge is located to the right of the detection area.

Cause/Action

No special action necessary. If this Fail occurs frequently, perform the following:

1. Check the position of the Tray Side Guide.
2. Clean the CIS glass surface.
3. Perform [DC750: CIS Setup Cycle] (ADJ 15.15.1).

077-612 CIS Detect High Fail

BSD-ON:CH8.28

The paper edge is located to the left of the detection area.

Cause/Action

Refer to 077-611 (CIS Detect Low Fail) FIP.

077-613 CIS Detect Reverse Fail

BSD-ON:CH8.28

The paper edges are reversed.

Cause/Action

Refer to 077-611 (CIS Detect Low Fail) FIP.

077-614 CIS Side Edge Out Of Range

BSD-ON:CH8.28

The paper edge is out of the valid range.

Cause/Action

Refer to 077-611 (CIS Detect Low Fail) FIP.

077-615 CIS Shading Recommend

BSD-ON:CH8.28

The shading correction has not been updated for long time. The count value of the side edge detection circuit has exceeded the setting value of NVM [742-649].

Cause/Action

1. Perform [DC750: CIS Setup Cycle] (ADJ 15.15.1) of Diag.

   NOTE: *Clean the dirt on the sensor and sensor facing surface (Mylar) before correction.*

   NOTE: *When implementing DC750, load the paper so that it completely covers the sensor facing surface (Mylar).*

   NOTE: *Before performing CIS Setup Cycle, set the NVM [742-629] (Number of Times to Perform Brightness Correction) to [0].*

2. Turn the power OFF then ON and check if the Fail occurs.

077-616 Pre Regi Roll 1 Nip/Relese Fail

BSD-ON:CH8.17

The P-Regi Roll 1 N/R Sensor could not detect the Nip or Release status within the specified time after the P-Regi Roll 1 N/R Motor operation has started.

Cause/Action

Refer to 077-331 (Pre Regi Roll 1 Up/Down Fail) FIP.

077-617 Pre Regi Roll 2 Nip/Relese Fail

BSD-ON:CH8.18

The P-Regi Roll 2 N/R Sensor could not detect the Nip or Release status within the specified time after the P-Regi Roll 2 N/R Motor operation has started.

Cause/Action

Refer to 077-332 (Pre Regi Roll 2 Up/Down Fail) FIP.

077-618 Aligner Nip/Relese 1 Fail

BSD-ON:CH8.22

The Aligner Crossed N/R Sensor 1 could not detect the Nip or Release status within the specified time after the Aligner Crossed N/R Motor 1 operation has started.

NOTE: *When NVM [743-158] (Aligner Nip/Release Fail Switch) is [0], Fail (Hidden Fail) is sent, and when it is [1], Aligner Up/Down 1 Fail (Sub System Fail) is sent.*

Cause/Action

Refer to 077-333 (Aligner Up/Down 1 Fail) FIP.

077-619 Aligner Nip/Relese 2 Fail

BSD-ON:CH8.23

The Aligner Crossed N/R Sensor 2 could not detect the Nip or Release status within the specified time after the Aligner Crossed N/R Motor 2 operation has started.

NOTE: *When NVM [743-158] (Aligner Nip/Release Fail Switch) is [0], Fail (Hidden Fail) is sent, and when it is [1], Aligner Up/Down 2 Fail (Sub System Fail) is sent.*

Cause/Action

Refer to 077-334 (Aligner Up/Down 2 Fail) FIP.

077-620 Aligner Nip/Relese 3 Fail

BSD-ON:CH8.24

The Aligner Crossed N/R Sensor 3 could not detect the Nip or Release status within the specified time after the Aligner Crossed N/R Motor 3 operation has started.

NOTE: *When NVM [743-158] (Aligner Nip/Release Fail Switch) is [0], Fail (Hidden Fail) is sent, and when it is [1], Aligner Up/Down 3 Fail (Sub System Fail) is sent.*

Cause/Action

Refer to 077-335 (Aligner Up/Down 3 Fail) FIP.

077-621 Pre Aligner Nip/Relese Fail

BSD-ON:CH8.19

The level of the Pre Aligner N/R Sensor does not change within the specified time from the start of driving the Pre Aligner N/R Motor.

NOTE: *When NVM [743-159] (Pre Aligner Nip/Release Fail Switch) is [0], Fail (Hidden Fail) is sent, and when it is [1], Pre Aligner Up/Down Fail (Sub System Fail) is sent.*

Cause/Action

Refer to 077-336 (Pre Aligner Up/Down Fail) FIP.

077-622 Aligner Unit Skew Fail

BSD-ON:CH8.21

In Unit Skew operation, the level of the Aligner Unit Home Sensor does not change within 200 ms from the start of driving the Unit Skew Motor in the CW direction or within 1700 ms from the start of driving in the CCW direction.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Aligner Unit Home Sensor (DC330 [008-142]) for operation failure. (PL 15.9)
- The Aligner Unit Skew Motor (DC330 [008-085]) for operation failure. (PL 15.9)
- The Sensor for installation failure, and the Actuator for damage.
- The Bracket Assembly for installation failure and damage.
- The Drive Gear for wear and damage.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH_1 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

077-623 Lead Regi Over Of Range

BSD-ON:CH8.29

The Regi Out Sensor does not turn ON within the specified time after the Regi Sync signal turned ON during the Registration operation.

NOTE: *This Fail becomes a hidden Fail when NVM [742-339] (Lead Regi Error Switch) is [0] and becomes Jam (Dynamic) Fail when it is [1].*

Cause/Action

Refer to 077-191 (Lead Regi Error Over) FIP.

077-624 Lead Regi Under Of Range

BSD-ON:CH8.29

In Registration operation, the Regi Out Sensor turned ON before the specified time from the time Regi Sync signal is turned ON.

NOTE: *This Fail becomes a hidden Fail when NVM [742-339] (Lead Regi Error Switch) is [0] and becomes Jam (Dynamic) Fail when it is [1].*

Cause/Action

Refer to 077-192 (Lead Regi Error Under) FIP.

077-900 J-Tra 2 Feed Out Sensor Static Jam

BSD-ON:CH8.6

J-Tra 2 Feed Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Paper dust contamination of the Sensor Detection part.
- The J-Tra 2 Feed Out Sensor (DC330 [008-114]) for operation failure. (PL 11.10)
- The Sensor for installation failure and the Actuator for return failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-901 H-Tra Path Sensor 3 Static Jam

BSD-ON:CH8.8

H-Tra Path Sensor 3 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The H-Tra Path Sensor 3 (DC330 [008-117]) for operation failure. (PL 11.6)

- The sensor for installation failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-903 H-Tra Path Sensor 5 Static Jam

BSD-ON:CH8.7

H-Tra Path Sensor 5 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The H-Tra Path Sensor 5 (DC330 [008-119]) for operation failure. (PL 11.7)
- The sensor for installation failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-904 J-Tra 1 Feed Out Sensor Static Jam

BSD-ON:CH8.5

J-Tra 1 Feed Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Paper dust contamination of the Sensor Detection part.
- The J-Tra 1 Feed Out Sensor (DC330 [008-113]) for operation failure. (PL 11.8)
- The Sensor for installation failure and the Actuator for return failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-905 Burr Press Path Sensor Static Jam

BSD-ON:CH8.9

Burr Press Path Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Burr Press Path Sensor (DC330 [010-112]) for operation failure. (PL 12.3)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-906 H-Tra Path Sensor 1 Static Jam

BSD-ON:CH8.12

H-Tra Path Sensor 1 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The H-Tra Path Sensor 1 (DC330 [008-115]) for operation failure. (PL 11.3)
- The sensor for installation failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-907 H-Tra Path Sensor 2 Static Jam

BSD-ON:CH8.11

H-Tra Path Sensor 2 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.

- The H-Tra Path Sensor 2 (DC330 [008-116]) for operation failure. (PL 11.4)
- The sensor for installation failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-908 HCF In Sensor Static Jam

BSD-ON:CH8.13

HCF In Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The HCF In Sensor (DC330 [008-120]) for operation failure. (PL 11.12)
- The sensor for installation failure.

If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

077-909 Pre Regi In Sensor Static Jam

BSD-ON:CH8.14

Pre Regi In Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- Operation failure of Pre Regi In Sensor (DC330 [008-121]). (PL 15.3)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-910 Pre Regi Path Sensor Static Jam

BSD-ON:CH8.15

Pre Regi Path Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Pre Regi Path Sensor (DC330 [008-122]) for operation failure. (PL 15.3)
- The sensor for installation failure.

If no problem is found, replace the PH Core PWB. (PL 18.2)

077-911 Pre Regi Out Sensor Static Jam

BSD-ON:CH8.16

Pre Regi Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Pre Regi Out Sensor (DC330 [008-123]) for operation failure. (PL 15.3)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-913 Aligner Path Sensor 1 Static Jam

BSD-ON:CH8.20

Aligner Path Sensor 1 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Aligner Path Sensor 1 (DC330 [008-136]) for operation failure. (PL 15.8)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_1 Sensor PWB (PL 18.2)

077-914 Aligner Path Sensor 2 Static Jam

BSD-ON:CH8.25

Aligner Path Sensor 2 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Aligner Path Sensor 2 (DC330 [008-137]) for operation failure. (PL 15.10)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_1 Sensor PWB (PL 18.2)

077-916 Regi In Sensor Static Jam

BSD-ON:CH8.29

Regi In Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- Operation failure of Regi In Sensor (DC330 [008-147]). (PL 15.10)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-917 Regi Out Sensor Static Jam

BSD-ON:CH8.29

Regi Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Regi Out Sensor (DC330 [008-148]) for operation failure. (PL 15.15)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- PH Core PWB (PL 18.2)
- PH_2 Sensor PWB (PL 18.2)

077-918 V-Tra Sensor 1 Static Jam

BSD-ON:CH10.1

V-Tra Sensor 1 detected Paper when the Power was ON, when each type Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 1 (DC330 [008-151]) for operation failure. (PL 6.22)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-919 V-Tra Sensor 2 Static Jam

BSD-ON:CH10.1

V-Tra Path Sensor 2 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 2 (DC330 [008-152]) for operation failure. (PL 6.22)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-920 V-Tra Sensor 3 Static Jam

BSD-ON:CH10.2

V-Tra Path Sensor 3 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 3 (DC330 [008-153]) for operation failure. (PL 6.22)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-921 V-Tra Sensor 4 Static Jam

BSD-ON:CH10.2

V-Tra Path Sensor 4 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 4 (DC330 [008-154]) for operation failure. (PL 6.22)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-922 V-Tra Sensor 5 Static Jam

BSD-ON:CH10.3

V-Tra Path Sensor 5 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 5 (DC330 [008-155]) for operation failure. (PL 6.22)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-923 V-Tra Sensor 6 Static Jam

BSD-ON:CH10.3

V-Tra Path Sensor 6 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 6 (DC330 [008-156]) for operation failure. (PL 6.22)
- The sensor for installation failure.

If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

077-924 V-Tra Sensor 7 Static Jam

BSD-ON:CH10.4

V-Tra Path Sensor 7 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The V-Tra Sensor 7 (DC330 [008-157]) for operation failure. (PL 7.5)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

077-925 Fusing Unit Exit Sensor Static Jam

BSD-ON:CH10.18

Fusing Unit Exit Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Fusing Unit Exit Sensor (DC330 [010-108]) for operation failure. (PL 7.6)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

077-926 Decurler Exit Sensor Static Jam

BSD-ON:CH10.30

Decurler Exit Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- Operation failure of Decurler Exit Sensor (DC330 [010-115]). (PL 16.22)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 1 Sensor PWB (PL 18.7)

077-928 Invert Upper Sensor Static Jam

BSD-ON:CH10.34

Invert Upper Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Invert Upper Sensor (DC330 [008-104]) for operation failure. (PL 16.14)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 2 Sensor PWB (PL 18.7)

077-929 Invert In Sensor Static Jam

BSD-ON:CH10.36

Invert In Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Invert In Sensor (DC330 [008-106]) for operation failure. (PL 16.15)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 2 Sensor PWB (PL 18.7)

077-930 Invert Out Sensor Static Jam

BSD-ON:CH10.34

Invert Out Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- Operation failure of Invert Out Sensor (DC330 [008-110]). (PL 16.14)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 2 Sensor PWB (PL 18.7)

077-931 Invert Sensor Static Jam

BSD-ON:CH10.37

Invert Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- Operation failure of Invert Sensor (DC330 [008-107]). (PL 16.11)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

077-932 IOT Exit Sensor Static Jam

BSD-ON:CH10.39

IOT Exit Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The IOT Exit Sensor (DC330 [008-105]) for operation failure. (PL 17.1)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 2 Sensor PWB (PL 18.7)

077-933 Invert Path Sensor Static Jam

BSD-ON:CH10.40

Invert Path Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Invert Path Sensor (DC330 [008-108]) for operation failure. (PL 16.17)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 2 Sensor PWB (PL 18.7)

077-934 Invert End Sensor Static Jam

BSD-ON:CH10.40

Invert End Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Invert End Sensor (DC330 [008-109]) for operation failure. (PL 16.17)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

077-935 D-Tra Sensor 1 Static Jam

BSD-ON:CH10.41

D-Tra Sensor 1 detected Paper when the Power was ON, when each type Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The D-Tra Sensor 1 (DC330 [008-130]) for operation failure. (PL 14.2)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

077-937 D-Tra Sensor 3 Static Jam

BSD-ON:CH10.41

D-Tra Path Sensor 3 detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The D-Tra Sensor 3 (DC330 [008-131]) for operation failure. (PL 14.2)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

077-938 Dup Invert Sensor Static Jam

BSD-ON:CH10.42

Dup Invert Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Dup Invert Sensor (DC330 [008-132]) for operation failure. (PL 14.4)
- The sensor for installation failure.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- FSR/INV Core PWB (PL 18.7)
- FSR/INV 1 Sensor PWB (PL 18.7)

077-939 Dup Path Sensor Static Jam

BSD-ON:CH10.43

Dup Path Sensor detected Paper when the Power was ON, when each type of Cover Interlock was closed, or when Print was finished.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The sensor for bits of paper and foreign substances, and contamination.
- The Dup Path Sensor (DC330 [008-133]) for operation failure. (PL 14.6)
- The sensor for installation failure.

If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

077-941 Paper Size Mismatch (at Feed)

BSD-ON:CH3.4

The Paper size that the machine recognizes and the actual Paper size that was transported differ.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Initial Actions

- Check if appropriate Print Server Setting is made for the Tray.
- Check if the property of the selected Tray and the Paper set in the Tray matches.
- Enter [Shutdown History] and check the latest Fail that occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.
  - 071-222: Tray 1 Size Sensor Broken
  - 072-222: Tray 2 Size Sensor Broken

Procedure

Check if it's multiple feed or other than multiple feed. **Is the Paper length that was set longer than the actual Paper length detected?**

Y **N**

Is the feed multiple feed with Paper shifted?

Y **N**

Make the Paper length setting the same as the length of Paper that is set in the Tray. When the problem persists, clean or replace Regi In Sensor (PL 15.10), Regi Out Sensor (PL 15.15).

Check the HFSI Counter Value of the Feeder Unit, Feed/Retard/Nudger Roll of the applicable Tray.

- HFSI [007-803] (#1 Feeder Unit)
- HFSI [007-800] (Feed/Retard/Nudger Roll (#1 Tray))
- HFSI [007-804] (#2 Feeder Unit)
- HFSI [007-801] (Feed/Retard/Nudger Roll (#2 Tray))

Has it reached its Life?

Y **N**

Replace the part that have reached their Life.

- Feed Roll, Nudger Roll (PL 10.7)
- Retard Roll (PL 10.10)
- Feeder Unit (PL 10.5)

Perform the following:

- In the case of a high temperature, high humidity environment, fan the Paper to eliminate Paper adhesion.
- If the Paper being used is deformed, replace it with fresh paper or a different brand of paper.

Furthermore, if the error is occurring frequently, perform the following:

- Fan the Paper to eliminate Paper adhesion.
- If Paper with a high coefficient of friction is being used, replace it with a different brand of Paper.

Does an error occur?

Y **N**

End

Check the Paper set position, Side/End Guide position. **Are the Paper and Side/End Guide position normal?**

Y **N**

Perform the following:

- Adjust and reset the Paper. When doing so, check if there is no deformation, damage to the Paper.
- Decrease the amount of loaded Paper.
- Correctly set the Side/End Guide position of the Paper Tray.

If the problem persists, replace the Side/End Guide. (PL 10.14)

Press the Retard lever and check if the Feed Roll and Retard Roll correctly nip. **Is the Retard pressure normal?**

Y **N**

Perform the following:

- Check for incorrect installation of the Retard Spring (Compression Spring).
- Replace the Friction Clutch. (PL 10.8)

When multiple feed occurs, check the Paper amount in the Tray. **Is the Paper amount too little?**

Y **N**

If the remaining paper is the last sheet of paper or the remaining amount is extremely low, perform the following.

- Check if the Pad on the Bottom Plate is coming off. If it is coming off, correctly attach it. (PL 10.14)
- Clean or replace the Bottom Plate. (PL 10.14)

A
A
A B

A B

Replace the Feed Roll. (PL 10.7)

Replace the Retard Roll. (PL 10.10) **Does Multiple Feed Error occur?**

Y **N**

End

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Feeder Unit (PL 10.5)
- PH Core PWB (PL 18.2)

Make the Paper length setting the same as the length of Paper that is set in the Tray. When the problem persists, clean or replace Regi In Sensor (PL 15.10), Regi Out Sensor (PL 15.15).

078-107 HCF In Sensor ON Jam (HCF A3 Tray 1)

BSD-ON:CH8.13

The HCF In Sensor does not turn ON within the specified time during the paper feed from HCF Tray 1.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

NOTE: *For more information on the connection to the HCF, refer to the HCF Supplementary Service Manual.*

Cause/Action

Check the following:

- The HCF In Sensor (DC330 [008-120]) for operation failure. (PL 11.12)
- The I-Tra Motor (DC330 [008-047]) for operation failure. (PL 11.12)
- The J-Tra Exit Roll, I-Tra Roll 1, 2 and Pinch Roll for contamination, wear, and revolution failure
- J-Tra Exit Roll, I-Tra Roll 1, 2 Pulley wear and damage.
- The Belt for wear and damage.
- The Main Unit and HCF for improper docking.
- Transportation failure due to a foreign substance on the paper path.
- Usage of out of spec paper.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.

- PH_1 MD PWB (PL 18.2)
- PH_2 MD PWB (PL 18.2)
- PH Core PWB (PL 18.2)

078-108 HCF In Sensor ON Jam (HCF A3 Tray 2)

BSD-ON:CH8.13

The HCF In Sensor does not turn ON within the specified time during the paper feed from HCF Tray 2.

Cause/Action

Refer to 078-107 (HCF In Sensor ON Jam (HCF Tray 1)) FIP.

078-110 HCF In Sensor ON Jam (HCF A3 MBT)

BSD-ON:CH8.13

The HCF In Sensor does not turn ON within the specified time during paper feed from HCF MBT.

Cause/Action

Refer to 078-107 (HCF In Sensor ON Jam (HCF Tray 1)) FIP.

089-310 IRECT Error Fail-#1

FIP

Refer to 089-CF-001 FIP.

089-311 IRECT Error Fail-#2

FIP

Refer to 089-CF-001 FIP.

089-312 IRECT Error Fail-#3

FIP

Refer to 089-CF-001 FIP.

089-313 IRECT Error Fail-#4

FIP

Refer to 089-CF-001 FIP.

089-314 IRECT Error Fail-#5

FIP

Refer to 089-CF-001 FIP.

089-315 IRECT Error Fail-#6

FIP

Refer to 089-CF-001 FIP.

089-600 ReC LED Fail-In

FIP

Refer to 089-CF-002 FIP.

089-601 ReC LED Fail-Center

FIP

Refer to 089-CF-002 FIP.

089-602 ReC LED Fail-Out

FIP

Refer to 089-CF-002 FIP.

089-603 RC Sample Block Fail-B-#1-In

FIP

Refer to 089-CF-003 FIP.

089-604 RC Sample Block Fail-B-#1-Center

FIP

Refer to 089-CF-003 FIP.

089-605 RC Sample Block Fail-B-#1-Out

FIP

Refer to 089-CF-003 FIP.

089-606 RC Sample Block Fail-B-#2-In

FIP

Refer to 089-CF-003 FIP.

089-607 RC Sample Block Fail-B-#2-Center

FIP

Refer to 089-CF-003 FIP.

089-608 RC Sample Block Fail-B-#2-Out

FIP

Refer to 089-CF-003 FIP.

089-609 RC Sample Block Fail-B-#3-In

FIP

Refer to 089-CF-003 FIP.

089-610 RC Sample Block Fail-B-#3-Center

FIP

Refer to 089-CF-003 FIP.

089-611 RC Sample Block Fail-B-#3-Out

FIP

Refer to 089-CF-003 FIP.

089-612 RC Sample Block Fail-B-#4-In

FIP

Refer to 089-CF-003 FIP.

089-613 RC Sample Block Fail-B-#4-Center

FIP

Refer to 089-CF-003 FIP.

089-614 RC Sample Block Fail-B-#4-Out

FIP

Refer to 089-CF-003 FIP.

089-615 RC Sample Block Fail-B-#5-In

FIP

Refer to 089-CF-003 FIP.

089-616 RC Sample Block Fail-B-#5-Center

FIP

Refer to 089-CF-003 FIP.

089-617 RC Sample Block Fail-B-#5-Out

FIP

Refer to 089-CF-003 FIP.

089-618 RC Sample Block Fail-B-#6-In

FIP

Refer to 089-CF-003 FIP.

089-619 RC Sample Block Fail-B-#6-Center

FIP

Refer to 089-CF-003 FIP.

089-620 RC Sample Block Fail-B-#6-Out

FIP

Refer to 089-CF-003 FIP.

089-621 RC Sample Lateral Fail-A1

BSD-ON:CH6.16

The Reference Color Fast Scan Position of A1 (Fine Tone) Pattern has exceeded the specified value and the detection of A1 Pattern is not performed correctly. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *When multiple failures with Chain No. 089 (Regi Con) occur, take action according to the priority order in the following table. Solving a higher priority failure may sometimes also repair the other failures.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Table 1

Priority	Chain-Link	Fail Item
1 (High)	089-310 to 089-315	IRECT Error Fail
2	089-600 to 089-602	ReC LED Fail
3	089-631	RC Data OverFlow Fail
4	089-603 to 089-620	RC Sample Block Fail-B
5	089-622 to 089-624	RC Sample Block Fail-A1
6	089-621	RC Sample Lateral Fail-A1
7	089-632	RC Data Over Range Fail
8	089-633 to 089-638	RC Linearity Data Over Range Fail
9	089-639	RC ENVMAG Over Range Fail
10	089-626 to 089-628	RC Sample Block Fail-D3
11 (Low)	089-625	RC Sample Lateral Fail-D3

Procedure

Enter [DC122: Shutdown History] and check to see if IBT Drive control related Fail has occurred. **Has an IBT Drive Control related Fail occurred?**

Y **N**

Is the IBT Belt installed properly?

Y **N**

Install the IBT Belt properly. After the installation, perform [DC685: Registration Control Setup Cycle].

Replace the IBT Belt (PL 6.3). After replacement, perform [DC685: Registration Control Setup Cycle].

Go to the appropriate FIP After the process has completed, perform [DC685: Registration Control Setup Cycle].

089-622 RC Sample Block Fail-A1-In

FIP

Refer to 089-CF-004 FIP.

089-623 RC Sample Block Fail-A1-Center

FIP

Refer to 089-CF-004 FIP.

089-624 RC Sample Block Fail-A1-Out

FIP

Refer to 089-CF-004 FIP.

089-625 RC Sample Lateral Fail-D3

BSD-ON:CH6.14

The Reference Color Horizontal Scanning Position of D3 (Real time Regi Con) Pattern has exceeded the specified value and the detection of D3 Pattern is not performed correctly. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Refer to 089-621 (RC Sample Lateral Fail-A1) FIP.

089-626 RC Sample Block Fail-D3-In

FIP

Refer to 089-CF-005 FIP.

089-627 RC Sample Block Fail-D3-Center

FIP

Refer to 089-CF-005 FIP.

089-628 RC Sample Block Fail-D3-Out

FIP

Refer to 089-CF-005 FIP.

089-629 RC Temp Sensor 1 Fail

BSD-ON:CH9.58

Detected temperature of Temp & Humidity Sensor 1 (environmental temperature sensor) exceeded the specified range. (Regi Con Cycle with machine internal temperature as starting condition does not operate, making it impossible to maintain optimum state of color registration, and color registration specifications may not be guaranteed in some cases.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag and check the value of NVM [767-021] (Temperature Sensor Fail [#1]). **Is the Value [0] (normal)?**

Y N

Turn the power OFF and check the connection between the Temp & Humidity Sensor 1 J248 and MK_DRV ADC PWB J723 for open circuit, short circuit, and poor contact.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Temp & Humidity Sensor 1 (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)

It can be considered that there were no errors. If the problem persists, replace the following part in the following order. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Temp & Humidity Sensor 1 (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)

089-630 RC Temp Sensor 2 Fail

BSD-ON:CH9.58

Detected temperature of Temp & Humidity Sensor 2 (environmental temperature sensor) exceeded the specified range. (Regi Con Cycle with machine internal temperature as starting condition does not operate, making it impossible to maintain optimum state of color registration, and color registration specifications may not be guaranteed in some cases.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag and check the value of NVM [767-022] (Temperature Sensor Fail [#2]). **Is the Value [0] (normal)?**

Y N

Turn the power OFF and check the connection between the Temp & Humidity Sensor 2 J249 and MK_DRV ADC PWB J723 for open circuit, short circuit, and poor contact.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Temp & Humidity Sensor 2 (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)

It can be considered that there were no errors. If the problem persists, replace the following part in the following order. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Temp & Humidity Sensor 2 (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)

089-631 RC Data Over Flow Fail

BSD-ON:CH6.14

The correction amount calculated from the detected color shift amount exceeded the maximum correction amount (adjustment range of Regi Con System). (This Fail is a Hidden Fail. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6).*

Procedure

Turn OFF the power. Remove each Drum Cartridge and IBT Unit and reinstall. Turn ON the power, perform [DC685: Registration Control Setup Cycle], and compare the correction amount with the value in the following table.

Table 1

Correction item	Adjustment Range	
	Min	Max
X (Fast Scan) Margin	-4720	+4720
Y (Slow Scan) Margin	-4720	+4720
Skew	-4148	+4148
Bow	-134	+134
Fast Scan All %	-2974	+2974
Fast Scan Left & Right %	-631	+631

Is there any item that had reached its Max or Min value in the adjustment range?

Y N

End

After replacing Drum Cartridge of corresponding color (PL 5.2), perform [DC685: Registration Control Setup Cycle]. **Does the Fail occur?**

Y N

End

Return to the original Drum Cartridge. Replace the following part in sequence in the same way, perform [DC685: Regi Con Setup Cycle] after each replacement, and check for Fail occurrence.

NOTE: *Reinstall parts that are free of problems.*

- ReC/ADC Sensor Assembly (PL 18.6)
- IOT Main PWB (PL 18.14)
- Corresponding color ROS Assembly (PL 2.1, PL 2.2)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

089-632 RC Data Over Range Fail

BSD-ON:CH6.14

The result from adding the offset value to the correction value has exceeded the settable range. (Although color shift does not occur, customer alignment adjustment amount is cut and desired alignment can not be adjusted.)

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Set the Alignment Client Adjustment Value of the Media Library to [0] and output the Image (the Image does not matter). **Does the Fail occur?**

Y N

Return the Client Adjustment Value to the original value sequentially and check for Fail occurrence at all times. When a Fail occurs, set the applicable Client Adjustment Value to a small value.

Set each Offset NVM Value of Side 1/Side 2 Side Regi, Side 1/Side 2 Horizontal Reduce/Enlarge, Side 1/Side 2 Vertical Reduce/Enlarge, Side 1/Side 2 Slow Scan Skew, Side 1/Side 2 Fast Scan Skew to [0].

NOTE: *Write down the original value before changing the NVM Value to [0].*

- NVM [753-239/240]: Side 1/Side 2 Side Regi Offset
- NVM [508-077/078]: Side 1/Side 2 Horizontal Offset
- NVM [753-241/242]: Side 1/Side 2 Vertical Offset
- NVM [753-243/244]: Side 1/Side 2 Slow Scan Skew Offset
- NVM [508-085/086]: Side 1/Side 2 Fast Scan Skew Offset

Turn the power OFF and ON and output the image again (the output image can be anything). **Does the Fail occur?**

Y N

Return the NVM Value to the original value sequentially and check for Fail occurrence at all times. When a Fail occurs, set the applicable NVM Value to a small value.

Perform [DC685: Regi Con/Setup Cycle] and the color with the most correction amount of each Correction Factor (X (Fast Scan) Margin, Y (Slow Scan) Margin, Skew, Bow, Fast Scan All Reduce/Enlarge, Fast Scan Left-Right Reduce/Enlarge) will be the applicable color.

Replace the following part in order and check for Fail occurrence every time a part is replaced. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Cartridge (PL 5.2) of the applicable color
- ReC/ADC Sensor Assembly (PL 18.6)
- IOT Main PWB (PL 18.14)
- Corresponding color ROS Assembly (PL 2.1, PL 2.2)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

When the problem persists, return the NVM Value to the original value sequentially and check for Fail occurrence at all times. When a Fail occurs, set the applicable NVM Value to a small value.

089-633 RC Linearlity Data Over Range Fail-#1

FIP

Refer to 089-CF-006 FIP.

089-634 RC Linearlity Data Over Range Fail-#2

FIP

Refer to 089-CF-006 FIP.

089-635 RC Linearlity Data Over Range Fail-#3

FIP

Refer to 089-CF-006 FIP.

089-636 RC Linearlity Data Over Range Fail-#4

FIP

Refer to 089-CF-006 FIP.

089-637 RC Linearlity Data Over Range Fail-#5

FIP

Refer to 089-CF-006 FIP.

089-638 RC Linearlity Data Over Range Fail-#6

FIP

Refer to 089-CF-006 FIP.

089-639 RC ENVMAG Over Range Fail

BSD-ON:-

The result from adding the alignment correction amount from environment change or image density change to the usual alignment correction amount has exceeded the maximum alignment correction that can be done. (This is a hidden failure. The Alignment Lead Regi might have exceeded the adjustable range and the Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Refer to 089-632 (RC Data Over Range Fail) FIP.

089-920 Waste Toner Bottle 1 Not Position

BSD-ON:CH9.77

The Waste Toner Container 1 is not set properly.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Install the Waste Toner Container 1 properly. If the shape is deformed, replace the Waste Toner Bottle 1. (PL 4.7)
2. If the problem persists, check the Waste Container Position Sensor 1 (DC330 [009-158]) for operation failure. (PL 4.6)
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

089-921 Waste Toner Bottle 2 Not Position

BSD-ON:CH9.77

The Waste Toner Bottle 2 is not set properly.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Install the Waste Toner Bottle 2 properly. If the shape is deformed, replace the Waste Toner Bottle 2. (PL 4.7)
2. If the problem persists, check the Waste Container Position Sensor 2 (DC330 [009-159]) for operation failure. (PL 4.6)
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

089-922 Waste Toner Bottle 1 Full

BSD-ON:CH9.77

The Waste Toner Bottle 1 must be replaced.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Replace the Waste Toner Bottle 1. (PL 4.7)
2. If the problem persists, check the Waste Container Full Sensor 1 (DC330 [009-156]) for operation failure. (PL 4.6)
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

089-923 Waste Toner Bottle 2 Full

BSD-ON:CH9.77

The Waste Toner Bottle 2 must be replaced.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Replace the Waste Toner Bottle 2. (PL 4.7)
2. If the problem persists, check the Waste Container Full Sensor 2 (DC330 [009-157]) for operation failure. (PL 4.6)
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

091-310 CC HVPS Broken Fail #1

FIP

Refer to 091-CF-001 FIP.

091-311 CC HVPS Broken Fail #2

FIP

Refer to 091-CF-001 FIP.

091-312 CC HVPS Broken Fail #3

FIP

Refer to 091-CF-001 FIP.

091-313 CC HVPS Broken Fail #4

FIP

Refer to 091-CF-001 FIP.

091-314 CC HVPS Broken Fail #5

FIP

Refer to 091-CF-001 FIP.

091-315 CC HVPS Broken Fail #6

FIP

Refer to 091-CF-001 FIP.

091-317 CC Cleaner Motor Fail #1

FIP

Refer to 091-CF-002 FIP.

091-318 CC Cleaner Motor Fail #2

FIP

Refer to 091-CF-002 FIP.

091-319 CC Cleaner Motor Fail #3

FIP

Refer to 091-CF-002 FIP.

091-320 CC Cleaner Motor Fail #4

FIP

Refer to 091-CF-002 FIP.

091-321 CC Cleaner Motor Fail #5

FIP

Refer to 091-CF-002 FIP.

091-322 CC Cleaner Motor Fail #6

FIP

Refer to 091-CF-002 FIP.

091-323 IOT-L & IOT-R Joint Sensor Fail

BSD-ON:CH9.76

The joint section of the IOT-L and IOT-R waste toner collection path was detected to be in the incorrect position.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The IOT L&R Joint Sensor (DC330 [009-160]) for operation failure. (PL 8.3)
- The IOT L&R Joint Sensor for improper installation.

If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

091-400 CC Pre Near Life #1

FIP

Refer to 091-CF-003 FIP.

091-401 CC Pre Near Life #2

FIP

Refer to 091-CF-003 FIP.

091-402 CC Pre Near Life #3

FIP

Refer to 091-CF-003 FIP.

091-403 CC Pre Near Life #4

FIP

Refer to 091-CF-003 FIP.

091-404 CC Pre Near Life #5
FIP
Refer to 091-CF-003 FIP.

091-405 CC Pre Near Life #6
FIP
Refer to 091-CF-003 FIP.

091-406 CC Near Life #1
FIP
Refer to 091-CF-004 FIP.

091-407 CC Near Life #2
FIP
Refer to 091-CF-004 FIP.

091-408 CC Near Life #3
FIP
Refer to 091-CF-004 FIP.

091-409 CC Near Life #4
FIP
Refer to 091-CF-004 FIP.

091-410 CC Near Life #5
FIP
Refer to 091-CF-004 FIP.

091-411 CC Near Life #6
FIP
Refer to 091-CF-004 FIP.

091-412 CC Life Over #1
FIP
Refer to 091-CF-005 FIP.

091-413 CC Life Over #2
FIP
Refer to 091-CF-005 FIP.

091-414 CC Life Over #3
FIP
Refer to 091-CF-005 FIP.

091-415 CC Life Over #4
FIP
Refer to 091-CF-005 FIP.

091-416 CC Life Over #5
FIP
Refer to 091-CF-005 FIP.

091-417 CC Life Over #6
FIP
Refer to 091-CF-005 FIP.

091-418 Drum Pre Near Life #1
FIP
Refer to 091-CF-006 FIP.

091-419 Drum Pre Near Life #2
FIP
Refer to 091-CF-006 FIP.

091-420 Drum Pre Near Life #3
FIP
Refer to 091-CF-006 FIP.

091-421 Drum Pre Near Life #4
FIP
Refer to 091-CF-006 FIP.

091-422 Drum Pre Near Life #5
FIP
Refer to 091-CF-006 FIP.

091-423 Drum Pre Near Life #6
FIP
Refer to 091-CF-006 FIP.

091-424 Drum Near Life #1

FIP

Refer to 091-CF-007 FIP.

091-425 Drum Near Life #2

FIP

Refer to 091-CF-007 FIP.

091-426 Drum Near Life #3

FIP

Refer to 091-CF-007 FIP.

091-427 Drum Near Life #4

FIP

Refer to 091-CF-007 FIP.

091-428 Drum Near Life #5

FIP

Refer to 091-CF-007 FIP.

091-429 Drum Near Life #6

FIP

Refer to 091-CF-007 FIP.

091-430 Drum Life Over #1

FIP

Refer to 091-CF-008 FIP.

091-431 Drum Life Over #2

FIP

Refer to 091-CF-008 FIP.

091-432 Drum Life Over #3

FIP

Refer to 091-CF-008 FIP.

091-433 Drum Life Over #4

FIP

Refer to 091-CF-008 FIP.

091-434 Drum Life Over #5

FIP

Refer to 091-CF-008 FIP.

091-435 Drum Life Over #6

FIP

Refer to 091-CF-008 FIP.

091-436 Waste Toner Bottle 1 Near Full

BSD-ON:CH9.77

Waste Bottle Full Sensor 1 detected that the waste toner will be full soon.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. The Waste Toner Container needs to be replaced soon. Replace the Waste Toner Container as required. (PL 4.7)
2. If the problem persists, check the Waste Container Full Sensor 1 (DC330 [009-156]) for operation failure. (PL 4.6)
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

091-437 Waste Toner Bottle 2 Near Full

BSD-ON:CH9.77

Waste Bottle Full Sensor 2 detected that the waste toner will be full soon.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. The Waste Toner Container needs to be replaced soon. Replace the Waste Toner Container as required. (PL 4.7)
2. If the problem persists, check the Waste Container Full Sensor 2 (DC330 [009-157]) for operation failure. (PL 4.6)
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

091-438 CC Cleaning

BSD-ON: -

Condition for executing CC Cleaning was detected.

Cause/Action

No action necessary.

091-910 CC or CC Cleaner Not Position #1

FIP

Refer to 091-CF-009 FIP.

091-911 CC or CC Cleaner Not Position #2

FIP

Refer to 091-CF-009 FIP.

091-912 CC or CC Cleaner Not Position #3

FIP

Refer to 091-CF-009 FIP.

091-913 CC or CC Cleaner Not Position #4

FIP

Refer to 091-CF-009 FIP.

091-914 CC or CC Cleaner Not Position #5

FIP

Refer to 091-CF-009 FIP.

091-915 CC or CC Cleaner Not Position #6

FIP

Refer to 091-CF-009 FIP.

091-916 Drum CRUM Not Position #1

FIP

Refer to 091-CF-010 FIP.

091-917 Drum CRUM Not Position #2

FIP

Refer to 091-CF-010 FIP.

091-918 Drum CRUM Not Position #3

FIP

Refer to 091-CF-010 FIP.

091-919 Drum CRUM Not Position #4

FIP

Refer to 091-CF-010 FIP.

091-920 Drum CRUM Not Position #5

FIP

Refer to 091-CF-010 FIP.

091-921 Drum CRUM Not Position #6

FIP

Refer to 091-CF-010 FIP.

091-922 CC Wire Cut Fail #1

FIP

Refer to 091-CF-011 FIP.

091-923 CC Wire Cut Fail #2

FIP

Refer to 091-CF-011 FIP.

091-924 CC Wire Cut Fail #3

FIP

Refer to 091-CF-011 FIP.

091-925 CC Wire Cut Fail #4

FIP

Refer to 091-CF-011 FIP.

091-926 CC Wire Cut Fail #5

FIP

Refer to 091-CF-011 FIP.

091-927 CC Wire Cut Fail #6

FIP

Refer to 091-CF-011 FIP.

091-928 CC Life End #1

FIP

Refer to 091-CF-005 FIP.

091-929 CC Life End #2

FIP

Refer to 091-CF-005 FIP.

091-930 CC Life End #3

FIP

Refer to 091-CF-005 FIP.

091-931 CC Life End #4

FIP

Refer to 091-CF-005 FIP.

091-932 CC Life End #5

FIP

Refer to 091-CF-005 FIP.

091-933 CC Life End #6

FIP

Refer to 091-CF-005 FIP.

091-934 Drum Life End #1

FIP

Refer to 091-CF-008 FIP.

091-935 Drum Life End #2

FIP

Refer to 091-CF-008 FIP.

091-936 Drum Life End #3

FIP

Refer to 091-CF-008 FIP.

091-937 Drum Life End #4

FIP

Refer to 091-CF-008 FIP.

091-938 Drum Life End #5

FIP

Refer to 091-CF-008 FIP.

091-939 Drum Life End #6

FIP

Refer to 091-CF-008 FIP.

091-940 Drum CRUM Checking

BSD-ON:CH9.1

Reading of Drum CRUM information has started.

Cause/Action

No action necessary.

092-310 VH Charge Check Fail #1

FIP

Refer to 092-CF-001 FIP.

092-311 VH Charge Check Fail #2

FIP

Refer to 092-CF-001 FIP.

092-312 VH Charge Check Fail #3

FIP

Refer to 092-CF-001 FIP.

092-313 VH Charge Check Fail #4

FIP

Refer to 092-CF-001 FIP.

092-314 VH Charge Check Fail #5

FIP

Refer to 092-CF-001 FIP.

092-315 VH Charge Check Fail #6

FIP

Refer to 092-CF-001 FIP.

092-316 ESV Sensor Fail #1

FIP

Refer to 092-CF-002 FIP.

092-317 ESV Sensor Fail #2

FIP

Refer to 092-CF-002 FIP.

092-318 ESV Sensor Fail #3

FIP

Refer to 092-CF-002 FIP.

092-319 ESV Sensor Fail #4

FIP

Refer to 092-CF-002 FIP.

092-320 ESV Sensor Fail #5

FIP

Refer to 092-CF-002 FIP.

092-321 ESV Sensor Fail #6

FIP

Refer to 092-CF-002 FIP.

092-350 Polygon Motor SOS Rotate Fail #1

FIP

Refer to 092-CF-003 FIP.

092-351 Polygon Motor SOS Rotate Fail #2

FIP

Refer to 092-CF-003 FIP.

092-352 Polygon Motor SOS Rotate Fail #3

FIP

Refer to 092-CF-003 FIP.

092-353 Polygon Motor SOS Rotate Fail #4

FIP

Refer to 092-CF-003 FIP.

092-354 Polygon Motor SOS Rotate Fail #5

FIP

Refer to 092-CF-003 FIP.

092-355 Polygon Motor SOS Rotate Fail #6

FIP

Refer to 092-CF-003 FIP.

092-356 FGSEL Fail #1

FIP

Refer to 092-CF-004 FIP.

092-357 FGSEL Fail #2

FIP

Refer to 092-CF-004 FIP.

092-358 FGSEL Fail #3
FIP
Refer to 092-CF-004 FIP.

092-359 FGSEL Fail #4
FIP
Refer to 092-CF-004 FIP.

092-360 FGSEL Fail #5
FIP
Refer to 092-CF-004 FIP.

092-361 FGSEL Fail #6
FIP
Refer to 092-CF-004 FIP.

092-362 ROS Connect Fail #1
FIP
Refer to 092-CF-005 FIP.

092-363 ROS Connect Fail #2
FIP
Refer to 092-CF-005 FIP.

092-364 ROS Connect Fail #3
FIP
Refer to 092-CF-005 FIP.

092-365 ROS Connect Fail #4
FIP
Refer to 092-CF-005 FIP.

092-366 ROS Connect Fail #5
FIP
Refer to 092-CF-005 FIP.

092-367 ROS Connect Fail #6
FIP
Refer to 092-CF-005 FIP.

092-400 Temperature Sensor Info #1
FIP
Refer to 092-CF-011 FIP.

092-401 Temperature Sensor Info #2
FIP
Refer to 092-CF-011 FIP.

092-402 Humidity Sensor Info #1
FIP
Refer to 092-CF-011 FIP.

092-403 Humidity Sensor Info #2
FIP
Refer to 092-CF-011 FIP.

092-606 Mini Setup ADC Patch Fail #1
FIP
Refer to 092-CF-006 FIP.

092-607 Mini Setup ADC Patch Fail #2
FIP
Refer to 092-CF-006 FIP.

092-608 Mini Setup ADC Patch Fail #3
FIP
Refer to 092-CF-006 FIP.

092-609 Mini Setup ADC Patch Fail #4
FIP
Refer to 092-CF-006 FIP.

092-610 Mini Setup ADC Patch Fail #5
FIP
Refer to 092-CF-006 FIP.

092-611 Mini Setup ADC Patch Fail #6
FIP
Refer to 092-CF-006 FIP.

092-612 Mini Setup ADC TRC Patch Fail Uncoated #1

FIP

Refer to 092-CF-007 FIP.

092-613 Mini Setup ADC TRC Patch Fail Uncoated #2

FIP

Refer to 092-CF-007 FIP.

092-614 Mini Setup ADC TRC Patch Fail Uncoated #3

FIP

Refer to 092-CF-007 FIP.

092-615 Mini Setup ADC TRC Patch Fail Uncoated #4

FIP

Refer to 092-CF-007 FIP.

092-616 Mini Setup ADC TRC Patch Fail Uncoated #5

FIP

Refer to 092-CF-007 FIP.

092-617 Mini Setup ADC TRC Patch Fail Uncoated #6

FIP

Refer to 092-CF-007 FIP.

092-618 Mini Setup ADC TRC Patch Fail Coated #1

FIP

Refer to 092-CF-008 FIP.

092-619 Mini Setup ADC TRC Patch Fail Coated #2

FIP

Refer to 092-CF-008 FIP.

092-620 Mini Setup ADC TRC Patch Fail Coated #3

FIP

Refer to 092-CF-008 FIP.

092-621 Mini Setup ADC TRC Patch Fail Coated #4

FIP

Refer to 092-CF-008 FIP.

092-622 Mini Setup ADC TRC Patch Fail Coated #5

FIP

Refer to 092-CF-008 FIP.

092-623 Mini Setup ADC TRC Patch Fail Coated #6

FIP

Refer to 092-CF-008 FIP.

092-624 Job ADC Patch Fail H1 #1

FIP

Refer to 092-CF-009 FIP.

092-625 Job ADC Patch Fail H1 #2

FIP

Refer to 092-CF-009 FIP.

092-626 Job ADC Patch Fail H1 #3

FIP

Refer to 092-CF-009 FIP.

092-627 Job ADC Patch Fail H1 #4

FIP

Refer to 092-CF-009 FIP.

092-628 Job ADC Patch Fail H1 #5

FIP

Refer to 092-CF-009 FIP.

092-629 Job ADC Patch Fail H1 #6

FIP

Refer to 092-CF-009 FIP.

092-630 Job ADC TRC Patch Fail H2 #1

FIP

Refer to 092-CF-010 FIP.

092-631 Job ADC TRC Patch Fail H2 #2

FIP

Refer to 092-CF-010 FIP.

092-632 Job ADC TRC Patch Fail H2 #3

FIP

Refer to 092-CF-010 FIP.

092-633 Job ADC TRC Patch Fail H2 #4

FIP

Refer to 092-CF-010 FIP.

092-634 Job ADC TRC Patch Fail H2 #5

FIP

Refer to 092-CF-010 FIP.

092-635 Job ADC TRC Patch Fail H2 #6

FIP

Refer to 092-CF-010 FIP.

092-636 Job ADC TRC Patch Fail L #1

FIP

Refer to 092-CF-010 FIP.

092-637 Job ADC TRC Patch Fail L #2

FIP

Refer to 092-CF-010 FIP.

092-638 Job ADC TRC Patch Fail L #3

FIP

Refer to 092-CF-010 FIP.

092-639 Job ADC TRC Patch Fail L #4

FIP

Refer to 092-CF-010 FIP.

092-640 Job ADC TRC Patch Fail L #5

FIP

Refer to 092-CF-010 FIP.

092-641 Job ADC TRC Patch Fail L #6

FIP

Refer to 092-CF-010 FIP.

092-642 ADC AGC Fail #1

BSD-ON:CH9.57, CH1.6, CH1.9

The output gain value of the Rear ADC Sensor (In side) is outside the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the ADC Sensor output gain value is not refreshed when this Fail occurs, image density error (too dark, too light) might occur.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Perform the following:

- Check the state of the transparent detection surface of Rear ADC Sensor and Front ADC Sensor. If it is dirty, remove the sheet metal cover of the ReC ADC Sensor Assembly and clean the detection surface with a well-wrung cloth.
- Check whether there is any error in ReC ADC Sensor Assembly installation or the connection of connectors.

Execute Diag [DC 934: ADC AGC Setup]. **Is the judgment of [ADC #1] on the screen display NG?**

Y **N**

The procedure is complete if Fail does not occur after executing [DC934: ADC AGC Setup] a number of times.

NOTE: *If Fail occurs, return to the previous procedure.*

Observe the surface of the IBT Belt and check whether there is any scratch or dirt on the opposite section of the Rear ADC Sensor and Front ADC Sensor. **Is there any scratch or contamination?**

Y **N**

Replace the IBT Belt. (PL 6.3)

Is the judgment of [ADC #2] on the screen display NG?

Y **N**

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Rear ADC Sensor (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the ReC ADC Sensor Assembly (PL 18.6). **Does the Fail occur?**

Y **N**

End

A

A

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between LVPS H1U J501_U and LED Power PWB J5511
- Between LED Power PWB J5500 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)
- LED Power PWB (PL 18.11)
- LVPS H1U (PL 18.12)

092-643 ADC AGC Fail #2

BSD-ON:CH9.57, CH1.6, CH1.9

The output gain value of the Front ADC Sensor (Out side) is outside the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the ADC Sensor output gain value is not refreshed when this Fail occurs, image density error (too dark, too light) might occur.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Perform the following:

- Check the state of the transparent detection surface of Front ADC Sensor and Rear ADC Sensor. If it is dirty, remove the sheet metal cover of the ReC ADC Sensor Assembly and clean the detection surface with a well-wrung cloth.
- Check whether there is any error in ReC ADC Sensor Assembly installation or the connection of connectors.

Execute Diag [DC 934: ADC AGC Setup]. **Is the judgment of [ADC #2] on the screen display NG?**

Y **N**

The procedure is complete if Fail does not occur after executing [DC934: ADC AGC Setup] a number of times.

NOTE: *If Fail occurs, return to the previous procedure.*

Observe the surface of the IBT Belt and check whether there is any scratch or dirt on the opposite section of the Front ADC Sensor and Rear ADC Sensor. **Is there any scratch or contamination?**

Y **N**

Replace the IBT Belt. (PL 6.3)

Is the judgment of [ADC #1] on the screen display NG?

Y **N**

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Front ADC Sensor (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the ReC ADC Sensor Assembly (PL 18.6). **Does the Fail occur?**

Y **N**

End

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between LVPS H1U J501_U and LED Power PWB J5511
- Between LED Power PWB J5500 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)
- LED Power PWB (PL 18.11)
- LVPS H1U (PL 18.12)

092-644 ADC Vclean Fail #1

BSD-ON:CH9.57, CH1.6, CH1.9

The output of the Rear ADC Sensor (In side) as detected from the IBT Belt surface is outside the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

At the occurrence of this Fail, the ADC Sensor may not be able to detect the toner patch correctly, so the density control result may become unstable in some cases.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-642: ADC AGC Fail #1

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Entering Diag [DC131: NVM Read/Write], and check the value of NVM [766-341] (ADC specular surface Vcin average value (#1)) and NVM [766-343] (ADC diffusion Vcin average value (#1)). **Is [766-341] 20 or more, [766-343] is 10 or more?**

Y N

There is a possibility of ReC ADC Sensor Assembly failure. Replace the ReC ADC Sensor Assembly (PL 18.6). **Does the Fail occur?**

Y N

End

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between LVPS H1U J501_U and LED Power PWB J5511
- Between LED Power PWB J5500 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)
- LED Power PWB (PL 18.11)
- LVPS H1U (PL 18.12)

Perform the following:

- Check the state of the transparent detection surface of Rear ADC Sensor and Front ADC Sensor. If it is dirty, remove the sheet metal cover of the ReC ADC Sensor Assembly and clean the detection surface with a well-wrung cloth.
- Check whether there is any error in ReC ADC Sensor Assembly installation or the connection of connectors.

Execute Diag [DC 934: ADC AGC Setup]. **Is the judgment of [ADC #1] on the screen display NG?**

Y N

The procedure is complete if Fail does not occur after executing [DC934: ADC AGC Setup] a number of times.

NOTE: *If Fail occurs, return to the previous procedure.*

Observe the surface of the IBT Belt and check whether there is any scratch or dirt on the opposite section of the Rear ADC Sensor and Front ADC Sensor. **Is there any scratch or contamination?**

Y N

Replace the IBT Belt. (PL 6.3)

Is the judgment of [ADC #2] on the screen display NG?

Y N

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

A

A

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Rear ADC Sensor (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the ReC ADC Sensor Assembly (PL 18.6). **Does the Fail occur?**

Y N

End

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between LVPS H1U J501_U and LED Power PWB J5511
- Between LED Power PWB J5500 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)
- LED Power PWB (PL 18.11)
- LVPS H1U (PL 18.12)

092-645 ADC Vclean Fail #2

BSD-ON:CH9.57, CH1.6, CH1.9

The output of the Front ADC Sensor (Out side) as detected from the IBT Belt surface is outside the specified range.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

At the occurrence of this Fail, the ADC Sensor may not be able to detect the toner patch correctly, so the density control result may become unstable in some cases.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-643: ADC AGC Fail #2

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Entering Diag [DC131: NVM Read/Write], and check the value of NVM [766-342] (ADC specular surface Vcin average value (#2)) and NVM [766-344] (ADC diffusion Vcin average value (#2)). **Is [766-342] 20 or more, [766-344] is 10 or more?**

Y N

There is a possibility of ReC ADC Sensor Assembly failure. Replace the ReC ADC Sensor Assembly (PL 18.6). **Does the Fail occur?**

Y N

End

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between LVPS H1U J501_U and LED Power PWB J5511
- Between LED Power PWB J5500 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)
- LED Power PWB (PL 18.11)
- LVPS H1U (PL 18.12)

Perform the following:

- Check the state of the transparent detection surface of Front ADC Sensor and Rear ADC Sensor. If it is dirty, remove the sheet metal cover of the ReC ADC Sensor Assembly and clean the detection surface with a well-wrung cloth.
- Check whether there is any error in ReC ADC Sensor Assembly installation or the connection of connectors.

Execute Diag [DC 934: ADC AGC Setup]. **Is the judgment of [ADC #2] on the screen display NG?**

Y N

The procedure is complete if Fail does not occur after executing [DC934: ADC AGC Setup] a number of times.

NOTE: *If Fail occurs, return to the previous procedure.*

Observe the surface of the IBT Belt and check whether there is any scratch or dirt on the opposite section of the Front ADC Sensor and Rear ADC Sensor. **Is there any scratch or contamination?**

Y N

Replace the IBT Belt. (PL 6.3)

Is the judgment of [ADC #1] on the screen display NG?

Y N

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Front ADC Sensor (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the ReC ADC Sensor Assembly (PL 18.6). **Does the Fail occur?**

Y N

End

Turn OFF the power and check the following connectors for disconnection and open circuit, short circuit or poor contact.

- Between LVPS H1U J501_U and LED Power PWB J5511
- Between LED Power PWB J5500 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)
- LED Power PWB (PL 18.11)
- LVPS H1U (PL 18.12)

092-646 Temperature Sensor Fail #1

FIP

Refer to 092-CF-011 FIP.

092-647 Temperature Sensor Fail #2

FIP

Refer to 092-CF-011 FIP.

092-648 Humidity Sensor Fail #1

FIP

Refer to 092-CF-011 FIP.

092-649 Humidity Sensor Fail #2

FIP

Refer to 092-CF-011 FIP.

092-650 ATC Average Fail #1

FIP

Refer to 092-CF-012 FIP.

092-651 ATC Average Fail #2

FIP

Refer to 092-CF-012 FIP.

092-652 ATC Average Fail #3

FIP

Refer to 092-CF-012 FIP.

092-653 ATC Average Fail #4

FIP

Refer to 092-CF-012 FIP.

092-654 ATC Average Fail #5

FIP

Refer to 092-CF-012 FIP.

092-655 ATC Average Fail #6

FIP

Refer to 092-CF-012 FIP.

092-656 ATC Amplitude Fail #1

FIP

Refer to 092-CF-013 FIP.

092-657 ATC Amplitude Fail #2

FIP

Refer to 092-CF-013 FIP.

092-658 ATC Amplitude Fail #3

FIP

Refer to 092-CF-013 FIP.

092-659 ATC Amplitude Fail #4

FIP

Refer to 092-CF-013 FIP.

092-660 ATC Amplitude Fail #5

FIP

Refer to 092-CF-013 FIP.

092-661 ATC Amplitude Fail #6

FIP

Refer to 092-CF-013 FIP.

092-662 ESV VH Fail #1

FIP

Refer to 092-CF-014 FIP.

092-663 ESV VH Fail #2

FIP

Refer to 092-CF-014 FIP.

092-664 ESV VH Fail #3

FIP

Refer to 092-CF-014 FIP.

092-665 ESV VH Fail #4

FIP

Refer to 092-CF-014 FIP.

092-666 ESV VH Fail #5

FIP

Refer to 092-CF-014 FIP.

092-667 ESV VH Fail #6

FIP

Refer to 092-CF-014 FIP.

092-668 ESV Vcont VH4 Fail #1

FIP

Refer to 092-CF-015 FIP.

092-669 ESV Vcont VH4 Fail #2

FIP

Refer to 092-CF-015 FIP.

092-670 ESV Vcont VH4 Fail #3

FIP

Refer to 092-CF-015 FIP.

092-671 ESV Vcont VH4 Fail #4

FIP

Refer to 092-CF-015 FIP.

092-672 ESV Vcont VH4 Fail #5

FIP

Refer to 092-CF-015 FIP.

092-673 ESV Vcont VH4 Fail #6

FIP

Refer to 092-CF-015 FIP.

092-674 ESV Vcont VH5 Fail #1

FIP

Refer to 092-CF-015 FIP.

092-675 ESV Vcont VH5 Fail #2

FIP

Refer to 092-CF-015 FIP.

092-676 ESV Vcont VH5 Fail #3

FIP

Refer to 092-CF-015 FIP.

092-677 ESV Vcont VH5 Fail #4

FIP

Refer to 092-CF-015 FIP.

092-678 ESV Vcont VH5 Fail #5

FIP

Refer to 092-CF-015 FIP.

092-679 ESV Vcont VH5 Fail #6

FIP

Refer to 092-CF-015 FIP.

092-680 ESV Vcont VH6 Fail #1

FIP

Refer to 092-CF-015 FIP.

092-681 ESV Vcont VH6 Fail #2

FIP

Refer to 092-CF-015 FIP.

092-682 ESV Vcont VH6 Fail #3

FIP

Refer to 092-CF-015 FIP.

092-683 ESV Vcont VH6 Fail #4

FIP

Refer to 092-CF-015 FIP.

092-684 ESV Vcont VH6 Fail #5

FIP

Refer to 092-CF-015 FIP.

092-685 ESV Vcont VH6 Fail #6

FIP

Refer to 092-CF-015 FIP.

092-686 Job ADC TRC Patch Fail M1 #1

FIP

Refer to 092-CF-010 FIP.

092-687 Job ADC TRC Patch Fail M1 #2

FIP

Refer to 092-CF-010 FIP.

092-688 Job ADC TRC Patch Fail M1 #3

FIP

Refer to 092-CF-010 FIP.

092-689 Job ADC TRC Patch Fail M1 #4

FIP

Refer to 092-CF-010 FIP.

092-690 Job ADC TRC Patch Fail M1 #5

FIP

Refer to 092-CF-010 FIP.

092-691 Job ADC TRC Patch Fail M1 #6

FIP

Refer to 092-CF-010 FIP.

092-692 Job ADC TRC Patch Fail M2 #1

FIP

Refer to 092-CF-010 FIP.

092-693 Job ADC TRC Patch Fail M2 #2

FIP

Refer to 092-CF-010 FIP.

092-694 Job ADC TRC Patch Fail M2 #3

FIP

Refer to 092-CF-010 FIP.

092-695 Job ADC TRC Patch Fail M2 #4

FIP

Refer to 092-CF-010 FIP.

092-696 Job ADC TRC Patch Fail M2 #5

FIP

Refer to 092-CF-010 FIP.

092-697 Job ADC TRC Patch Fail M2 #6

FIP

Refer to 092-CF-010 FIP.

092-926 Drum CRUM Data Mismatch #1

FIP

Refer to 092-CF-016 FIP.

092-927 Drum CRUM Data Mismatch #2

FIP

Refer to 092-CF-016 FIP.

092-928 Drum CRUM Data Mismatch #3

FIP

Refer to 092-CF-016 FIP.

092-929 Drum CRUM Data Mismatch #4

FIP

Refer to 092-CF-016 FIP.

092-930 Drum CRUM Data Mismatch #5

FIP

Refer to 092-CF-016 FIP.

092-931 Drum CRUM Data Mismatch #6

FIP

Refer to 092-CF-016 FIP.

092-932 Drum CRUM Geographic Diff Mismatch Fail #1

FIP

Refer to 092-CF-017 FIP.

092-933 Drum CRUM Geographic Diff Mismatch Fail #2

FIP

Refer to 092-CF-017 FIP.

092-934 Drum CRUM Geographic Diff Mismatch Fail #3

FIP

Refer to 092-CF-017 FIP.

092-935 Drum CRUM Geographic Diff Mismatch Fail #4

FIP

Refer to 092-CF-017 FIP.

092-936 Drum CRUM Geographic Diff Mismatch Fail #5

FIP

Refer to 092-CF-017 FIP.

092-937 Drum CRUM Geographic Diff Mismatch Fail #6

FIP

Refer to 092-CF-017 FIP.

092-938 CC or CC Cleaner Not Position To Confirm Replace CC Assy

BSD-ON:-

This Fault is generated by software when clearing the Fault (091-910 to 915) of CC or CC Cleaner Not Position of #1 to #6.

Cause/Action

No action necessary.

093-310 Deve Motor Fail #1

FIP

Refer to 093-CF-001 FIP.

093-311 Deve Motor Fail #2

FIP

Refer to 093-CF-001 FIP.

093-312 Deve Motor Fail #3

FIP

Refer to 093-CF-001 FIP.

093-313 Deve Motor Fail #4

FIP

Refer to 093-CF-001 FIP.

093-314 Deve Motor Fail #5

FIP

Refer to 093-CF-001 FIP.

093-315 Deve Motor Fail #6

FIP

Refer to 093-CF-001 FIP.

093-316 Dispense Broken #1

FIP

Refer to 093-CF-002 FIP.

093-317 Dispense Broken #2

FIP

Refer to 093-CF-002 FIP.

093-318 Dispense Broken #3

FIP

Refer to 093-CF-002 FIP.

093-319 Dispense Broken #4

FIP

Refer to 093-CF-002 FIP.

093-320 Dispense Broken #5

FIP

Refer to 093-CF-002 FIP.

093-321 Dispense Broken #6

FIP

Refer to 093-CF-002 FIP.

093-329 Toner CRUM Authentication IC is not Available #1

FIP

Refer to 093-CF-003 FIP.

093-330 Toner CRUM Authentication IC is not Available #2

FIP

Refer to 093-CF-003 FIP.

093-331 Toner CRUM Authentication IC is not Available #3

FIP

Refer to 093-CF-003 FIP.

093-332 Toner CRUM Authentication IC is not Available #4

FIP

Refer to 093-CF-003 FIP.

093-333 Toner CRUM Authentication IC is not Available #5

FIP

Refer to 093-CF-003 FIP.

093-334 Toner CRUM Authentication IC is not Available #6

FIP

Refer to 093-CF-003 FIP.

093-335 Mag-Z Fail #1

FIP

Refer to 093-CF-004 FIP.

093-336 Mag-Z Fail #2

FIP

Refer to 093-CF-004 FIP.

093-337 Mag-Z Fail #3
FIP
Refer to 093-CF-004 FIP.

093-338 Mag-Z Fail #4
FIP
Refer to 093-CF-004 FIP.

093-339 Mag-Z Fail #5
FIP
Refer to 093-CF-004 FIP.

093-340 Mag-Z Fail #6
FIP
Refer to 093-CF-004 FIP.

093-400 Toner Pre Near Empty #1
FIP
Refer to 093-CF-005 FIP.

093-401 Toner Pre Near Empty #2
FIP
Refer to 093-CF-005 FIP.

093-402 Toner Pre Near Empty #3
FIP
Refer to 093-CF-005 FIP.

093-403 Toner Pre Near Empty #4
FIP
Refer to 093-CF-005 FIP.

093-404 Toner Pre Near Empty #5
FIP
Refer to 093-CF-005 FIP.

093-405 Toner Pre Near Empty #6
FIP
Refer to 093-CF-005 FIP.

093-406 Toner Near Empty #1
FIP
Refer to 093-CF-006 FIP.

093-407 Toner Near Empty #2
FIP
Refer to 093-CF-006 FIP.

093-408 Toner Near Empty #3
FIP
Refer to 093-CF-006 FIP.

093-409 Toner Near Empty #4
FIP
Refer to 093-CF-006 FIP.

093-410 Toner Near Empty #5
FIP
Refer to 093-CF-006 FIP.

093-411 Toner Near Empty #6
FIP
Refer to 093-CF-006 FIP.

093-413 Dispense Near Broken #1
FIP
Refer to 093-CF-002 FIP.

093-414 Dispense Near Broken #2
FIP
Refer to 093-CF-002 FIP.

093-415 Dispense Near Broken #3
FIP
Refer to 093-CF-002 FIP.

093-416 Dispense Near Broken #4
FIP
Refer to 093-CF-002 FIP.

093-417 Dispense Near Broken #5

FIP

Refer to 093-CF-002 FIP.

093-418 Dispense Near Broken #6

FIP

Refer to 093-CF-002 FIP.

093-600 Mag-Z Warning #1

FIP

Refer to 093-CF-007 FIP.

093-601 Mag-Z Warning #2

FIP

Refer to 093-CF-007 FIP.

093-602 Mag-Z Warning #3

FIP

Refer to 093-CF-007 FIP.

093-603 Mag-Z Warning #4

FIP

Refer to 093-CF-007 FIP.

093-604 Mag-Z Warning #5

FIP

Refer to 093-CF-007 FIP.

093-605 Mag-Z Warning #6

FIP

Refer to 093-CF-007 FIP.

093-922 Toner CRUM Data Mismatch Fail #1

FIP

Refer to 093-CF-008 FIP.

093-923 Toner CRUM Data Mismatch Fail #2

FIP

Refer to 093-CF-008 FIP.

093-924 Toner CRUM Data Mismatch Fail #3

FIP

Refer to 093-CF-008 FIP.

093-925 Toner CRUM Data Mismatch Fail #4

FIP

Refer to 093-CF-008 FIP.

093-926 Toner CRUM Data Mismatch Fail #5

FIP

Refer to 093-CF-008 FIP.

093-927 Toner CRUM Data Mismatch Fail #6

FIP

Refer to 093-CF-008 FIP.

093-928 Toner CRUM Geographic Diff Mismatch Fail #1

FIP

Refer to 093-CF-009 FIP.

093-929 Toner CRUM Geographic Diff Mismatch Fail #2

FIP

Refer to 093-CF-009 FIP.

093-930 Toner CRUM Geographic Diff Mismatch Fail #3

FIP

Refer to 093-CF-009 FIP.

093-931 Toner CRUM Geographic Diff Mismatch Fail #4

FIP

Refer to 093-CF-009 FIP.

093-932 Toner CRUM Geographic Diff Mismatch Fail #5

FIP

Refer to 093-CF-009 FIP.

093-933 Toner CRUM Geographic Diff Mismatch Fail #6

FIP

Refer to 093-CF-009 FIP.

093-934 Toner Cartridge Not In Position #1

FIP

Refer to 093-CF-010 FIP.

093-935 Toner Cartridge Not In Position #2

FIP

Refer to 093-CF-010 FIP.

093-936 Toner Cartridge Not In Position #3

FIP

Refer to 093-CF-010 FIP.

093-937 Toner Cartridge Not In Position #4

FIP

Refer to 093-CF-010 FIP.

093-938 Toner Cartridge Not In Position #5

FIP

Refer to 093-CF-010 FIP.

093-939 Toner Cartridge Not In Position #6

FIP

Refer to 093-CF-010 FIP.

093-940 Toner Cartridge Exchange Time Over

BSD-ON:CH1.29

Printing is continued beyond the specified conditions while the Dispense Door is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of Front Cover Interlock Switch R/L (DC330 [009-106]). (PL 18.6)
- Installation failure of the Dispense Cover Interlock Switch R/L.

If no problem are found, replace the MK_EPG 1 MD PWB. (PL 18.3)

094-300 IBT Interlock Open

BSD-ON:CH1.29

The IBT Module is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of IBT Drawer Interlock Switch (DC330 [009-209]). (PL 6.18)
- Installation failure of the IBT Drawer Interlock Switch.

If no problem are found, replace the MK_EPG 1 MD PWB. (PL 18.3)

094-310 Belt Home Fail Too Short

BSD-ON:CH9.51, CH9.49, CH9.50

The IBT Belt Home Position Sensor 1 or 2 detected that the interval of an IBT Belt cycle is shorter than the reference value.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Perform the following:

- Check the Belt Home Position Sensor 1 (DC330 [009-200]) for operation failure. (PL 6.5)
- Check the Belt Home Position Sensor 2 (DC330 [009-201]) for operation failure. (PL 6.5)
- Check IBT Steering Motor (DC330 [004-010/011/012/013] (6C/5C #1/5C #6/4C)) for operation failure. (PL 6.4)
- Check the Belt Edge Sensor 1/2/3 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9, PL 6.5)

If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV Core PWB (PL 18.3)
- MK_DRV MD PWB (PL 18.3)
- MK_DRV ADC PWB (PL 18.3)

094-311 Belt Home Fail Too Long

BSD-ON:CH9.51, CH9.49, CH9.50

The IBT Belt Home Position Sensor 1 or 2 detected that the interval of an IBT Belt cycle is longer than the reference value.

NOTE: *If the value of NVM [749-473] (Belt Home Fail Too Long) has become '3', clear the value to '0', and then turn the power OFF and ON. This counter counts the number of sequential Fail occurrences and it is configured to prevent the start up at power OFF and ON only, in order to avoid the danger of the IBT Belt breaking when the Fail has occurred 3 times in a row.*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the operation position of the IBT Belt. **Is the IBT Belt towards the Front or the Rear Side?**

Y **N**

Perform the following:

- Check for contamination of the Belt Home Position Sensor 1/2. If it is contaminated, clean or replace the Sensor. (PL 6.5)
- Check for contamination of the Home Position Sticker of the IBT Belt. If it is contaminated, clean the sticker or replace the IBT Belt. (PL 6.3)
- Check the IBT Belt for deflection.
- Check IBT Steering Motor (DC330 [004-010/011/012/013] (6C/5C #1/5C #6/4C)) for operation failure. (PL 6.4)
- Check the Belt Edge Sensor 1/2/3 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9, PL 6.5)

If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV Core PWB (PL 18.3)
- MK_DRV MD PWB (PL 18.3)
- MK_DRV ADC PWB (PL 18.3)

Perform the following:

- Rewrite the NVM [749-256] (Angle Data Default Value) Value to [0] and return the IBT Belt to the center.
- Check IBT Steering Motor (DC330 [004-010/011/012/013] (6C/5C #1/5C #6/4C)) for operation failure. (PL 6.4)
- Check the Belt Edge Sensor 1/2/3 for contamination. If it is contaminated, clean or replace the Sensor. (PL 6.9, PL 6.5)

If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_DRV Core PWB (PL 18.3)
- MK_DRV MD PWB (PL 18.3)
- MK_DRV ADC PWB (PL 18.3)

094-312 2nd BTB Retract Fail

BSD-ON:CH9.60

The output of the 2nd BTB Retract Sensor does not change within the specified time after starting contact/retract operation of 2nd BTB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- 2nd BTB Retract Sensor (DC330 [009-206]) for operation failure. (PL 6.23)
- Operation failure of the 2nd BTB Contact/Retract Motor (DC330 [009-439/440] (Contact/Retract)). (PL 6.23)
- The 2nd BTB Retract Sensor for improper installation
- The 2nd BTB Retract Sensor Actuator for damage.

If no problem are found, replace the MK_EPG 2 MD PWB. (PL 18.3)

094-313 2nd Nip ADJ Cam Home Sensor Fail

BSD-ON:CH9.61, CH9.62

The output of the 2nd Nip Adjustable Cam Home Sensor does not change even when the specified time has elapsed after rotating the 2nd Nip Adjustable Motor in the CW and CCW directions.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The Front 2nd Nip Adjustable Cam Home Sensor (DC330 [009-208]) for operation failure. (PL 6.6)
- The Rear 2nd Nip Adjustable Cam Home Sensor (DC330 [009-207]) for operation failure. (PL 6.6)
- The Front/Rear 2nd Nip Adjustable Motor (DC330 [009-445]) for operation failure. (PL 6.6)
- The Front/Rear 2nd Nip Adjustable Cam Home Sensor for improper installation.
- The Front/Rear 2nd Nip Adjustable Cam Home Sensor Actuator for damage.

If no problem are found, replace the MK_EPG 2 MD PWB. (PL 18.3)

094-314 1st BTR Retract Fail R1

BSD-ON:CH9.52

The 1st BTR Contact/Retract Sensor R1 can not detect contact/retract position within the specified time after starting 1st BTR contact/retract operation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The 1st BTR Contact/Retract Sensor R1 (DC330 [009-202]) for operation failure. (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R1 (DC330 [009-431/432] (Contact/Retract)). (PL 6.14)
- The 1st BTR Contact/Retract Sensor R1 for improper installation.
- The 1st BTR Contact/Retract Sensor R1 Actuator for damage.

If no problem are found, replace the MK_EPG 2 MD PWB. (PL 18.3)

094-315 1st BTR Retract Fail R2

BSD-ON:CH9.53

The 1st BTR Contact/Retract Sensor R2 can not detect contact/retract position within the specified time after starting 1st BTR contact/retract operation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The 1st BTR Contact/Retract Sensor R2 (DC330 [009-203]) for operation failure. (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R2 (DC330 [009-433/434] (Contact/Retract)). (PL 6.14)
- The 1st BTR Contact/Retract Sensor R2 for improper installation.
- The 1st BTR Contact/Retract Sensor R2 Actuator for damage.

If no problem are found, replace the MK_EPG 2 MD PWB. (PL 18.3)

094-316 1st BTR Retract Fail R3

BSD-ON:CH9.55

The 1st BTR Contact/Retract Sensor R3 can not detect contact/retract position within the specified time after starting 1st BTR contact/retract operation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The 1st BTR Contact/Retract Sensor R3 (DC330 [009-204]) for operation failure. (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R3 (DC330 [009-435/436] (Contact/Retract)). (PL 6.14)
- The 1st BTR Contact/Retract Sensor R3 for improper installation.
- The 1st BTR Contact/Retract Sensor R3 Actuator for damage.

If no problem are found, replace the MK_EPG 2 MD PWB. (PL 18.3)

094-317 1st BTR Retract Fail R4

BSD-ON:CH9.56

The 1st BTR Contact/Retract Sensor R4 can not detect contact/retract position within the specified time after starting 1st BTR contact/retract operation.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The 1st BTR Contact/Retract Sensor R4 (DC330 [009-205]) for operation failure. (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R4 (DC330 [009-437/438] (Contact/Retract)). (PL 6.14)
- The 1st BTR Contact/Retract Sensor R4 for improper installation.
- The 1st BTR Contact/Retract Sensor R4 Actuator for damage.

If no problem are found, replace the MK_EPG 2 MD PWB. (PL 18.3)

094-318 2nd Bias Cut FE Connect Fail

BSD-ON:CH9.64B

For machines with Power Save PWB (Media Extension Kit installed), Power Save PWB cannot be detected at power ON or Job Start.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Check the value of NVM [544-563] (2nd BIAS CUT FE SW). **Is the value [0] (no PWB)?**

Y **N**

Does this machine have Power Save PWB?

Y **N**

Change the value of NVM [544-563] (2nd BIAS CUT FE SW) to "0".

Replace the following parts in sequence. However, each time a part is replaced, check whether the Fail is still occurring and return the part if it has no problems.

- Power Save PWB (PL 6.6)
- MK_EPG ADC PWB (PL 18.3)
- MK_EPG Core PWB (PL 18.3)

Perform the following:

- Check that the Power Save PWB is installed correctly.
- Check for partial connection of Power Save PWB J436F, J437F and J438F, partial connection of relay connector P/J594 and P/J574, or wiring failure.

If no problem are found, replace the Power Save PWB. (PL 6.6)

094-414 IBT Reverse Rotation

BSD-ON:CH9.48, CH9.47

Reverse rotation of IBT was performed.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- The connection between the Belt Encoder Sensor A J142 and MK_DRV 1 Sensor PWB J597_D1 for open circuit, short circuit, and poor contact.
- The connection between the Belt Encoder Sensor B J144 and MK DRV 1 Sensor PWB J597_D1 for open circuit, short circuit, and poor contact.
- The connection between the Belt Encoder Sensor Z J144Z and MK DRV 1 Sensor PWB J597_D1 for open circuit, short circuit, and poor contact.
- The connection between the MK DRV 1 Sensor PWB J596_D1 and MK_DRV Core PWB J651_D for open circuit, short circuit, and poor contact.
- The IBT Drive Motor (DC330 [004-008/009] (FWD/RVS)) for operation failure. (PL 6.5)

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Belt Encoder Sensor Assembly (PL 6.5)
- MK_DRV Core PWB (PL 18.3)
- MK DRV 1 Sensor PWB (PL 18.3)

094-415 2nd BTB Unit Life Limit

BSD-ON:-

It is time to replace Secondary Transfer Belt.

Cause/Action

Replace the 2nd BTB Unit. (PL 6.26)

After replacement, reset the value of DC135 [009-870] (2nd BTB Unit (IMPS).

094-422 Trim (Xfer Module) Life Limit

BSD-ON:-

It is time to replace the Xfer Module.

Cause/Action

Replace the IBT Belt Assembly. (PL 6.2)

After replacement, reset the value of DC135 [009-888] (Trim (Xfer Module)).

094-424 Belt Cleaner Unit Life Limit

BSD-ON:-

It is time to replace the Belt Cleaner Assembly.

Cause/Action

Replace the Belt Cleaner Assembly. (PL 6.2)

After replacement, reset the value of DC135 [009-872] (Belt Cleaner Unit (IMPS)).

094-425 1st BTR Contact

BSD-ON:CH9.52, CH9.53, CH9.55, CH9.56

Condition for executing 1st BTR Contact Mode switching (Half Contact <-> Full Contact) was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of the 1st BTR Contact/Retract Sensor R1/R2/R3/R4 (DC330 [009-202/203/204/205]). (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R1 (DC330 [009-446/432] (Half Contact/Retract)). (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R2 (DC330 [009-447/434] (Half Contact/Retract)). (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R3 (DC330 [009-448/436] (Half Contact/Retract)). (PL 6.14)
- Operation failure of the 1st BTR Contact/Retract Motor R4 (DC330 [009-449/438] (Half Contact/Retract)). (PL 6.14)
- The 1st BTR Contact/Retract Sensor R1/R2/R3/R4 Actuator for damage. (PL 6.14)

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_EPG 2 MD PWB (PL 18.3)
- MK_EPG Core PWB (PL 18.3)

094-600 1st BTR Fail #1

FIP

Refer to 094-CF-001 FIP.

094-601 1st BTR Fail #2

FIP

Refer to 094-CF-001 FIP.

094-602 1st BTR Fail #3

FIP

Refer to 094-CF-001 FIP.

094-603 1st BTR Fail #4

FIP

Refer to 094-CF-001 FIP.

094-604 1st BTR Fail #5

FIP

Refer to 094-CF-001 FIP.

094-605 1st BTR Fail #6

FIP

Refer to 094-CF-001 FIP.

094-930 Toner Empty #1

FIP

Refer to 094-CF-002 FIP.

094-931 Toner Empty #2

FIP

Refer to 094-CF-002 FIP.

094-932 Toner Empty #3

FIP

Refer to 094-CF-002 FIP.

094-933 Toner Empty #4

FIP

Refer to 094-CF-002 FIP.

094-934 Toner Empty #5

FIP

Refer to 094-CF-002 FIP.

094-935 Toner Empty #6

FIP

Refer to 094-CF-002 FIP.

094-936 Dispense Cover Open

BSD-ON:CH1.7, CH1.29, CH1.27

The Dispense Cover is open.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Operation failure of LH/RH Dispense Cover Interlock Switch (DC330 [009-106]). (PL 18.6)
- Check the connection between the FLY 11 PWB J620_11 and MK EPG 1 MD PWB J667_X1 for open circuit, short circuit, or poor contact.
- Open circuit, short circuit, and poor contact between FLY 11 PWB J620_11 and RH Dispense Cover Interlock Switch J251_R2.
- Open circuit, short circuit, and poor contact between RH Dispense Cover Interlock Switch J251_R1 and LH Dispense Cover Interlock Switch J251_L2.
- Open circuit, short circuit, and poor contact between LH Dispense Cover Interlock Switch J251_L1 and DST 1 PWB J1103.
- Installation failure of the LH/RH Dispense Cover Interlock Switch.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK EPG 1 MD PWB (PL 18.3)
- FLY 11 PWB (PL 18.11)

094-943 Special Color Toner Color Mismatch #1

BSD-ON:CH9.5

The NVM setting value of color of #1 Engine not matching the color information of Toner Cartridge CRUM when turning on the power supply or when using 2 or more colors of toner with #1 Engine was detected.

Cause/Action

1. Turn the power OFF and ON.
2. In the PC-UI, execute NVM Save/Restore Tool. (Turn the power OFF and ON after completion)
3. If the problem persists, replace the Toner Cartridge #1. (PL 5.1)

094-944 Unable to Read Special Color Toner CRUM Information #1

BSD-ON:CH9.5

Inability to read and determine the color information of #1 Engine Toner Cartridge CRUM when turning on the power supply or when using 2 or more colors of toner with #1 Engine was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge #1.
3. Check the Toner Cartridge #1 for improper installation.
4. If the problem persists, replace the Toner Cartridge #1. (PL 5.1)

094-945 Special Color Toner In Wrong Engine #1

BSD-ON:CH9.5

Toner color of Engine #1 which is a color that can not be installed to #1 was detected.

Cause/Action

Follow the instructions of the UI, and install the correct color.

094-946 Special Color Toner Color Mismatch #6

BSD-ON:CH9.5

The NVM setting value of color of #6 Engine not matching the color information of Toner Cartridge CRUM when turning on the power supply or when using 2 or more colors of toner with #6 Engine was detected.

Cause/Action

1. Turn the power OFF and ON.
2. In the PC-UI, execute NVM Save/Restore Tool. (Turn the power OFF and ON after completion)
3. If the problem persists, replace the Toner Cartridge #6. (PL 5.1)

094-947 Unable to Read Special Color Toner CRUM Information #6

BSD-ON:CH9.5

Inability to read and determine the color information of #6 Engine Toner Cartridge CRUM when turning on the power supply or when using 2 or more colors of toner with #6 Engine was detected.

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge #6.
3. Check the Toner Cartridge #6 for improper installation.
4. If the problem persists, replace the Toner Cartridge #6. (PL 5.1)

094-948 Special Color Toner In Wrong Engine #6

BSD-ON:CH9.5

Toner color of Engine #6 which is a color that can not be installed to #6 was detected.

Cause/Action

Follow the instructions of the UI, and install the correct color.

094-949 Special Color Toner CRUM Checking

BSD-ON:CH9.5

Color information confirmation of #1 Engine and #6 Engine was started.

Cause/Action

Follow the instructions on the UI.

094-950 Special Color Configuration Mismatch #1

BSD-ON:CH9.5

At power ON or when exiting diag mode, a mismatch in #1 Engine settings was detected. (Engine availability switch: ON, Speciality Color: OFF)

Cause/Action

Check #1 Engine settings.

094-951 Special Color Configuration Mismatch #6

BSD-ON:CH9.5

At power ON or when exiting diag mode, a mismatch in #6 engine settings was detected. (Engine availability switch: ON, Speciality Color: OFF)

Cause/Action

Check #6 Engine settings.

102-310 UI Logic Fail

BSD-ON:CH3.16

UI error which should not occur detected.

Cause/Action

Turn the power OFF and ON.

102-311 No UI Software Resource

BSD-ON:CH3.16

There are insufficient resources such as Graphic and Text, no access rights, no directories, etc.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Perform re-installation of PC-UI. (ADJ 18.1.3)

102-312 No UI Software Setup File

BSD-ON:CH3.16

No language settings file.

Cause/Action

1. Turn the power OFF and ON.
2. Perform re-installation of PC-UI. (ADJ 18.1.3)

102-313 No UI Software Library

BSD-ON:CH3.16

No communication library. (Including CLASSPATH environment variable failure)

Cause/Action

1. Turn the power OFF and ON.
2. Perform re-installation of PC-UI. (ADJ 18.1.3)

102-314 NVM Test Fail UI

BSD-ON:CH3.16

UI NVM does not exist.

Cause/Action

1. Turn the power OFF and ON.
2. Perform re-installation of PC-UI. (ADJ 18.1.3)

102-315 Communication Fail UI - Sys

BSD-ON:CH3.16

Communication error has occurred between UI - Sys.

Cause/Action

1. Turn the power OFF and ON.
2. Perform re-installation of PC-UI. (ADJ 18.1.3)

124-312 Sys Logic Fail

BSD-ON:CH3.2

There was no response from the Controller within the specified time.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power Off/On, and if the problem persists, execute [SysUnInstaller.bat] in the installation disk with administrator privileges and reinstall Sys after execution.

   NOTE: *When running SysUnInstaller.bat, the message "Error: XxxxxxXxxxxxXxxxx.exe process not found." may appear, but this can be safely ignored.*

124-315 Billing Fail

BSD-ON:CH3.23

Inconsistency of Billing Counter held in each Sub was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Enter DC132 of Diag, compare the M/C Billing Data of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM) and rewrite them to normal values.
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

   - PH Core PWB (PL 18.2)
   - NVM PWB (PL 18.2)
   - MK_DRV Core PWB (PL 18.3)
   - NVM PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)
   - SYS PWB (PL 18.14)

124-316 Serial Number Fail

BSD-ON:CH3.23

Inconsistency of Serial Number held in each Sub was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Enter DC132 of Diag, compare the M/C Serial No of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM) with the M/C Label Serial Number, and rewrite them to normal values.
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

   - PH Core PWB (PL 18.2)
   - NVM PWB (PL 18.2)
   - MK_DRV Core PWB (PL 18.3)
   - NVM PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)
   - SYS PWB (PL 18.14)

124-317 Usage Counter Fail

BSD-ON:-

Inconsistency of Usage Counter held in each Sub was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Enter DC132 of Diag, check the Usage Counter of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM), and rewrite them to normal values.
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

   - PH Core PWB (PL 18.2)
   - NVM PWB (PL 18.2)
   - MK_DRV Core PWB (PL 18.3)
   - NVM PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)
   - SYS PWB (PL 18.14)

124-320 Communication Fail IOT - Sys

BSD-ON:CH3.2

Communication error between the IOT and Controller has occurred.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power Off/On, and if the problem persists, execute [SysUnInstaller.bat] in the installation disk with administrator privileges and reinstall Sys after execution.

   NOTE: *When running SysUnInstaller.bat, the message "Error: XxxxxxXxxxxxXxxxx.exe process not found." may appear, but this can be safely ignored.*
3. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.
   - Between PC UI Mother Board and SYS PWB J644
   - Between SYS PWB J644 and IOT Main PWB J630
4. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.
   - PC UI Mother Board (PL 1.2)
   - SYS PWB (PL 18.14)
   - IOT Main PWB (PL 18.14)

124-321 All CRUM Fail 3

BSD-ON:CH3.23

The [CRUM valid/invalid] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is different for all 3 locations.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [CRUM valid/invalid] of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM), and rewrite them to normal values.

124-322 All CRUM Fail 21

BSD-ON:CH3.23

The [Region-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM are different for all 3 locations.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Region-2] of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM), and rewrite them to normal values.

124-323 All CRUM Fail 22

BSD-ON:CH3.23

The [OEM Destination-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM are different for all 3 locations.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [OEM Destination-2] of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM), and rewrite them to normal values.

124-324 IOT PWB CRUM Restoration Fail 3

BSD-ON:CH3.23

The [CRUM valid/invalid] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-PH NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [CRUM valid/invalid] of PWBA-PH NVM, and rewrite it to normal value.

124-325 IOT PWB CRUM Restoration Fail 21

BSD-ON:CH3.23

The [Region-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-PH NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Region-2] of PWBA-PH NVM, and rewrite it to normal value.

124-326 IOT PWB CRUM Restoration Fail 22

BSD-ON:CH3.23

The [OEM Destination-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-PH NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [OEM Destination-2] of PWBA-PH NVM, and rewrite it to normal value.

124-327 MK Drive CRUM Restoration Fail 3

BSD-ON:CH3.23

The [CRUM valid/invalid] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_Drive NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [CRUM valid/invalid] of PWBA-MK_Drive NVM, and rewrite it to normal value.

124-328 MK Drive CRUM Restoration Fail 21

BSD-ON:CH3.23

The [Region-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_Drive NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Region-2] of PWBA-MK_Drive NVM, and rewrite it to normal value.

124-329 MK Drive CRUM Restoration Fail 22

BSD-ON:CH3.23

The [OEM Destination-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_Drive NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [OEM Destination-2] of PWBA-MK_Drive NVM, and rewrite it to normal value.

124-330 MK EPG CRUM Restoration Fail 3

BSD-ON:CH3.23

The [CRUM valid/invalid] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_EPG NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [CRUM valid/invalid] of PWBA-MK_EPG NVM, and rewrite it to normal value.

124-331 MK EPG CRUM Restoration Fail 21

BSD-ON:CH3.23

The [Region-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_EPG NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Region-2] of PWBA-MK_EPG NVM, and rewrite it to normal value.

124-332 MK EPG CRUM Restoration Fail 22

BSD-ON:CH3.23

The [OEM Destination-2] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_EPG NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [OEM Destination-2] of PWBA-MK_EPG NVM, and rewrite it to normal value.

124-334 IOT PWB Product Number Fail

BSD-ON:CH3.23

The [Product Number] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-PH NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Product Number] of PWBA-PH NVM, and rewrite it to normal value.

124-335 MK Drive Product Number Fail

BSD-ON:CH3.23

The [Product Number] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_Drive NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Product Number] of PWBA-MK_Drive NVM, and rewrite it to normal value.

124-336 MK EPG Product Number Fail

BSD-ON:CH3.23

The [Product Number] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_EPG NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Product Number] of PWBA-MK_EPG NVM, and rewrite it to normal value.

124-337 All Product Number Fail

BSD-ON:CH3.23

The [Product Number] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is different for all 3 locations.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Enter DC132 of Diag, compare the Product Number of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM) and rewrite them to normal values.
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

   - PH Core PWB (PL 18.2)
   - NVM PWB (PL 18.2)
   - MK_DRV Core PWB (PL 18.3)
   - NVM PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)
   - SYS PWB (PL 18.14)

124-338 IOT PWB Billing Count Up Mode Fail

BSD-ON:CH3.23

The [Billing Count Up Mode] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-PH NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Billing Count Up Mode] of PWBA-PH NVM, and rewrite it to normal value.

124-339 MK Drive Billing Count Up Mode Fail

BSD-ON:CH3.23

The [Billing Count Up Mode] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_Drive NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Billing Count Up Mode] of PWBA-MK_Drive NVM, and rewrite it to normal value.

124-340 MK EPG Billing Count Up Mode Fail

BSD-ON:CH3.23

The [Billing Count Up Mode] of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is only different for PWBA-MK_EPG NVM.

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter DC132 of Diag, check [Billing Count Up Mode] of PWBA-MK_EPG NVM, and rewrite it to normal value.

124-341 All Billing Count Up Mode Fail

BSD-ON:CH3.23

The [Billing Count Up Mode] content of CRUM information held in PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM is different for all 3 locations.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Enter DC132 of Diag, compare the Billing Count Up Mode of the 3 PWBs (PWBA-PH NVM, PWBA-MK_Drive NVM, and PWBA-MK_EPG NVM) and rewrite them to normal values.
3. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

   - PH Core PWB (PL 18.2)
   - NVM PWB (PL 18.2)
   - MK_DRV Core PWB (PL 18.3)
   - NVM PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)
   - SYS PWB (PL 18.14)

124-342 Sys Arbitration Fail

BSD-ON:CH3.2

An attempt was made to send an illegal command from SYS to other subsystems.

Cause/Action

Turn the power OFF and ON.

124-343 IOT Logic Fail Sys Command

BSD-ON:CH3.2

Command sent from SYS to IOT is notified to be error by IOT.

Cause/Action

Turn the power OFF and ON.

124-344 Sys Data Structure Fail

BSD-ON:CH3.2

Failed to handle data structure with SYS software.

Cause/Action

Turn the power OFF and ON.

124-345 Incomplete Set Fail

BSD-ON:CH3.2

There is a sheet missing in the output completed set.

Cause/Action

Turn the power OFF and ON.

129-310 Communication Fail Comm - IOT

BSD-ON:CH3.2

Detected abnormal communication between SYS PWB and IOT Main PWB.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the power OFF and check the connection between the SYS PWB J644 and the IOT Main PWB J630 for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.
   - SYS PWB (PL 18.14)
   - IOT Main PWB (PL 18.14)

129-311 Communication Fail PC Service - Comm

BSD-ON:CH3.16

Communication failure between the PC Service and SYS PWB was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for open circuit or poor contact of LAN cable between PC UI Mother Board and SYS PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinstall the part if it has no problem.
   - SYS PWB (PL 18.14)
   - PC UI Mother Board (PL 1.2)

178-107 HCF In Sensor ON Jam (HCF A3 Tray 3)

BSD-ON:CH8.13

The HCF In Sensor does not turn ON within the specified time during the paper feed from HCF Tray 3.

Cause/Action

Refer to 078-107 (HCF In Sensor ON Jam (HCF Tray 1)) FIP.

178-108 HCF In Sensor ON Jam (HCF A3 Tray 4)

BSD-ON:CH8.13

The HCF In Sensor does not turn ON within the specified time during the paper feed from HCF Tray 4.

Cause/Action

Refer to 078-107 (HCF In Sensor ON Jam (HCF Tray 1)) FIP.

010-CF-001 Fusing Belt Fan Fail

BSD-ON:CH10.21

The lock signal indicating rotate/stop of Fan is not rotating (High) within the specified time from Fusing Belt Fan ON.

Fault Code

- 010-312/379/380: Fusing Belt Fan 1/2/3 Fail

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

1. Check the applicable Fusing Belt Fan (DC330 [010-009/010/011] (Fan 1/2/3)) for operation failure. (PL 7.9)
2. Check the applicable Fusing Belt Fan for foreign substances.
3. If no problem are found, replace the FSR/INV_1 MD PWB. (PL 18.7)

010-CF-002 P/R Fan Fail

BSD-ON:CH10.22

The lock signal indicating rotate/stop of Fan is not rotating (High) within the specified time from Pressure Roll Fan ON.

Fault Code

- 010-313/381/382: P/R Fan 1/2/3 Fail

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

1. Check the applicable P/R Fan (DC330 [010-012/013/014] (Fan 1/2/3)) for operation failure. (PL 7.9)
2. Check the applicable P/R Fan for foreign substances.
3. If no problem are found, replace the FSR/INV_2 MD PWB. (PL 18.7)

024-CF-001 Engine Replacement Fail - Read

BSD-ON:-

At the time of replacing the spot color, it was detected that the reading of color information before replacement has failed (NVM Read error).

Fault Code

- 024-310: Engine Replacement Fail - Read #1 Clr
- 024-312: Engine Replacement Fail - Read #1 Gld
- 024-313: Engine Replacement Fail - Read #1 Slv
- 024-314: Engine Replacement Fail - Read #1 Wht
- 024-315: Engine Replacement Fail - Read #6 Gld
- 024-316: Engine Replacement Fail - Read #6 Slv
- 024-317: Engine Replacement Fail - Read #6 Wht
- 024-318: Engine Replacement Fail - Read #1 TX

Cause/Action

1. Check whether the applicable Drum Assembly and Toner Cartridge are installed properly.
2. Turn the power OFF and ON.
3. Reinstall the latest Sys.

024-CF-002 Engine Replacement Fail - Write

BSD-ON:-

At the time of replacing the spot color, it was detected that the writing of color information after replacement has failed (NVM Write error).

Fault Code

- 024-320: Engine Replacement Fail - Write #1 Clr
- 024-322: Engine Replacement Fail - Write #1 Gld
- 024-323: Engine Replacement Fail - Write #1 Slv
- 024-324: Engine Replacement Fail - Write #1 Wht
- 024-325: Engine Replacement Fail - Write #6 Gld
- 024-326: Engine Replacement Fail - Write #6 Slv
- 024-327: Engine Replacement Fail - Write #6 Wht
- 024-328: Engine Replacement Fail - Write #1 TX

Cause/Action

1. Check whether the applicable Drum Assembly and Toner Cartridge are installed properly.
2. Turn the power OFF and ON.
3. Reinstall the latest Sys.

024-CF-003 EDI Profile NG

BSD-ON:-

- It was detected that the EDI profile requested at the start of the job does not match the system configuration.
- It was detected that the EDI profile assigned to IOT for the job has been changed by a method other than the feature provided by the UI, and job control is no longer valid.

NOTE: *The assumed cases are as follows.*

- *After the job is sent from EDI, the key operator entered the administrator mode and changed the EDI profile setting.*
- *The EDI profile already assigned to IOT in the job is overwritten on Windows.*

Fault Code

- 024-945: EDI Profile NG 1
- 024-946: EDI Profile NG 2
- 024-947: EDI Profile NG 3
- 024-948: EDI Profile NG 4
- 024-949: EDI Profile NG 5
- 024-950: EDI Profile NG 6
- 024-951: EDI Profile NG 7
- 024-952: EDI Profile NG 8
- 024-953: EDI Profile NG 9
- 024-954: EDI Profile NG 10
- 024-955: EDI Profile NG 11
- 024-956: EDI Profile NG 12

Cause/Action

1. Turn the power OFF and ON.
2. If the problem persists, enter administrator mode and check the EDI Profile setting. If the EDI profile setting is correct, execute the job.

024-CF-004 Engine Replacement Fail - Read

BSD-ON:-

At the time of replacing the spot color, it was detected that the reading of color information before replacement has failed (NVM Read error).

Fault Code

- 024-330/332: Engine Replacement Fail - Read #1/#6 P
- 024-334/336: Engine Replacement Fail - Read #1/#6 SP1
- 024-338/340: Engine Replacement Fail - Read #1/#6 SP2
- 024-342/344: Engine Replacement Fail - Read #1/#6 SP3
- 024-346/348: Engine Replacement Fail - Read #1/#6 SP4
- 024-350/352: Engine Replacement Fail - Read #1/#6 SP5
- 024-354/356: Engine Replacement Fail - Read #1/#6 SP6
- 024-358/360: Engine Replacement Fail - Read #1/#6 SP7
- 024-362/364: Engine Replacement Fail - Read #1/#6 SP8
- 024-366/368: Engine Replacement Fail - Read #1/#6 SP9
- 024-370/372: Engine Replacement Fail - Read #1/#6 SP10
- 024-374/376: Engine Replacement Fail - Read #1/#6 SP11
- 024-378/380: Engine Replacement Fail - Read #1/#6 SP12
- 024-382/384: Engine Replacement Fail - Read #1/#6 SP13
- 024-386/388: Engine Replacement Fail - Read #1/#6 SP14
- 024-390/392: Engine Replacement Fail - Read #1/#6 SP15
- 024-394/396: Engine Replacement Fail - Read #1/#6 SP16

Cause/Action

1. Check whether the applicable Drum Assembly and Toner Cartridge are installed properly.
2. Turn the power OFF and ON.
3. Reinstall the latest Sys.

024-CF-005 Engine Replacement Fail - Write

BSD-ON:-

At the time of replacing the spot color, it was detected that the writing of color information after replacement has failed (NVM Write error).

Fault Code

- 024-331/333: Engine Replacement Fail - Write #1/#6 P
- 024-335/337: Engine Replacement Fail - Write #1/#6 SP1
- 024-339/341: Engine Replacement Fail - Write #1/#6 SP2
- 024-343/345: Engine Replacement Fail - Write #1/#6 SP3
- 024-347/349: Engine Replacement Fail - Write #1/#6 SP4
- 024-351/353: Engine Replacement Fail - Write #1/#6 SP5
- 024-355/357: Engine Replacement Fail - Write #1/#6 SP6
- 024-359/361: Engine Replacement Fail - Write #1/#6 SP7
- 024-363/365: Engine Replacement Fail - Write #1/#6 SP8
- 024-367/369: Engine Replacement Fail - Write #1/#6 SP9
- 024-371/373: Engine Replacement Fail - Write #1/#6 SP10
- 024-375/377: Engine Replacement Fail - Write #1/#6 SP11
- 024-379/381: Engine Replacement Fail - Write #1/#6 SP12
- 024-383/385: Engine Replacement Fail - Write #1/#6 SP13
- 024-387/389: Engine Replacement Fail - Write #1/#6 SP14
- 024-391/393: Engine Replacement Fail - Write #1/#6 SP15
- 024-395/397: Engine Replacement Fail - Write #1/#6 SP16

Cause/Action

1. Check whether the applicable Drum Assembly and Toner Cartridge are installed properly.
2. Turn the power OFF and ON.
3. Reinstall the latest Sys.

042-CF-001 Drum Motor Speed Fail

BSD-ON:CH9.9, CH9.10, CH9.11, CH9.12, CH9.13, CH9.14

The Drum Motor speed error was detected.

Fault Code

- 042-310/311/312/313/314/315: Drum Motor Speed Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn OFF the power, and remove the Drum Cartridge of the applicable color.
Enter Diag, drive the Drum Motor (DC330 [004-001/002/003/004/005/006] (#1/#2/#3/#4/#5/#6)) of the applicable color, and check if the Drum Shaft rotates. **Does the Drum Shaft rotate?**

Y **N**

Set the value of NVM [750-002] (Drum Motor FB Mode SW) to [0]. Drive the Drum Motor (DC330 [004-001/002/003/004/005/006] (#1/#2/#3/#4/#5/#6)) of the applicable color, and check if the Drum Shaft rotates. **Does the Drum Shaft rotate?**

Y **N**

It seems to be a failure of the connection between the Drum Motor or Motor and the Drum Shaft. Return the value of NVM (750-002) to [1].
Turn the power OFF and replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV MD PWB (PL 18.3)
- MK_DRV Core PWB (PL 18.3)

It seems to be poor feedback control due to garbled NVM data or input error. Confirm NVM or initialize NVM as necessary, and return the value of NVM [750-002] to [1]. Or check that the value is [1].

It seems to be a failure caused by load increase due to curl, etc. of the Drum Cleaning Blade in the Drum Cartridge. Replace the Drum Cartridge (PL 5.2) of the applicable color. **Does the Fail occur?**

Y **N**

End

NOTE: *After the corrective action, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

Turn OFF the power. Refer to BSD and check the following connections for open circuits, short circuits, and poor contacts.

- Between MK_DRV SNR PWB of the applicable color and Drum Encoder Sensor Assembly
- Between MK_DRV SNR PWB and MK_DRV Core PWB J651_D of the applicable color

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV Core PWB (PL 18.3)

042-CF-002 Drum Motor Phase A Fail / Warning

BSD-ON:CH9.9, CH9.10, CH9.11, CH9.12, CH9.13, CH9.14

The Drum Motor Phase A signal error was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 042-317/320/323/326/329/332: Drum Motor Phase A Fail #1/#2/#3/#4/#5/#6 (Sub System Fail)
- 042-600/602/604/606/608/610: Drum Motor Phase A Warning #1/#2/#3/#4/#5/#6 (Record)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Open circuit, short circuit or poor contact of the connection between MK_DRV SNR PWB and Drum Encoder Sensor Assembly of the applicable color.
- The connection between the MK_DRV SNR PWB and MK_DRV Core PWB J651_D of the applicable color for open circuit, short circuit, and poor contact.
- Damage of the Actuator in the Drum Drive Assembly of the applicable color.
- Contamination of Drum Encoder Sensor detector or foreign matter on the detector.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV Core PWB (PL 18.3)

042-CF-003 Drum Motor Phase B Fail / Warning

BSD-ON:CH9.9, CH9.10, CH9.11, CH9.12, CH9.13, CH9.14

The Drum Motor Phase B signal error was detected.

Fault Code

- 042-318/321/324/327/330/333: Drum Motor Phase B Fail #1/#2/#3/#4/#5/#6 (Sub System Fail)
- 042-601/603/605/607/609/611: Drum Motor Phase B Warning #1/#2/#3/#4/#5/#6 (Record)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Open circuit, short circuit or poor contact of the connection between MK_DRV SNR PWB and Drum Encoder Sensor Assembly of the applicable color.
- The connection between the MK_DRV SNR PWB and MK_DRV Core PWB J651_D of the applicable color for open circuit, short circuit, and poor contact.
- Damage of the Actuator in the Drum Drive Assembly of the applicable color.
- Contamination of Drum Encoder Sensor detector or foreign matter on the detector.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV Core PWB (PL 18.3)

042-CF-004 Drum Motor Phase AB Fail

BSD-ON:CH9.9, CH9.10, CH9.11, CH9.12, CH9.13, CH9.14

The Drum Motor Phase AB signal error was detected.

Fault Code

- 042-319/322/325/328/331/334: Drum Motor Phase AB Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Turn OFF the power, and remove the Drum Cartridge of the applicable color.
Enter Diag, drive the Drum Motor (DC330 [004-001/002/003/004/005/006] (#1/#2/#3/#4/#5/#6)) of the applicable color, and check if the Drum Shaft rotates. **Does the Drum Shaft rotate?**

Y **N**

Set the value of NVM [750-002] (Drum Motor FB Mode SW) to [0]. Drive the Drum Motor (DC330 [004-001/002/003/004/005/006] (#1/#2/#3/#4/#5/#6)) of the applicable color, and check if the Drum Shaft rotates. **Does the Drum Shaft rotate?**

Y **N**

It seems to be a failure of the connection between the Drum Motor or Motor and the Drum Shaft. Return the value of NVM (750-002) to [1].
Turn the power OFF and replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV MD PWB (PL 18.3)
- MK_DRV Core PWB (PL 18.3)

It seems to be poor feedback control due to garbled NVM data or input error. Confirm NVM or initialize NVM as necessary, and return the value of NVM [750-002] to [1]. Or check that the value is [1].

It seems to be a failure caused by load increase due to curl, etc. of the Drum Cleaning Blade in the Drum Cartridge. Replace the Drum Cartridge (PL 5.2) of the applicable color. **Does the Fail occur?**

Y **N**

End

NOTE: *After the corrective action, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

Turn OFF the power. Refer to BSD and check the following connections for open circuits, short circuits, and poor contacts.

- Between MK_DRV SNR PWB of the applicable color and Drum Encoder Sensor Assembly
- Between MK_DRV SNR PWB and MK_DRV Core PWB J651_D of the applicable color

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV Core PWB (PL 18.3)

042-CF-005 CC Fan Fail

BSD-ON:CH9.80, CH9.81

The CC Fan error was detected. The CC Fan Fail signal indicating abnormality of the Fan was monitored for a specified time, and it was found to be Fail (High) the specified number of times or higher in a row.

Fault Code

- 042-347/348/349/350/351/352: CC Fan Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the applicable CC Fan (DC330 [004-040/042/044/046/048/050] (#1/#2/#3/#4/#5/#6)) for operation failure. (PL 4.4)
2. Check the applicable CC Fan for foreign substances.
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

042-CF-006 Blower Fan Fail

BSD-ON:CH9.78, CH9.79

Blower Fan failure. The FGO pulse count output from the Blower Fan, between 2 sec and 12 sec after the Drum Motor had stopped, was monitored, and the calculated number of rotations is equal to or lower than the specified value.

Fault Code

- 042-366/367/368/369/370/371: Blower Fan Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the applicable Blower Fan (DC330 [004-064/066/068/070/072/074] (#1/#2/#3/#4/#5/#6)) for operation failure. (PL 4.10, PL 4.11)
2. Check the applicable Blower Fan for foreign substances.
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

042-CF-007 Rear Drive Fan Fail

BSD-ON:CH9.82, CH9.83

Rear Drive Cooling Fan failure. The Rear Drive Cooling Fan Fail signal indicating abnormality of the Fan was monitored for a specified time, and it was found to be Fail (High) the specified number of times or higher in a row.

Fault Code

- 042-372/373/374/375/376/377: Rear Drive Fan Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the applicable Rear Drive Cooling Fan (DC330 [004-077/078/079/080/081/082] (#1/#2/#3/#4/#5/#6)) for operation failure. (PL 18.1)
2. Check the applicable Rear Drive Cooling Fan for foreign substances.
3. If no problem are found, replace the MK_DRV MD PWB. (PL 18.3)

042-CF-008 LVPS Fan Fail

BSD-ON:CH1.49

LVPS Fan failure. The LVPS Fan Fail signal was monitored 3 times at 1-second intervals after 5 seconds from the start of Drum Motor, and all 3 times were Fail (High).

Fault Code

- 042-378/380/381/388: LVPS Fan Fail 1/2/3/4

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the applicable LVPS Fan (DC330 [004-035] (1/2/3/4)) for operation failure. (PL 18.12)
2. Check the applicable LVPS Fan for foreign substances.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - FSR/INV_1 MD PWB (PL 18.7)
   - IOT Main PWB (PL 18.14)

042-CF-009 Drum Motor Encoder Z Fail

BSD-ON:CH9.9, CH9.10, CH9.11, CH9.12, CH9.13, CH9.14

Drum Motor Encoder signal error (speed detected by Encoder Z phase to be 2/3 or less of the specified value) was detected.

Fault Code

- 042-382/383/384/385/386/387: Drum Motor Encoder Z Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Open circuit, short circuit or poor contact of the connection between MK_DRV SNR PWB and Drum Encoder Sensor Assembly of the applicable color.
- The connection between the MK_DRV SNR PWB and MK_DRV Core PWB J651_D of the applicable color for open circuit, short circuit, and poor contact.
- The connection between the MK_DRV Core PWB J655_D and IOT Main PWB J634 for open circuit, short circuit, and poor contact.
- Damage of the Actuator in the Drum Drive Assembly of the applicable color.
- Contamination of Drum Encoder Sensor detector or foreign matter on the detector.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Drum Drive Assembly (PL 3.1) of the applicable color

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV Core PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

042-CF-010 B_POSI regi Data Abnormal

BSD-ON:CH9.49

The difference in output (Belt skew amount) between the Belt Edge Sensor 1 and Belt Edge Sensor 3 of the applicable color during Regi Con Set Up was 1.5 mm or more.

Fault Code

- 042-622/623/624/625/626/636: B_POSI regi Data Abnormal #1/#2/#3/#$4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power Off/On, and perform [DC685: Regi Con/Setup Cycle].
2. Check the output of Belt Edge Sensor 3 (DC330 [004-033] (LED ON), DC140 [004-101]).
3. Check the mechanical part for steering operation for abnormality.
4. If no problem is found, replace the IBT Belt (PL 6.3). After replacement, perform [DC685: Regi Con/Setup Cycle].
5. If the problem persists, replace the 2nd Belt Assembly. (PL 6.20)

042-CF-011 SR Belt Skew Data Abnormal

BSD-ON:CH9.49

The Regi Con Set Up correction value, calculated from difference in output (Belt skew amount) between the Belt Edge Sensor 1 and Belt Edge Sensor 3 of the applicable color during printing, was 0.5 mm or more.

Fault Code

- 042-627/628/629/630/631/637: SR Belt Skew Data Abnormal #1/#2/#3/#$4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power Off/On, and perform [DC685: Regi Con/Setup Cycle].
2. Perform [DC685: Regi Con/Setup Cycle] 1 to 2 times again.
3. Check the mechanical part for steering operation for abnormality.
4. If no problem is found, replace the IBT Belt (PL 6.3). After replacement, perform [DC685: Regi Con/Setup Cycle].
5. If the problem persists, replace the 2nd Belt Assembly. (PL 6.20)

044-CF-001 FPGA WR/RD Check Err

BSD-ON:CH3.20

Register WR/RD of FPGA does not operate properly.

Fault Code

- 044-310: FPGA WR/RD Check Err (YM)
- 044-311: FPGA WR/RD Check Err (CK)
- 044-312: FPGA WR/RD Check Err (S2S1)

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check the power supply voltage (+5VDC) between Halftone PWB of the applicable color and GND.
3. Turn the Power OFF and check the Connector P/J768 between IOT Main PWB and Halftone PWB of the applicable color for poor contact, damage, and foreign matter.
4. Check to see that there is no foreign matter on Halftone PWB of the applicable color.
5. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

    - CDI HSS cable of the applicable color
    - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
    - Printer Interface board

044-CF-002 EQ WR Err

BSD-ON:CH3.20

Write error from FPGA of the applicable color to the external equalizer has occurred.

Fault Code

- 044-313: EQ WR Err (YM)
- 044-314: EQ WR Err (CK)
- 044-315: EQ WR Err (S2S1)

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check the power supply voltage (+5VDC) between Halftone PWB of the applicable color and GND.
3. Check to see that there is no foreign matter on Halftone PWB of the applicable color.
4. If no problem is found, replace the Halftone PWB of the applicable color. (PL 18.13, PL 18.14)

044-CF-003 FPGA Config Err

BSD-ON:CH3.20

The Config of FPGA performed after turning ON the Power did not end within the specified amount of time.

Fault Code

- 044-322: FPGA Config Err (YM)
- 044-323: FPGA Config Err (CK)
- 044-324: FPGA Config Err (S2S1)

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check the power supply voltage (+5VDC) between Halftone PWB of the applicable color and GND.
3. Turn the Power OFF and check the Connector P/J768 between IOT Main PWB and Halftone PWB of the applicable color for poor contact, damage, and foreign matter.
4. If no problem is found, replace the Halftone PWB of the applicable color. (PL 18.13, PL 18.14)

044-CF-004 IMGST2Preq T Err

BSD-ON:CH3.20

It was detected that the time from Image Start to Page Request exceeded the threshold.

Fault Code

- 044-627: IMGST2Preq T H Err (YM)
- 044-628: IMGST2Preq T H Err (CK)
- 044-629: IMGST2Preq T H Err (S2S1)
- 044-979: IMGST2Preq T Err (YM)
- 044-980: IMGST2Preq T Err (CK)
- 044-981: IMGST2Preq T Err (S2S1)

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the Power OFF and check the Connector P/J768 between IOT Main PWB and Halftone PWB of the applicable color for poor contact, damage, and foreign matter.
3. Check to see that there is no foreign matter on Halftone PWB of the applicable color.
4. Check for operation failure of the FPGA Cooling Fan of the applicable color on the Halftone PWB.
5. Check to see that there is no foreign matter on the Panel on the external controller side.
6. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

    - CDI HSS cable of the applicable color
    - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
    - Printer Interface board

044-CF-005 IMG info Err

BSD-ON:CH3.20

Halftone PWB of the applicable color detected error, in which image information packet sent from Print Server can not be correctly received with the CDI HSS cable of the applicable color.

Fault Code

- 044-949: IMG info Err (YM)
- 044-950: IMG info Err Err (CK)
- 044-951: IMG info Err Err (S2S1)

NOTE: *In the case of a 1-time occurrence, transient external noise may have occurred on the CDI HSS cable. In case of multiple occurrences, failure is suspected.*

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

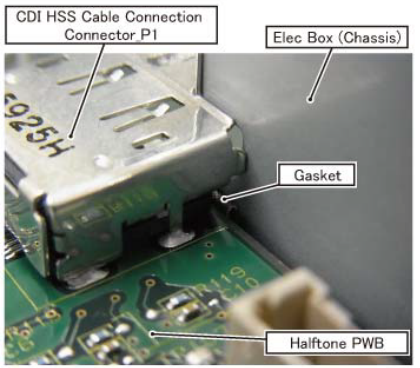
Check connector for poor contact at Print Server/IOT side. **Is there poor contact?**

Y **N**

Install the connector correctly.

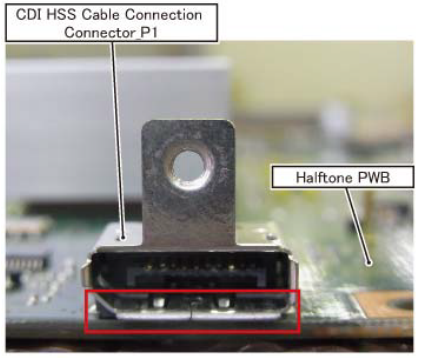
Check that the gasket in between the CDI HSS cable connector_ P1 of Halftone PWB of the applicable color and the Elec_Box (chassis) is properly installed.

- Check that the gasket is sandwiched between the CDI HSS cable connector_ P1 and Elec Box (chassis). (Figure 1)
- Check that the gasket is in contact with the lower horizontal direction (red frame) of CDI HSS cable connector_ P1. (Figure 2)



j0cx220001

Figure 1 j0cx220001



j0cx220002

Figure 2 j0cx220002

Is it installed properly?

Y **N**

Install the part properly.

Check that the gasket in between the CDI HSS cable connector of the applicable color and server side chassis is properly installed.

- Check that the gasket is in contact with the CDI HSS cable connector. (Figure 3)
- Make sure the gasket is properly attached to the server side chassis. (Figure 4)

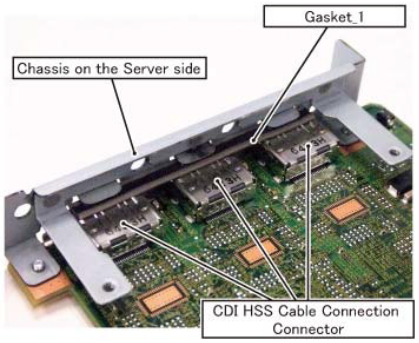


Figure 3 j0cx220003

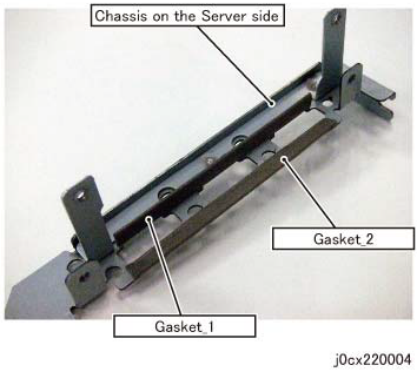


Figure 4 j0cx220004

Is it installed properly?

Y **N**

Install the part properly.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Printer Interface board
- Halftone PWB (PL 18.13, PL 18.14) of the applicable color

044-CF-006 Rx PKT Buf OVF Err

BSD-ON:CH3.20

An overflow error was detected in the reception packet buffer of Halftone PWB of the applicable color.

Fault Code

- 044-964: Rx PKT BufOVF Err (YM)
- 044-965: Rx PKT BufOVF Err (CK)
- 044-966: Rx PKT BufOVF Err (S2S1)

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter [Shutdown History] and check the Fail count. **Does it occur only 1 time?**

Y **N**

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Halftone PWB (PL 18.13, PL 18.14) of the applicable color
- Printer Interface board

Turn the power supply on the IOT side OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Halftone PWB (PL 18.13, PL 18.14) of the applicable color
- Printer Interface board

044-CF-007 Tx PKTBuf UDF Err (YM)

BSD-ON:CH3.20

An underflow error was detected in the transmission packet buffer of Halftone PWB of the applicable color.

Fault Code

- 044-970: Tx PKTBuf UDF Err (YM)
- 044-971: Tx PKTBuf UDF Err (CK)
- 044-972: Tx PKTBuf UDF Err (S2S1)

NOTE: *Turn the machine power OFF when plugging/unplugging or replacing the CDI HSS cable. (Unnecessary error logs will be recorded for cable plugging/unplugging when machine power is ON)*

NOTE: *When turning ON the power of the machine, be sure to attach a plastic cover over the Elec Box at the rear of IOT-R. (If plastic cover is not attached, static electricity, etc. may cause component damage or abnormal operation of the board)*

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter [Shutdown History] and check the Fail count. **Does it occur only 1 time?**

Y **N**

Replace Halftone PWB of the applicable color. (PL 18.13, PL 18.14)

Turn the power supply on the IOT side OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Replace Halftone PWB of the applicable color. (PL 18.13, PL 18.14)

061-CF-001 ContIF Error Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

HalfTone PWB detected an error in image synchronization signal sent from Print Server to IOT.

Fault Code

- 061-310/311/312/313/314/315: ContIF Error Fail #1/#2/#3/#4/#5/#6 (Sub System Fail)
- 061-640/641/642/643/644/645: ContIF Error_H Fail #1/#2/#3/#4/#5/#6 (Record)
- 061-942/943/944/945/946/947: ContIF Error Fail CycleDown #1/#2/#3/#4/#5/#6 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector between Print Server and Halftone PWB of the applicable color.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - CDI cable of the applicable color
   - Halftone PWB (PL 18.13, PL 18.14) of the applicable color

061-CF-002 Video ASIC Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

Video ASIC on HalfTone PWB has failed.

Fault Code

- 061-316/317/318/319/320/321: Video ASIC Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Check for poor contact of the Connector (P/J7681) between Halftone PWB of the applicable color and IOT Main PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
   - IOT Main PWB (PL 18.14)

061-CF-003 Video Line Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

The system detected that the beam was not lighted due to a Video Line malfunction between the VIDEO ASIC and the ROS LD DRIVER IC.

Fault Code

- 061-322/323/324/325/326/327: Video Line Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Refer to BSD and check the following:
   - ROS Cable (PL 2.1, PL 2.2) between Halftone PWB of the applicable color and ROS Assembly for open circuits, short circuits, and poor contacts.
   - Flat Cable of ROS Assembly of the applicable color for open circuits, short circuits, and poor contacts.
   - Check for poor contact of the Connector between Print Server and Halftone PWB of the applicable color.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
   - CDI cable of the applicable color

061-CF-004 ROS Data Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

Error of setting serial data to the ROS LD DRIVER IC has occurred.

Fault Code

- 061-328/329/330/331/332/333: ROS Data Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Refer to BSD and check the following:
   - ROS Cable (PL 2.1, PL 2.2) between Halftone PWB of the applicable color and ROS Assembly for open circuits, short circuits, and poor contacts.
   - Flat Cable of ROS Assembly of the applicable color for open circuits, short circuits, and poor contacts.
   - Poor contact of the Connector (P/J7681) between Halftone PWB and IOT Main PWB.
2. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
   - ROS Assembly (PL 2.1, PL 2.2) of the applicable color

     NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-005 ROS LD Fail/ ROS LD ALM

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

The LD deterioration was detected in one of 27 beams at the ROS exposure process.

Fault Code

- 061-334/335/336/337/338/339: ROS LD Fail #1/#2/#3/#4/#5/#6 (Sub System Fail)
- 061-608/609/610/611/612/613: ROS LD ALM #1/#2/#3/#4/#5/#6 (Record)
- 061-646/647/648/649/650/651: ROS LD_H Fail #1/#2/#3/#4/#5/#6 (Record)
- 061-948/949/950/951/952/953: ROS LD Fail CycleDown #1/#2/#3/#4/#5/#6 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag and check the NVM of the applicable color.

- NVM [756-697] (LD state when LD FAIL #1 of APC1 occurs)
- NVM [756-698] (LD state when LD FAIL #1 of APC2 occurs)
- NVM [756-699] (LD state when LD FAIL #2 of APC1 occurs)
- NVM [756-700] (LD state when LD FAIL #2 of APC2 occurs)
- NVM [756-701] (LD state when LD FAIL #3 of APC1 occurs)
- NVM [756-702] (LD state when LD FAIL #3 of APC2 occurs)
- NVM [756-703] (LD state when LD FAIL #4 of APC1 occurs)
- NVM [756-704] (LD state when LD FAIL #4 of APC2 occurs)
- NVM [756-705] (LD state when LD FAIL #5 of APC1 occurs)
- NVM [756-706] (LD state when LD FAIL #5 of APC2 occurs)
- NVM [756-707] (LD state when LD FAIL #6 of APC1 occurs)
- NVM [756-708] (LD state when LD FAIL #6 of APC2 occurs)

Is the display [4294967295]?

Y N

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Flat Cable in ROS Assembly of the applicable color
- ROS Cable (PL 2.1, PL 2.2) of the applicable color
- ROS Assembly (PL 2.1, PL 2.2) of the applicable color

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering. If no problem is found after checking, replace the ROS Assembly of the applicable color. (PL 2.1, PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-006 SOS Long Fail #1

BSD-ON: CH6.3

The interval of the ROS Assy #1 SOS signal is longer than the specified value.

Fault Code

- 061-346: SOS Long Fail #1 (Sub System Fail)
- 061-652: SOS Long_H Fail #1 (Record)
- 061-954: SOS Long Fail CycleDown #1 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-100] (Polygon Motor Ready Check Fail 1), DC330 [006-112] (SOS Long Fail 1) ON after turning DC330 [006-007] (ROS LD 1) ON and check each Status Display.

- DC330 [006-100]: OK: Low, NG: High
- DC330 [006-112]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-100] or DC330 [006-112]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JB764(#1) and ROS Assembly (#1) J3451 for open circuits, short circuits, and poor contacts
- Open circuit, short circuit or poor connection between LDD PWB J343 (#1) and SOS PWB J342 (#1).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#1).

If no problem is found, replace the ROS Assembly (#1). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-007 SOS Long Fail #2

BSD-ON:CH6.5

The interval of the ROS Assy #2 SOS signal is longer than the specified value.

Fault Code

- 061-347: SOS Long Fail #2 (Sub System Fail)
- 061-653: SOS Long_H Fail #2 (Record)
- 061-955: SOS Long Fail CycleDown #2 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-101] (Polygon Motor Ready Check Fail 2), DC330 [006-113] (SOS Long Fail 2) ON after turning DC330 [006-008] (ROS LD 2) ON and check each Status Display.

- DC330 [006-101]: OK: Low, NG: High
- DC330 [006-113]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-101] or DC330 [006-113]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JA764(Y) and ROS Assembly (Y) J345Y for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (Y) and SOS PWB J342 (Y).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (Y).

If no problem is found after checking, replace the ROS Assembly (Y). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-008 SOS Long Fail #3

BSD-ON:CH6.7

The interval of the ROS Assy #3 SOS signal is longer than the specified value.

Fault Code

- 061-348: SOS Long Fail #3 (Sub System Fail)
- 061-654: SOS Long_H Fail #3 (Record)
- 061-956: SOS Long Fail CycleDown #3 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-102] (Polygon Motor Ready Check Fail 3), DC330 [006-114] (SOS Long Fail 3) ON after turning DC330 [006-009] (ROS LD 3) ON and check each Status Display.

- DC330 [006-102]: OK: Low, NG: High
- DC330 [006-114]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-102] or DC330 [006-114]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESVDeve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JB764(M) and ROS Assembly (M) J345M for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (M) and SOS PWB J342 (M).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (M).

If no problem is found after checking, replace the ROS Assembly (M). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-009 SOS Long Fail #4

BSD-ON:CH6.9

The interval of the ROS Assy #4 SOS signal is longer than the specified value.

Fault Code

- 061-349: SOS Long Fail #4 (Sub System Fail)
- 061-655: SOS Long_H Fail #4 (Record)
- 061-957: SOS Long Fail CycleDown #4 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-103] (Polygon Motor Ready Check Fail 4), DC330 [006-115] (SOS Long Fail 4) ON after turning DC330 [006-010] (ROS LD 4) ON and check each Status Display.

- DC330 [061-103]: OK: Low, NG: High
- DC330 [061-115]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-103] or DC330 [006-115]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JA764(C) and ROS Assembly (C) J345C for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (C) and SOS PWB J342 (C).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (C).

If no problem is found after checking, replace the ROS Assembly (C). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-010 SOS Long Fail #5

BSD-ON:CH6.11

The interval of the ROS Assy #5 SOS signal is longer than the specified value.

Fault Code

- 061-350: SOS Long Fail #5 (Sub System Fail)
- 061-656: SOS Long_H Fail #5 (Record)
- 061-958: SOS Long Fail CycleDown #5 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-104] (Polygon Motor Ready Check Fail 5), DC330 [006-116] (SOS Long Fail 5) ON after turning DC330 [006-011] (ROS LD 5) ON and check each Status Display.

- DC330 [061-104]: OK: Low, NG: High
- DC330 [061-116]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-104] or DC330 [006-116]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JB764(K) and ROS Assembly (K) J345K for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (K) and SOS PWB J342 (K).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (K).

If no problem is found after checking, replace the ROS Assembly (K). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-011 SOS Long Fail #6

BSD-ON:CH6.13

The interval of the ROS Assy #6 SOS signal is longer than the specified value.

Fault Code

- 061-351: SOS Long Fail #6 (Sub System Fail)
- 061-657: SOS Long_H Fail #6 (Record)
- 061-959: SOS Long Fail CycleDown #6 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-105] (Polygon Motor Ready Check Fail 6), DC330 [006-117] (SOS Long Fail 6) ON after turning DC330 [006-012] (ROS LD 6) ON and check each Status Display.

- DC330 [006-105]: OK: Low, NG: High
- DC330 [006-117]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-105] or DC330 [006-117]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JA764 (#6) and ROS Assembly (#6) J3456 for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#6) and SOS PWB J342 (#6).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#6).

If no problem is found, replace the ROS Assembly (#6). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-012 SOS Short Fail #1

BSD-ON: CH6.3

The interval of the ROS Assy #1 SOS signal is shorter than the specified value.

Fault Code

- 061-352: SOS Short Fail #1 (Sub System Fail)
- 061-658: SOS Short_H Fail #1 (Record)
- 061-960: SOS Short Fail CycleDown #1 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-100] (Polygon Motor Ready Check Fail 1), DC330 [006-118] (SOS Short Fail 1) ON after turning DC330 [006-007] (ROS LD 1) ON and check each Status Display.

- DC330 [006-100]: OK: Low, NG: High
- DC330 [006-118]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-100] or DC330 [006-118]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JB764(#1) and ROS Assembly (#1) J3451 for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#1) and SOS PWB J342 (#1).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#1).

If no problem is found, replace the ROS Assembly (#1). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-013 SOS Short Fail #2

BSD-ON:CH6.5

The interval of the ROS Assy #2 SOS signal is shorter than the specified value.

Fault Code

- 061-353: SOS Short Fail #2 (Sub System Fail)
- 061-659: SOS Short_H Fail #2 (Record)
- 061-961: SOS Short Fail CycleDown #2 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-101] (Polygon Motor Ready Check Fail 2), DC330 [006-119] (SOS Short Fail 2) ON after turning DC330 [006-008] (ROS LD 2) ON and check each Status Display.

- DC330 [006-101]: OK: Low, NG: High
- DC330 [006-119]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-101] or DC330 [006-119]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JA764(Y) and ROS Assembly (Y) J345Y for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (Y) and SOS PWB J342 (Y).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (Y).

If no problem is found after checking, replace the ROS Assembly (Y). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-014 SOS Short Fail #3

BSD-ON:CH6.7

The interval of the ROS Assy #3 SOS signal is shorter than the specified value.

Fault Code

- 061-354: SOS Short Fail #3 (Sub System Fail)
- 061-660: SOS Short_H Fail #3 (Record)
- 061-962: SOS Short Fail CycleDown #3 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-102] (Polygon Motor Ready Check Fail 3), DC330 [006-120] (SOS Short Fail 3) ON after turning DC330 [006-009] (ROS LD 3) ON and check each Status Display.

- DC330 [061-102]: OK: Low, NG: High
- DC330 [061-120]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-102] or DC330 [006-120]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB YM JB764(M) and ROS Assembly (M) J345M for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (M) and SOS PWB J342 (M).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (M).

If no problem is found after checking, replace the ROS Assembly (M). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-CF-015 SOS Short Fail #4

BSD-ON:CH6.9

The interval of the ROS Assy #4 SOS signal is shorter than the specified value.

Fault Code

- 061-355: SOS Short Fail #4 (Sub System Fail)
- 061-661: SOS Short_H Fail #4 (Record)
- 061-963: SOS Short Fail CycleDown #4 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-103] (Polygon Motor Ready Check Fail 4), DC330 [006-121] (SOS Short Fail 4) ON after turning DC330 [006-010] (ROS LD 4) ON and check each Status Display.

- DC330 [061-103]: OK: Low, NG: High
- DC330 [061-121]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-103] or DC330 [006-121]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JA764(C) and ROS Assembly (C) J345C for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (C) and SOS PWB J342 (C).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (C).

If no problem is found after checking, replace the ROS Assembly (C). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

061-CF-016 SOS Short Fail #5

BSD-ON:CH6.11

The interval of the ROS Assy #5 SOS signal is shorter than the specified value.

Fault Code

- 061-356: SOS Short Fail #5 (Sub System Fail)
- 061-662: SOS Short_H Fail #5 (Record)
- 061-964: SOS Short Fail CycleDown #5 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-104] (Polygon Motor Ready Check Fail 5), DC330 [006-122] (SOS Short Fail 5) ON after turning DC330 [006-011] (ROS LD 5) ON and check each Status Display.

- DC330 [006-104]: OK: Low, NG: High
- DC330 [006-122]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-104] or DC330 [006-122]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.1) between Halftone PWB CK JB764(K) and ROS Assembly (K) J345K for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (K) and SOS PWB J342 (K).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (K).

If no problem is found after checking, replace the ROS Assembly (K). (PL 2.1)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-017 SOS Short Fail #6

BSD-ON:CH6.13

The interval of the ROS Assy #6 SOS signal is shorter than the specified value.

Fault Code

- 061-357: SOS Short Fail #6 (Sub System Fail)
- 061-663: SOS Short_H Fail #6 (Record)
- 061-965: SOS Short Fail CycleDown #6 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-105] (Polygon Motor Ready Check Fail 6), DC330 [006-123] (SOS Short Fail 6) ON after turning DC330 [006-012] (ROS LD 6) ON and check each Status Display.

- DC330 [006-105]: OK: Low, NG: High
- DC330 [006-123]: OK: Low, NG: High

Is the Status Display is NG for DC330 [006-105] or DC330 [006-123]?

Y N

Check for poor connection that causes chattering to the circuit of the Front Cover Interlock Switch or High Pressure System (Deve Bias, CC, PCC, 1st BTR, ReC Roll, IR3, 2nd BTB, 2nd BTB DTR/ESV) HVPS electric supply line part abnormality that causes leak or external noise.

Turn OFF the power and check the following:

- ROS Cable (PL 2.2) between Halftone PWB SS JA764 (#6) and ROS Assembly (#6) J3456 for open circuits, short circuits, and poor contacts.
- Open circuit, short circuit or poor connection between LDD PWB J343 (#6) and SOS PWB J342 (#6).
- Open circuit, short circuit, and poor contact between IOT Main PWB J632 and ROS Motor J490 (#6).

If no problem is found, replace the ROS Assembly (#6). (PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

061-CF-018 Polygon Motor Fail #1

BSD-ON:CH6.3

- The number of rotations of the ROS #1 Polygon Motor did not fall within the standard range even after 4sec from Polygon Motor ON.
- The number of rotations of the ROS #1 Polygon Motor fell outside of the standard range during operation.

Fault Code

- 061-364: Polygon Motor Fail #1 (Sub System Fail)
- 061-664: PolygonMotor_H Fail #1 (Record)
- 061-966: PolygonMotor Fail CycleDown #1 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-100] (Polygon Motor Ready Check Fail 1) ON after turning DC330 [006-001] (Polygon Motor Start 1) ON and check the Status Display of DC330 [006-100].

- DC330 [006-100]: OK: Low, NG: High

Is the Status Display of DC330 [006-100] NG?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (#1) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ROS Assembly (#1) (PL 2.2)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

- IOT Main PWB (PL 18.14)

061-CF-019 Polygon Motor Fail #2

BSD-ON:CH6.5

- The number of rotations of the ROS #2 Polygon Motor did not fall within the standard range even after 4sec from Polygon Motor ON.
- The number of rotations of the ROS #2 Polygon Motor fell outside of the standard range during operation.

Fault Code

- 061-365: Polygon Motor Fail #2 (Sub System Fail)
- 061-665: PolygonMotor_H Fail #2 (Record)
- 061-967: PolygonMotor Fail CycleDown #2 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-101] (Polygon Motor Ready Check Fail 2) ON after turning DC330 [006-002] (Polygon Motor Start 2) ON and check the Status Display of DC330 [006-101].

- DC330 [006-101]: OK: Low, NG: High

Is the Status Display of DC330 [006-101] NG?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (Y) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ROS Assembly (Y) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

- IOT Main PWB (PL 18.14)

061-CF-020 Polygon Motor Fail #3

BSD-ON:CH6.7

- The number of rotations of the ROS #3 Polygon Motor did not fall within the standard range even after 4sec from Polygon Motor ON.
- The number of rotations of the ROS #3 Polygon Motor fell outside of the standard range during operation.

Fault Code

- 061-366: Polygon Motor Fail #3 (Sub System Fail)
- 061-666: PolygonMotor_H Fail #3 (Record)
- 061-968: PolygonMotor Fail CycleDown #3 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-102] (Polygon Motor Ready Check Fail 3) ON after turning DC330 [006-003] (Polygon Motor Start 3) ON and check the Status Display of DC330 [006-102].

- DC330 [006-102]: OK: Low, NG: High

Is the Status Display of DC330 [006-102] NG?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (M) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ROS Assembly (M) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-CF-021 Polygon Motor Fail #4

BSD-ON:CH6.9

- The number of rotations of the ROS #4 Polygon Motor did not fall within the standard range even after 4sec from Polygon Motor ON.
- The number of rotations of the ROS #4 Polygon Motor fell outside of the standard range during operation.

Fault Code

- 061-367: Polygon Motor Fail #4 (Sub System Fail)
- 061-667: PolygonMotor_H Fail #4 (Record)
- 061-969: PolygonMotor Fail CycleDown #4 (Device Error)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-103] (Polygon Motor Ready Check Fail 4) ON after turning DC330 [006-004] (Polygon Motor Start 4) ON and check the Status Display of DC330 [006-103].

- DC330 [006-103]: OK: Low, NG: High

Is the Status Display of DC330 [006-103] NG?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (C) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ROS Assembly (C) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

- IOT Main PWB (PL 18.14)

061-CF-022 Polygon Motor Fail #5

BSD-ON:CH6.11

- The number of rotations of the ROS #5 Polygon Motor did not fall within the standard range even after 4sec from Polygon Motor ON.
- The number of rotations of the ROS #5 Polygon Motor fell outside of the standard range during operation.

Fault Code

- 061-368: Polygon Motor Fail #5 (Sub System Fail)
- 061-668: PolygonMotor_H Fail #5 (Record)
- 061-970: PolygonMotor Fail CycleDown #5 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-104] (Polygon Motor Ready Check Fail 5) ON after turning DC330 [006-005] (Polygon Motor Start 5) ON and check the Status Display of DC330 [006-104].

- DC330 [006-104]: OK: Low, NG: High

Is the Status Display of DC330 [006-104] NG?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (K) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ROS Assembly (K) (PL 2.1)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

- IOT Main PWB (PL 18.14)

061-CF-023 Polygon Motor Fail #6

BSD-ON:CH6.13

- The number of rotations of the ROS #6 Polygon Motor did not fall within the standard range even after 4sec from Polygon Motor ON.
- The number of rotations of the ROS #6 Polygon Motor fell outside of the standard range during operation.

Fault Code

- 061-369: Polygon Motor Fail #6 (Sub System Fail)
- 061-669: PolygonMotor_H Fail #6 (Record)
- 061-971: PolygonMotor Fail CycleDown #6 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Procedure

Enter the Diag mode. Turn DC330 [006-105] (Polygon Motor Ready Check Fail 6) ON after turning DC330 [006-006] (Polygon Motor Start 6) ON and check the Status Display of DC330 [006-105].

- DC330 [006-105]: OK: Low, NG: High

Is the Status Display of DC330 [006-105] NG?

Y N

Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.

Turn OFF the power and check the connection between the IOT Main PWB J632 and ROS Motor J490 (#6) for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ROS Assembly (#6) (PL 2.2)

  NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

- IOT Main PWB (PL 18.14)

061-CF-024 ROS VDD Down Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

The ROS VDD signal (LD power supply signal) is in non-conducting state.

Fault Code

- 061-388/389/390/391/392/393: ROS VDD Down Fail #1/#2/#3/#4/#5/#6 (Sub System Fail)
- 061-670/671/672/673/674/675: ROS VDD Down_H Fail #1/#2/#3/#4/#5/#6 (Record)
- 061-972/973/974/975/976/977: ROS VDD Down Fail CycleDown #1/#2/#3/#4/#5/#6 (Device Error)

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check the voltage between the following terminals of the Halftone PWB of the applicable color and GND (+5VDC).
   - JA764-1, 2 (Y/C/#6)
   - JB764-1, 2 (#1/M/K)
2. Check the circuit of the Front Cover Interlock Switch for poor connection that may have caused chattering.
3. If no problem is found after checking, replace the Halftone PWB of the applicable color. (PL 18.13, PL 18.14)

061-CF-025 PLD Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

Communication error between ASIC on Halftone PWB and IOT Main PWB, power supply error to PLD, VCLK error, PLD failure, etc. occurred.

Fault Code

- 061-397/398/399: PLD Fail 23/45/61

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Refer to BSD, and check for poor contact of the Connector (P/J7681 , P/J7682, P/J7683) between Halftone PWB of the applicable color and IOT Main PWB.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
   - IOT Main PWB (PL 18.14)

061-CF-026 ROS I2C Fail

BSD-ON:CH6.4, CH6.6, CH6.8, CH6.10, CH6.12, CH6.2

I2C Communication error in ROS was detected.

Fault Code

- 061-376/377/378/379/380/381: ROS I2C Fail 2/3/4/5/6/1

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Refer to BSD and check the following:
   - ROS Cable (PL 2.1, PL 2.2) between Halftone PWB of the applicable color and ROS Assembly for open circuits, short circuits, and poor contacts.
   - Flat Cable (PL 2.3) of ROS Assembly of the applicable color for open circuits, short circuits, and poor contacts.
   - Poor contact of the Connector (P/J7681) between Halftone PWB and IOT Main PWB.
2. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Halftone PWB (PL 18.13, PL 18.14) of the applicable color
   - ROS Assembly (PL 2.1, PL 2.2) of the applicable color

   NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (*REP 2.1.1*)*

071-CF-001 Tray 1 Blower Fail

BSD-ON:CH7.15, CH7.16, CH7.19

Blower Fan of Tray 1 has stopped.

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Fault Code

- 071-212: Tray 1 Lead Blower Fail
- 071-213: Tray 1 End Blower Fail
- 071-214: Tray 1 Front Blower Fail
- 071-215: Tray 1 Rear Blower Fail

Cause/Action

1. Check the applicable Fan for operation failure.
   - Tray 1 Lead Blower Fan (DC330 [007-013]) (PL 10.11)
   - Tray 1 End Blower Fan (DC330 [007-016]) (PL 10.11)
   - Tray 1 Front Blower Fan (DC330 [007-019]) (PL 10.5)
   - Tray 1 Rear Blower Fan (DC330 [007-022]) (PL 10.5)
2. Check the applicable Fan for foreign substances.
3. If no problem are found, replace the PH_1 MD PWB. (PL 18.2)

072-CF-001 Tray 2 Blower Fail

BSD-ON:CH7.17, CH7.18, CH7.20

Blower Fan of Tray 2 has stopped.

NOTE: *Refer to BSD* CH1.83 *for the output of DC power supply during Fail occurrence.*

Fault Code

- 072-212: Tray 2 Lead Blower Fail
- 072-213: Tray 2 End Blower Fail
- 072-214: Tray 2 Front Blower Fail
- 072-215: Tray 2 Rear Blower Fail

Cause/Action

1. Check the applicable Fan for operation failure.
   - Tray 2 Lead Blower Fan (DC330 [007-041]) (PL 10.11)
   - Tray 2 End Blower Fan (DC330 [007-044]) (PL 10.11)
   - Tray 2 Front Blower Fan (DC330 [007-047]) (PL 10.5)
   - Tray 2 Rear Blower Fan (DC330 [007-050]) (PL 10.5)
2. Check the applicable Fan for foreign substances.
3. If no problem are found, replace the PH_2 MD PWB. (PL 18.2)

089-CF-001 IRECT Error Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

- Detected insufficient Input Data (UnderRun) on the Controller regarding the Output Data to ROS.
- IRECT Memory error has occurred.

Fault Code

- 089-310/311/312/313/314/315: IRECT Error Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn the Power OFF and unplug and plug in the applicable color CDI Cable Connector between the Halftone PWB and external Controller.
3. Check to see that there is no foreign matter on Halftone PWB of the applicable color.
4. Perform [DC685: Regi Con/Setup Cycle].
5. If the problem persists, contact the Support Department and get instructions.

089-CF-002 ReC LED Fail

BSD-ON:CH6.14, CH6.15, CH6.16

ReC Sensor error was detected. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 089-600: ReC LED Fail-In
- 089-601: ReC LED Fail-Center
- 089-602: ReC LED Fail-Out

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

Procedure

Refer to BSD, and check the connection between the IOT Main PWB J631 and the applicable ReC Sensor for disconnection, open circuit, short circuit or poor contact. **Is the connection normal?**

Y N

Correctly perform connection from the IOT Main PWB J631 to the applicable ReC Sensor.

Check the IBT Belt at the applicable ReC Sensor position for damage and distortion. **Is the IBT Belt normal?**

Y N

Replace the IBT Belt. (PL 6.3)

A

Check if there is any foreign matter, scratches or deformation on the Magnet Roll of the Developer. **Is the Magnet Roll normal?**

Y N

If there is foreign matter, remove it. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- Developer of the applicable color (PL 5.2)
- Developer Housing Assembly (PL 5.8) of the applicable color

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

Is smear occurring on the whole IBT Belt?

Y N

Check if the Waste Toner has overflown in the vicinity of IBT Belt Cleaner Edge part and fallen on the IBT Belt. **Is there any Waste Toner fallen on the IBT Belt?**

Y N

Clean the IBT Belt Cleaner Assembly. If the problem persists, replace the IBT Belt Cleaner Assembly. (PL 6.2)

Replace the ReC/ADC Sensor Assembly (PL 18.6). After replacement, perform [DC685: Regi Con/Setup Cycle].

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring.

- Developer of the applicable color (PL 5.2)
- Drum Cartridge (PL 5.2) of the applicable color

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

A

089-CF-003 RC Sample Block Fail-B

BSD-ON:CH6.14, CH6.15, CH6.16

ReC Sensor In (Rear Side), Center or Out (Front Side) Patch did not meet the specified enabled Sample Block count during B (Rough Tone Pattern) Patch detection of each color. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 089-603/606/609/612/615/618: RC Sample Block Fail-B-In (#1/#2/#3/#4/#5/#6)
- 089-604/607/610/613/616/619: RC Sample Block Fail-B-Center (#1/#2/#3/#4/#5/#6)
- 089-605/608/611/614/617/620: RC Sample Block Fail-B-Out (#1/#2/#3/#4/#5/#6)

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

Procedure

Printout the Test Pattern [Procon_PG (Pattern No. 380/381)] in [Test Pattern Print] with [DC612: Test Pattern Print], and check the density status of the color which the Fail is occurring. **Is the density of the color normal?**

Y N

Perform adjustment of the applicable color. Perform [DC685: Regi Con/Setup Cycle] after adjustment.

Remove the ReC/ADC Sensor Assembly and check the ReC Sensor for any contamination. **Is the ReC Sensor contaminated?**

Y N

Clean the ReC Sensor. Perform [DC685: RegCon Setup Cycle] after cleaning.

Refer to BSD, and check the connection between the IOT Main PWB J631 and the applicable ReC Sensor for disconnection, open circuit, short circuit or poor contact. **Is the connection normal?**

Y N

Correctly perform connection from the IOT Main PWB J631 to the applicable ReC Sensor. Perform [DC685: RegCon Setup Cycle] after connecting.

Check if there is any contamination or scratch on the IBT Belt. **Is the IBT Belt normal?**

Y N

If the IBT Belt is contaminated with the Toner or Paper Dust, clean the IBT Belt. Perform [DC685: RegCon Setup Cycle] after cleaning.
If the problem persists, replace the IBT Belt (PL 6.3). After replacement, perform [DC685: Regi Con/Setup Cycle].

Replace the following part in sequence. After replacement, perform [DC685: Regi Con Setup Cycle], and check for Fail occurrence of each replaced part. Also, return part that are free of problem.

- ReC/ADC Sensor Assembly (PL 18.6)
- IOT Main PWB (PL 18.14)

089-CF-004 RC Sample Block Fail-A1

BSD-ON:CH6.14, CH6.15, CH6.16

ReC Sensor In (Rear Side) or Out (Front Side) Patch did not meet the specified enabled Sample Block count during A1 (Fine Tone Pattern), C Patch detection. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 089-622: RC Sample Block Fail-A1-In
- 089-623: RC Sample Block Fail-A1-Center
- 089-624: RC Sample Block Fail-A1-Out

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

Procedure

Printout the Test Pattern [Procon_PG (Pattern No. 380/381)] in [Test Pattern Print] with [DC612: Test Pattern Print], and check the density status of the color which the Fail is occurring. **Is the density of the color normal?**

Y N

Perform adjustment of the applicable color. Perform [DC685: Regi Con/Setup Cycle] after adjustment.

Perform [DC681: Regi Measurement Cycle]. **Is the Process AC Shift Amount of the applicable ReC Sensor OK?**

Y N

Check for Drive abnormality of the Drum Cartridge.

NOTE: *If the Process AC Shift Amount here is NG, also check the graph display to make the Drum cycle (11-sample cycle) color registration deviation a guide of abnormality. In addition, there is a possibility that there is no problem with Drive Abnormality Check of the Drum Cartridge.*

Is the Lateral AC Shift Amount OK for the applicable ReC Sensor?

Y N

Check for IBT Belt Walk Skew Abnormality.

Remove the ReC/ADC Sensor Assembly and check the ReC Sensor for any contamination. **Is the ReC Sensor contaminated?**

Y N

Clean the ReC Sensor. Perform [DC685: RegCon Setup Cycle] after cleaning.

Refer to BSD, and check the connection between the IOT Main PWB J631 and the applicable ReC Sensor for disconnection, open circuit, short circuit or poor contact. **Is the connection normal?**

Y N

Correctly perform connection from the IOT Main PWB J631 to the applicable ReC Sensor. Perform [DC685: RegCon Setup Cycle] after connecting.

Check if there is any contamination or scratch on the IBT Belt. **Is the IBT Belt normal?**

Y N

If the IBT Belt is contaminated with the Toner or Paper Dust, clean the IBT Belt. Perform [DC685: RegCon Setup Cycle] after cleaning.
If the problem persists, replace the IBT Belt (PL 6.3). After replacement, perform [DC685: Regi Con/ Setup Cycle].

Replace the following part in sequence. After replacement, perform [DC685: Regi Con Setup Cycle], and check for Fail occurrence of each replaced part. Also, return part that are free of problem.

- ReC/ADC Sensor Assembly (PL 18.6)
- IOT Main PWB (PL 18.14)

089-CF-005 RC Sample Block Fail-D3

BSD-ON:CH6.14, CH6.15, CH6.16

ReC Sensor In (Rear Side), Center or Out (Front Side) Patch did not meet the specified enabled Sample Block count during D3 (Real Time Regi Con Pattern) Patch detection. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 089-626: RC Sample Block Fail-D3-In
- 089-627: RC Sample Block Fail-D3-Center
- 089-628: RC Sample Block Fail-D3-Out

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

Procedure

Printout the Test Pattern [Procon_PG (Pattern No. 380/381)] in [Test Pattern Print] with [DC612: Test Pattern Print], and check the density status of the color which the Fail is occurring. **Is the density of the color normal?**

Y N

Perform adjustment of the applicable color. Perform [DC685: Regi Con/Setup Cycle] after adjustment.

Perform [DC681: Regi Measurement Cycle]. **Is the Process AC Shift Amount of the applicable ReC Sensor OK?**

Y N

Check for Drive abnormality of the Drum Cartridge.

NOTE: *If the Process AC Shift Amount here is NG, also check the graph display to make the Drum cycle (11-sample cycle) color registration deviation a guide of abnormality. In addition, there is a possibility that there is no problem with Drive Abnormality Check of the Drum Cartridge.*

Is the Lateral AC Shift Amount OK for the applicable ReC Sensor?

Y N

Check for IBT Belt Walk Skew Abnormality.

Remove the ReC/ADC Sensor Assembly and check the ReC Sensor for any contamination. **Is the ReC Sensor contaminated?**

Y N

Clean the ReC Sensor. Perform [DC685: RegCon Setup Cycle] after cleaning.

Refer to BSD, and check the connection between the IOT Main PWB J631 and the applicable ReC Sensor for disconnection, open circuit, short circuit or poor contact. **Is the connection normal?**

Y N

Correctly perform connection from the IOT Main PWB J631 to the applicable ReC Sensor. Perform [DC685: RegCon Setup Cycle] after connecting.

Check if there is any contamination or scratch on the IBT Belt. **Is the IBT Belt normal?**

Y **N**

If the IBT Belt is contaminated with the Toner or Paper Dust, clean the IBT Belt. Perform [DC685: RegCon Setup Cycle] after cleaning.
If the problem persists, replace the IBT Belt (PL 6.3). After replacement, perform [DC685: Regi Con/ Setup Cycle].

Replace the following part in sequence. After replacement, perform [DC685: Regi Con Setup Cycle], and check for Fail occurrence of each replaced part. Also, return part that are free of problem.

- ReC/ADC Sensor Assembly (PL 18.6)
- IOT Main PWB (PL 18.14)

089-CF-006 RC Linearlity Data Over Range Fail

BSD-ON:CH6.14

The result from adding the linearity correction value to the correction amount in the horizontal scanning direction has exceeded the settable range. (This is a hidden failure. The Color Regi Spec cannot be guaranteed and Data is only recorded in history.)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 089-633/634/635/636/637/638: RC Linearlity Data Over Range Fail (#1/#2/#3/#4/#5/#6)

NOTE: *When multiple failures of Chain No. 089 (Regi Con) occur, refer to the Note in 089-621 FIP and take action starting with the Fail that is highest in priority order.*

Procedure

Change the Value of NVM [756-898 to 756-909] to the following Value (Default value of the ROS Bar Code Data).

- NVM [756-898 to 756-903]: 50505050
- NVM [756-904 to 756-909]: 5050

Perform [DC685: Regi Con/Setup Cycle]. **Does the Fail occur?**

Y **N**

Enter the Bar Code Data of the sticker attached to the upper section of the ROS Assembly to NVM [756-898 to 903], NVM [756-904 to 909].
Perform [DC685: Regi Con/Setup Cycle]. **Does the Fail occur?**

Y **N**

End

Replace the ROS Assembly of the color for which Fail occurred. (PL 2.1, PL 2.2)

NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*

Replace the IOT Main PWB. (PL 18.4)

091-CF-001 CC HVPS Broken Fail

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

CC HVPS failure was detected.

Fault Code

- 091-310/311/312/313/314/315: CC HVPS Broken Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power, and check the cable between CC HVPS of the applicable color (J586_H1(#1)/ J586_H2(Y)/ J586_H3(M)/ J586_H4(C)/ J586_H5(K)/ J586_H6(#6)) and MK_ EPG Core PWB J645_X, J651_X for open circuit, short circuit, and poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - CC HVPS (PL 18.4) of the applicable color
   - MK_EPG Core PWB (PL 18.3)

091-CF-002 CC Cleaner Motor Fail

BSD-ON:CH1.28, CH9.65, CH9.66, CH9.67

It was detected that the CC Cleaner operation did not start normally or did not end normally within the specified time.

Fault Code

- 091-317/318/319/320/321/322: CC Cleaner Motor Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Install the CC Assembly of the applicable color properly.
2. Check the CC Interlock Switch of the applicable color (DC330 [009-150/151/152/153/154/155] (#1/#2/#3/#4/#5/#6)) for operation failure and installation status. (PL 5.7)
3. Check the CC Cleaner Motor of the applicable color (DC330 [009-077/078/079/080/081/082] (#1/#2/#3/#4/#5/#6)) for operation failure. (PL 8.5, PL 8.2)
4. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - MK_EPG 1 MD PWB (PL 18.3)
   - MK_EPG 2 MD PWB (PL 18.3)
   - MK_EPG Core PWB (PL 18.3)

091-CF-003 CC Pre Near Life

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

Preparation for replacing the CC Assembly is required.

Fault Code

- 091-400/401/402/403/404/405: CC Pre Near Life #1/#2/#3/#4/#5/#6

Cause/Action

The applicable CC Assembly needs to be replaced soon. Prepare a new CC Assembly. Also, replace the CC Assembly as required. (PL 5.2)

091-CF-004 CC Near Life

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

The replacement period of the CC Assembly is approaching.

Fault Code

- 091-406/407/408/409/410/411: CC Near Life #1/#2/#3/#4/#5/#6

Cause/Action

The applicable CC Assembly needs to be replaced soon. Replace the CC Assembly as required. (PL 5.2)

091-CF-005 CC Life Over/Life End

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

It is time to replace the CC Assembly.

Fault Code

- 091-412/413/414/415/416/417: CC Life Over #1/#2/#3/#4/#5/#6
- 091-928/929/930/931/932/933: CC Life End #1/#2/#3/#4/#5/#6

Cause/Action

Replace the applicable CC Assembly. (PL 5.2)

091-CF-006 Drum Pre Near Life

BSD-ON:CH9.1, CH9.2, CH9.3, CH9.4

Preparation for replacing the Drum Cartridge is required.

Fault Code

- 091-418/419/420/421/422/423: Drum Pre Near Life #1/#2/#3/#4/#5/#6

Cause/Action

The applicable Drum Cartridge needs to be replaced soon. Prepare a new Drum Cartridge. Replace the Drum Cartridge as required. (PL 5.2)

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

091-CF-007 Drum Near Life

BSD-ON:CH9.1, CH9.2, CH9.3, CH9.4

The Drum Cartridge needs to be replaced soon.

Fault Code

- 091-424/425/426/427/428/429: Drum Near Life #1/#2/#3/#4/#5/#6

Cause/Action

The applicable Drum Cartridge needs to be replaced soon. Replace the Drum Cartridge as required. (PL 5.2)

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

091-CF-008 Drum Life Over/Life End

BSD-ON:CH9.1, CH9.2, CH9.3, CH9.4

The Drum Cartridge must be replaced.

Fault Code

- 091-430/431/432/433/434/435: Drum Life Over #1/#2/#3/#4/#5/#6
- 091-934/935/936/937/938/939: Drum Life End #1/#2/#3/#4/#5/#6

Cause/Action

Replace the applicable Drum Cartridge. (PL 5.2)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

091-CF-009 CC or CC Cleaner Not Position

BSD-ON:CH1.28

The CC Assembly is not installed in the specified location or the position of the CC Cleaner is not the Home Position.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 091-910/911/912/913/914/915: CC or CC Cleaner Not Position #1/#2/#3/#4/#5/#6

Cause/Action

1. Turn the power OFF and ON.
2. Install the applicable CC Assembly properly.
3. If the problem persists, check the applicable CC Interlock Switch (DC330 [009-150/151/152/153/154/155] (#1/#2/#3/#4/#5/#6)) for operation failure and installation status. (PL 5.7)
4. If no problem are found, replace the MK_EPG 1 MD PWB. (PL 18.3)

091-CF-010 Drum CRUM Not Position

BSD-ON:CH9.1, CH9.2, CH9.3, CH9.4

The Drum CRUM is not in the proper position (loose CRUM).

Fault Code

- 091-916/917/918/919/920/921: Drum CRUM Not Position #1/#2/#3/#4/#5/#6

Cause/Action

1. Turn the power OFF and ON.
2. Turn OFF the power. Remove and reinstall the Drum Cartridge of the applicable color.
3. Check whether the Drum CRUM of the applicable color is installed at the correct position.
4. If no problem is found, replace the Drum Cartridge of the applicable color. (PL 5.2)

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

091-CF-011 CC Wire Cut Fail

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

Open circuit of the CC Wire of CC Assembly was detected.

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fault Code

- 091-922/923/924/925/926/927: CC Wire Cut Fail #1/#2/#3/#4/#5/#6

Cause/Action

Turn OFF the power and check the following:

- Poor contact of CC HVPS CC1, CC2 of the applicable color
- Turn OFF the power, and check the cable between CC HVPS of the applicable color (J586_H1, J586_H2, J586_H3, J586_H4, J586_H5, J586_H6) and MK EPG Core PWB J645_X for open circuit, short circuit, and poor contact.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- CC Kit (PL 5.2) of the applicable color
- CC HVPS (PL 18.4) of the applicable color
- MK EPG Core PWB (PL 18.3)

092-CF-001 VH Charge Check Fail

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

Any of the following errors was detected:

- ESV Sensor fault or electrical system fault
- Scorotron error.
- Potential error on Drum

Fault Code

- 092-310/311/312/313/314/315: VH Charge Check Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

When this Fail occurs, there is a high possibility of a defect occurring due to a potential abnormality on the drum, and printing can not be performed.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 093-316 to 321: ESV Sensor Fail #1 to #6

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ESV Sensor	High	ESV Sensor failure
2	Charge Corotron	High	Charge Corotron scratched, contamination, or it is time for replacement
3	MK_DRV ADC PWB	Medium	Abnormality in ESV Sensor electrical system
4	DST 1 (IOT-L) PWB	Medium	Abnormality in ESV Sensor electrical system
5	LVPS H1U	Low	Abnormality in ESV Sensor power supply
6	HVPS (Charge Corotron)	Low	Voltage application to Charge Corotron failure
7	Replace the Drum Cartridge	Low	Drum scratched, contamination, or it is time for replacement.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Turn OFF the power and check the following:

- ESV Sensor of the applicable Engine for contamination, scratches
- Charge Corotron mesh or wire of applicable Engine for contamination, scratches
- Drum Cartridge of the applicable Engine for installation failure and scratches

Are there any dirt, scratches, and installation failure of the corresponding part?

Y **N**

Perform the following:

- If the ESV Sensor is dirty or scratched, replace the ESV Sensor. (PL 5.7)
- If the Charge Corotron mesh or wire is dirty, perform operations such as Charge Corotron Cleaning to clean it.
- If the Charge Corotron mesh or wire is scratched, replace the Charge Corotron. (PL 5.14)
- If the Drum Cartridge is scratched, replace the Drum Cartridge. (PL 5.2)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

Refer to BSD and check the following connections for open circuits, short circuits, and poor contacts.

- Between MK_DRV ADC PWB J724 or J723 and the ESV Sensor PWB of the applicable Engine
- Between DST 1 (IOT-L) J1120 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ESV Sensor (PL 5.7) of the applicable color
- MK_DRV ADC PWB (PL 18.3)

Turn ON the power. **Does the Fail occur?**

Y **N**

The procedure is complete if Fail does not occur after powering Off/On and executing several times.

NOTE: *If Fail occurs, return to one previous procedure.*

Perform the following:

- If there is image unevenness, replace the Drum Cartridge of the applicable color. (PL 5.2)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- There is a possibility of Charge Corotron HVPS abnormality. Check for short circuit, half connection, and if there is no problem, replace the Charge Corotron HVPS of the applicable color. (PL 18.5, PL 18.4)
- Since there is a possibility of GND failure between Drum Shaft and Drum Cartridge, check whether GND failure has occurred.

Turn the power OFF and ON. **Does the Fail occur?**

Y **N**

End

Replace the part in the [Related Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

092-CF-002 ESV Sensor Fail

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

Any one of the following errors has occurred.

- ESV Sensor fault or electrical system fault
- Potential error on Photoreceptor
- Charging and exposure error

Fault Code

- 092-316/317/318/319/320/321: ESV Sensor Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

When this Fail occurs, there is a possibility that the potential on the drum is not normally controlled due to ESV Sensor failure, and printing can not be performed. In addition, when the electric system is abnormal (FUSE blown), there is a possibility that the output of other sensors becomes abnormal.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 061-xxx: ROS System Fail

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ESV Sensor	High	ESV Sensor failure
2	MK_DRV ADC PWB	Low	Abnormality in ESV Sensor electrical system
3	DST 1 (IOT-L) PWB	Low	Abnormality in ESV Sensor electrical system
4	LVPS H1U	Low	Abnormality in ESV Sensor power supply
5	Charge Corotron	Low	Charge Corotron scratched, contamination, or it is time for replacement
6	Replace the Drum Cartridge	Low	Patch is light due to deterioration of the Drum.
7	ROS Unit	Low	Poor lighting due to contamination of ROS
8	HVPS (Charge Corotron)	Low	Voltage application to Charge Corotron failure

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Turn OFF the power. Refer to BSD and check the following connections for open circuits, short circuits, and poor contacts.

- Between MK_DRV ADC PWB J724 or J723 and the ESV Sensor PWB of the applicable Engine
- Between DST 1 (IOT-L) J1120 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. After replacement, perform [Procon Setup] of [DC938: PROCON CHECK], and check for Fail occurrence of each replaced part. Also, return part that are free of problem.

- ESV Sensor (PL 5.7) of the applicable color
- MK_DRV ADC PWB (PL 18.3)
- DST 1 (IOT-L) PWB (PL 18.11)

Does the Fail occur?

Y **N**

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Perform the following:

- Check if the Charge Corotron mesh or wire of the applicable color is dirty, perform operations such as Charge Corotron Cleaning to clean it. If there is Charge Corotron Cleaner operation failure, or disconnection of wire, etc., replace the Charge Corotron. (PL 5.14)
- If there is image unevenness, replace the Drum Cartridge of the applicable color. (PL 5.2)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- Clean the ROS Assembly seal glass of the applicable color. If the image unevenness occurs, replace the ROS Assembly. (PL 2.1, PL 2.2)
- There is a possibility of Charge Corotron HVPS abnormality. Check for short circuit, half connection, and if there is no problem, replace the Charge Corotron HVPS of the applicable color. (PL 18.4, PL 18.5)
- Since there is a possibility of GND failure between Drum Shaft and Drum Cartridge, check whether GND failure has occurred.

Execute [Procon Setup]. **Does the Fail occur?**

Y **N**

End

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

092-CF-003 Polygon Motor SOS Rotate Fail

BSD-ON:CH6.3, CH6.5, CH6.7, CH6.9, CH6.11, CH6.13

Polygon Motor detected that switching to SOS rotation was not possible.

Fault Code

- 092-350/351/352/353/354/355: Polygon Motor SOS Rotate Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Refer to BSD, and check the connections between the IOT Main PWB J632 and the ROS Assembly of the applicable color (P7021(#1)/ P7022(Y)/ J7023(M)/ J7024(C)/ J7025(K)/ J7026(#6)) for open circuits, short circuits, and poor contacts. ,
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Corresponding color ROS Assembly (PL 2.1, PL 2.2)

     NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*
   - IOT Main PWB (PL 18.14)

092-CF-004 FGSEL Fail

BSD-ON:CH6.3, CH6.5, CH6.7, CH6.9, CH6.11, CH6.13

It was detected that the SOS phase difference has deviated by more than the specified value due to ROS factors.

Fault Code

- 092-356/357/358/359/360/361: FGSEL Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Refer to BSD, and check the connection between the IOT Main PWB J632 and the ROS Assembly P702 of the applicable color for disconnection, open circuit, short circuit or poor contact.
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - Corresponding color ROS Assembly (PL 2.1, PL 2.2)

     NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*
   - IOT Main PWB (PL 18.14)

092-CF-005 ROS Connect Fail

BSD-ON:CH6.2, CH6.4, CH6.6, CH6.8, CH6.10, CH6.12

Detected connection error between LDD PWB (ROS Assy) and Halftone PWB.

Fault Code

- 092-362/363/364/365/366/367: ROS Connect Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Refer to BSD and check the following:
   - ROS Cable (PL 2.1, PL 2.2) between Halftone PWB of the applicable color and ROS Assembly.
   - Flat Cable of ROS Assembly of the applicable color for open circuits, short circuits, and poor contacts.
   - If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
     – Corresponding color ROS Assembly (PL 2.1, PL 2.2)

       NOTE: *Register the Number on the ROS Data Sticker to NVM after replacing the ROS Assembly. (REP 2.1.1)*
     – Halftone PWB (PL 18.13, PL 18.14) of the applicable color

092-CF-006 Mini Setup ADC Patch Fail

BSD-ON:CH9.57

The difference between the measured values of the 2 patches that changed the density level created during Procon Setup (MiniSetup/1st MidSetup/2nd MidSetup) is small or their relationship is reversed.

Fault Code

- 092-606/607/608/609/610/611: Mini Setup ADC Patch Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the Image Density Control that uses the ADC Sensor output is not refreshed only for the applicable color when the above Fail occurs, image density error (too dark, too light) might occur. However, as the Toner Density Control that uses the ATC Sensor is operating as usual, the Toner density in the Developer is maintained at the appropriate level. As long as there is no density related image problem in the output image and the Fail does not reoccur after checking for Fail occurrence multiple times, no further action is required.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-310 to 315: VH Charge Check Fail #1 to #6
- 092-316 to 321: ESV Sensor Fail #1 to #6
- 092-642/643: ADC AGC Fail #1/#2
- 092-644/645: ADC Vclean Fail #1/#2
- 092-646 to 649: Temperature/Humidity Sensor Fail #1/#2
- 092-650 to 655: ATC Average Fail #1 to #6
- 092-656 to 661: ATC Amplitude Fail #1 to #6
- 092-662 to 667: ESV VH Fail #1 to #6
- 092-668 to 685: ESV Vcont VH4/VH5/VH6 Fail #1 to #6
- 061-xxx: ROS System Fail
- 089-xxx: Regi Con System Fail
- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 093-406 to 411: Toner Near Empry #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Uneven density in surface -> the patch density has changed due to creation position.
- The density is close to a blank print or blank paper, or a particular color is light -> Patch is light.
- White/off-color areas, streaks at the FS (vertical) direction center section -> patch position image is light, the patch is also light
- White/Color fading/Streaks/Parts fading in SS (horizontal) direction -> The Patch on the position where the image is light is light as well
- Carry over (rough print)/Toner fogging -> Falsely detected that the Patch is light because the IBT ground color is detected dark

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ReC ADC Sensor Assembly	High	ADC Sensor failure/Assy Connector, Harness error
2	IOT Main PWB	Low	Abnormality in ADC Sensor electrical system
3	MK_DRV ADC PWB	Low	Abnormality in ADC Sensor electrical system
4	LED Power PWB	Low	Abnormality in ADC Sensor electrical system
5	LVPS H1U	Low	Abnormality in ADC Sensor power supply
6	IBT Belt	Low	Abnormality in reflection output due to contamination, scratches, etc. of IBT Belt
7	IBT Cleaner	Low	It was detected that the Patch is light due to contamination of the IBT Belt
8	Toner Cartridge	Low	Patch is light due to shortage in the Toner
9	Replace the Drum Cartridge	Low	Patch is light due to deterioration of the Drum
10	Charge Corotron	Low	Patch is light due to contamination of the Charge Corotron
11	ROS Assembly	Low	Patch is light due to the contamination of ROS or lack of intensity
12	Replace the 1st BTR Unit	Low	Image is light due to Retract Operation failure of 1st BTR or the patch is light due to contamination of 1st BTR
13	Deve Unit (Developer Housing Assembly)	Low	Patch is light due to eccentric rotation or MOS failure
14	HVPS (Charge Corotron)	Low	Patch is light due to application malfunction
15	HVPS (Deve)	Low	Patch is light due to application malfunction
16	HVPS (1st BTR)	Low	Patch is light due to application malfunction
17	Dispense Unit	Low	Patch is light due to Toner supply malfunction
18	ATC Sensor	Low	Patch is light due to ATC Sensor abnormality.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup].
Select [Fail occurrence state] from the process control value on the screen.

Check the items, [ADC AGC Fail], [ADC Vclean Fail], [ATC Average Fail], [ATC Amplitude Fail], [Temperature Sensor Fail], [Humidity Sensor Fail], [VH Charge Check Fail], [ESV Vcont VH4 Fail], [ESV Vcont VH5 Fail], and [ESV Vcont VH6 Fail] of the applicable color. **Is there NG in any item?**

Y N

Select [ADC Potential Patch Density Value (Uncoated/Coated)] from Procon Monitor Value on the screen, and check the value of [ADC Min 2 Uncoated] for the applicable color. **Is the value lower than 35?**

Y N

Is there any abnormality in print density?

Y N

Enter [DC612: Color Test Pattern Print], and obtain Cin80% Halftone of the applicable color. **Has any uneven density occurred in SS direction?**

Y N

There is a possibility that the ADC Sensor measurement value is abnormal. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ReC ADC Sensor Assembly (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Uneven density is the cause. Proceed to the applicable image quality FIP, and perform the corrective action.

Perform the following:

- First, take care of any problem that falls under [Image problem that must be resolved first].
- Check the Toner Cartridge of the applicable color for presence of Toner. If there is no Toner in it, replace the Toner Cartridge. (PL 5.1)
- For the applicable color, check the Charge Corotron or the FS direction center section of the Drum for contamination, foreign matter, damage, etc. If there is any contamination, foreign matter, damage, etc., replace the Drum Cartridge. (PL 5.2)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (*ADJ 20.1.6*) for the applicable color.*

- If the Toner is low at the FS direction center section on the Developer Housing Mag Roll of the applicable color, or the Toner remains low even after rotating the Gear, replace the Developer Housing Assembly. (PL 5.8)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (*ADJ 20.1.6*) for the applicable color.*

- Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.

A B

- Check the ROS Assembly of the applicable color for contamination. If it is contaminated, clean or replace the ROS Assembly. (PL 2.1, PL 2.2)
- Check the harness, leaf spring, etc. of each HVPS (CC, Deve, 1st BTR) of the applicable color for open circuit, short circuit, and poor contact.

Is the Fail cleared?

Y N

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

End

This Fail may likely occur when there is a temporary darkening of image density. No action necessary.

Proceed to the corresponding FIP to repair it.

A B

092-CF-007 Mini Setup ADC TRC Patch Fail Uncoated

BSD-ON:CH9.57

The density of the lowest Cin and the highest Cin patch in 20 gradation patches for gradation control of uncoated paper is not within a certain threshold.

Fault Code

- 092-612/613/614/615/616/617: Mini Setup ADC TRC Patch Fail Uncoated #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the Image Density Control that uses the ADC Sensor output is not refreshed only for the applicable color when the above Fail occurs, image density error (too dark, too light) might occur. However, as the Toner Density Control that uses the ATC Sensor is operating as usual, the Toner density in the Developer is maintained at the appropriate level. As long as there is no density related image problem in the output image and the Fail does not reoccur after checking for Fail occurrence multiple times, no further action is required.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-310 to 315: VH Charge Check Fail #1 to #6
- 092-316 to 321: ESV Sensor Fail #1 to #6
- 092-606 to 611: Mini Setup ADC Patch Fail #1 to #6
- 092-642/643: ADC AGC Fail #1/#2
- 092-644/645: ADC Vclean Fail #1/#2
- 092-646 to 649: Temperature/Humidity Sensor Fail #1/#2
- 092-650 to 655: ATC Average Fail #1 to #6
- 092-656 to 661: ATC Amplitude Fail #1 to #6
- 092-662 to 667: ESV VH Fail #1 to #6
- 092-668 to 685: ESV Vcont VH4/VH5/VH6 Fail #1 to #6
- 061-xxx: ROS System Fail
- 089-xxx: Regi Con System Fail
- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 093-406 to 411: Toner Near Empry #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Uneven density in surface -> the patch density has changed due to creation position.
- The density is close to a blank print or blank paper, or a particular color is light -> Patch is light.
- White/off-color areas, streaks at the FS (vertical) direction center section -> patch position image is light, the patch is also light
- White/Color fading/Streaks/Parts fading in SS (horizontal) direction -> The Patch on the position where the image is light is light as well
- Carry over (rough print)/Toner fogging -> Falsely detected that the Patch is light because the IBT ground color is detected dark

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ReC ADC Sensor Assembly	High	ADC Sensor failure/Assy Connector, Harness error
2	IOT Main PWB	Low	Abnormality in ADC Sensor electrical system
3	MK_DRV ADC PWB	Low	Abnormality in ADC Sensor electrical system
4	LED Power PWB	Low	Abnormality in ADC Sensor electrical system
5	LVPS H1U	Low	Abnormality in ADC Sensor power supply
6	IBT Belt	Low	Abnormality in reflection output due to contamination, scratches, etc. of IBT Belt
7	IBT Cleaner	Low	It was detected that the Patch is light due to contamination of the IBT Belt
8	Toner Cartridge	Low	Patch is light due to shortage in the Toner
9	Replace the Drum Cartridge	Low	Patch is light due to deterioration of the Drum
10	Charge Corotron	Low	Patch is light due to contamination of the Charge Corotron
11	ROS Assembly	Low	Patch is light due to the contamination of ROS or lack of intensity
12	Replace the 1st BTR Unit	Low	Image is light due to Retract Operation failure of 1st BTR or the patch is light due to contamination of 1st BTR
13	Deve Unit (Developer Housing Assembly)	Low	Patch is light due to eccentric rotation or MOS failure
14	HVPS (Charge Corotron)	Low	Patch is light due to application malfunction
15	HVPS (Deve)	Low	Patch is light due to application malfunction
16	HVPS (1st BTR)	Low	Patch is light due to application malfunction
17	Dispense Unit	Low	Patch is light due to Toner supply malfunction
18	ATC Sensor	Low	Patch is light due to ATC Sensor abnormality.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup].
Select [Fail occurrence state] from the process control value on the screen.

Check the items, [ADC AGC Fail], [ADC Vclean Fail], [ATC Average Fail], [ATC Amplitude Fail], [Temperature Sensor Fail], [Humidity Sensor Fail], [VH Charge Check Fail], [ESV Vcont VH4 Fail], [ESV Vcont VH5 Fail], and [ESV Vcont VH6 Fail] of the applicable color. **Is there NG in any item?**

Y N

Check [Mini Setup ADC TRC Patch Fail Uncoated] of the applicable color. **Is the display NG?**

Y N

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Perform the following:

- After executing [Procon Setup], execute [Check PG]. Overall low density of output images.
- Enter [DC 612: Color Test Pattern Print], and white spot occurs in the FS direction facing the Rear ADC Sensor and the Front ADC Sensor in the halftone of the applicable color.

Does it apply to any?

Y N

Only the ADC patch may be detected to be light. Check the IBT Belt or 1st BTR, and check if there are dirt, foreign substances, or scratches at the position in FS direction facing the Rear ADC Sensor and Front ADC Sensor. **Are there dirt, foreign substances, or scratches?**

Y N

The density is normal and there is a possibility that the ADC Sensor measurement value is abnormal. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ReC ADC Sensor Assembly (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the applicable part.

- IBT Belt (PL 6.3)
- IBT Belt Cleaner Assembly (PL 6.2)
- 1st Roll Assembly (PL 6.7)

Perform the following:

- First, take care of any problem that falls under [Image problem that must be resolved first].
- Check the Toner Cartridge of the applicable color for presence of Toner. If there is no Toner in it, replace the Toner Cartridge. (PL 5.1)
- For the applicable color, check the Charge Corotron or the FS direction center section of the Drum for contamination, foreign matter, damage, etc. If there is any contamination, foreign matter, damage, etc., replace the Drum Cartridge. (PL 5.2)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

A

- If the Toner is low at the FS direction center section on the Developer Housing Mag Roll of the applicable color, or the Toner remains low even after rotating the Gear, replace the Developer Housing Assembly. (PL 5.8)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.
- Check the ROS Assembly of the applicable color for contamination. If it is contaminated, clean or replace the ROS Assembly. (PL 2.1, PL 2.2)
- Check the harness, leaf spring, etc. of each HVPS (CC, Deve, 1st BTR) of the applicable color for open circuit, short circuit, and poor contact.

Is the Fail cleared?

Y N

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

End

Proceed to the corresponding FIP to repair it.

092-CF-008 Mini Setup ADC TRC Patch Fail Coated

BSD-ON:CH9.57

The density of the lowest Cin and the highest Cin patch in 20 gradation patches for gradation control of coated paper is not within a certain threshold.

Fault Code

- 092-618/619/620/621/622/623: Mini Setup ADC TRC Patch Fail Coated #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the Image Density Control that uses the ADC Sensor output is not refreshed only for the applicable color when the above Fail occurs, image density error (too dark, too light) might occur. However, as the Toner Density Control that uses the ATC Sensor is operating as usual, the Toner density in the Developer is maintained at the appropriate level. As long as there is no density related image problem in the output image and the Fail does not reoccur after checking for Fail occurrence multiple times, no further action is required.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-310 to 315: VH Charge Check Fail #1 to #6
- 092-316 to 321: ESV Sensor Fail #1 to #6
- 092-606 to 611: Mini Setup ADC Patch Fail #1 to #6
- 092-642/643: ADC AGC Fail #1/#2
- 092-644/645: ADC Vclean Fail #1/#2
- 092-646 to 649: Temperature/Humidity Sensor Fail #1/#2
- 092-650 to 655: ATC Average Fail #1 to #6
- 092-656 to 661: ATC Amplitude Fail #1 to #6
- 092-662 to 667: ESV VH Fail #1 to #6
- 092-668 to 685: ESV Vcont VH4/VH5/VH6 Fail #1 to #6
- 061-xxx: ROS System Fail
- 089-xxx: Regi Con System Fail
- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 093-406 to 411: Toner Near Empry #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Uneven density in surface -> the patch density has changed due to creation position.
- The density is close to a blank print or blank paper, or a particular color is light -> Patch is light.
- White/off-color areas, streaks at the FS (vertical) direction center section -> patch position image is light, the patch is also light
- White/Color fading/Streaks/Parts fading in SS (horizontal) direction -> The Patch on the position where the image is light is light as well
- Carry over (rough print)/Toner fogging -> Falsely detected that the Patch is light because the IBT ground color is detected dark

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ReC ADC Sensor Assembly	High	ADC Sensor failure/Assy Connector, Harness error
2	IOT Main PWB	Low	Abnormality in ADC Sensor electrical system
3	MK_DRV ADC PWB	Low	Abnormality in ADC Sensor electrical system
4	LED Power PWB	Low	Abnormality in ADC Sensor electrical system
5	LVPS H1U	Low	Abnormality in ADC Sensor power supply
6	IBT Belt	Low	Abnormality in reflection output due to contamination, scratches, etc. of IBT Belt
7	IBT Cleaner	Low	It was detected that the Patch is light due to contamination of the IBT Belt
8	Toner Cartridge	Low	Patch is light due to shortage in the Toner
9	Replace the Drum Cartridge	Low	Patch is light due to deterioration of the Drum
10	Charge Corotron	Low	Patch is light due to contamination of the Charge Corotron
11	ROS Assembly	Low	Patch is light due to the contamination of ROS or lack of intensity
12	Replace the 1st BTR Unit	Low	Image is light due to Retract Operation failure of 1st BTR or the patch is light due to contamination of 1st BTR
13	Deve Unit (Developer Housing Assembly)	Low	Patch is light due to eccentric rotation or MOS failure
14	HVPS (Charge Corotron)	Low	Patch is light due to application malfunction
15	HVPS (Deve)	Low	Patch is light due to application malfunction
16	HVPS (1st BTR)	Low	Patch is light due to application malfunction
17	Dispense Unit	Low	Patch is light due to Toner supply malfunction
18	ATC Sensor	Low	Patch is light due to ATC Sensor abnormality.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup].
Select [Fail occurrence state] from the process control value on the screen.

Check the items, [ADC AGC Fail], [ADC Vclean Fail], [ATC Average Fail], [ATC Amplitude Fail], [Temperature Sensor Fail], [Humidity Sensor Fail], [VH Charge Check Fail], [ESV Vcont VH4 Fail], [ESV Vcont VH5 Fail], and [ESV Vcont VH6 Fail] of the applicable color. **Is there NG in any item?**

Y N

Check [Mini Setup ADC TRC Patch Fail Coated] of the applicable color. **Is the display NG?**

Y N

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Perform the following:

- After executing [Procon Setup], execute [Check PG]. Overall low density of output images.
- Enter [DC 612: Color Test Pattern Print], and white spot occurs in the FS direction facing the Rear ADC Sensor and the Front ADC Sensor in the halftone of the applicable color.

Does it apply to any?

Y N

Only the ADC patch may be detected to be light. Check the IBT Belt or 1st BTR, and check if there are dirt, foreign substances, or scratches at the position in FS direction facing the Rear ADC Sensor and Front ADC Sensor. **Are there dirt, foreign substances, or scratches?**

Y N

The density is normal and there is a possibility that the ADC Sensor measurement value is abnormal. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ReC ADC Sensor Assembly (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the applicable part.

- IBT Belt (PL 6.3)
- IBT Belt Cleaner Assembly (PL 6.2)
- 1st Roll Assembly (PL 6.7)

Perform the following:

- First, take care of any problem that falls under [Image problem that must be resolved first].
- Check the Toner Cartridge of the applicable color for presence of Toner. If there is no Toner in it, replace the Toner Cartridge. (PL 5.1)
- For the applicable color, check the Charge Corotron or the FS direction center section of the Drum for contamination, foreign matter, damage, etc. If there is any contamination, foreign matter, damage, etc., replace the Drum Cartridge. (PL 5.2)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

A

- If the Toner is low at the FS direction center section on the Developer Housing Mag Roll of the applicable color, or the Toner remains low even after rotating the Gear, replace the Developer Housing Assembly. (PL 5.8)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.
- Check the ROS Assembly of the applicable color for contamination. If it is contaminated, clean or replace the ROS Assembly. (PL 2.1, PL 2.2)
- Check the harness, leaf spring, etc. of each HVPS (CC, Deve, 1st BTR) of the applicable color for open circuit, short circuit, and poor contact.

Is the Fail cleared?

Y N

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

End

Proceed to the corresponding FIP to repair it.

092-CF-009 Job ADC Patch Fail H1

BSD-ON:CH9.57

The density of the potential control patch created during the job is not within a certain threshold.

Fault Code

- 092-624/625/626/627/628/629: Job ADC Patch Fail H1 #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the Image Density Control that uses the ADC Sensor output is not refreshed only for the applicable color when the above Fail occurs, image density error (too dark, too light) might occur. However, as the Toner Density Control that uses the ATC Sensor is operating as usual, the Toner density in the Developer is maintained at the appropriate level. As long as there is no density related image problem in the output image and the Fail does not reoccur after checking for Fail occurrence multiple times, no further action is required.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-310 to 315: VH Charge Check Fail #1 to #6
- 092-316 to 321: ESV Sensor Fail #1 to #6
- 092-606 to 611: Mini Setup ADC Patch Fail #1 to #6
- 092-642/643: ADC AGC Fail #1/#2
- 092-644/645: ADC Vclean Fail #1/#2
- 092-646 to 649: Temperature/Humidity Sensor Fail #1/#2
- 092-650 to 655: ATC Average Fail #1 to #6
- 092-656 to 661: ATC Amplitude Fail #1 to #6
- 092-662 to 667: ESV VH Fail #1 to #6
- 092-668 to 685: ESV Vcont VH4/VH5/VH6 Fail #1 to #6
- 061-xxx: ROS System Fail
- 089-xxx: Regi Con System Fail
- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 093-406 to 411: Toner Near Empry #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Uneven density in surface -> the patch density has changed due to creation position.
- The density is close to a blank print or blank paper, or a particular color is light -> Patch is light.
- White/off-color areas, streaks at the FS (vertical) direction center section -> patch position image is light, the patch is also light
- White/Color fading/Streaks/Parts fading in SS (horizontal) direction -> The Patch on the position where the image is light is light as well
- Carry over (rough print)/Toner fogging -> Falsely detected that the Patch is light because the IBT ground color is detected dark

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ReC ADC Sensor Assembly	High	ADC Sensor failure/Assy Connector, Harness error
2	IOT Main PWB	Low	Abnormality in ADC Sensor electrical system
3	MK_DRV ADC PWB	Low	Abnormality in ADC Sensor electrical system
4	LED Power PWB	Low	Abnormality in ADC Sensor electrical system
5	LVPS H1U	Low	Abnormality in ADC Sensor power supply
6	IBT Belt	Low	Abnormality in reflection output due to contamination, scratches, etc. of IBT Belt
7	IBT Cleaner	Low	It was detected that the Patch is light due to contamination of the IBT Belt
8	Toner Cartridge	Low	Patch is light due to shortage in the Toner
9	Replace the Drum Cartridge	Low	Patch is light due to deterioration of the Drum
10	Charge Corotron	Low	Patch is light due to contamination of the Charge Corotron
11	ROS Assembly	Low	Patch is light due to the contamination of ROS or lack of intensity
12	Replace the 1st BTR Unit	Low	Image is light due to Retract Operation failure of 1st BTR or the patch is light due to contamination of 1st BTR
13	Deve Unit (Developer Housing Assembly)	Low	Patch is light due to eccentric rotation or MOS failure
14	HVPS (Charge Corotron)	Low	Patch is light due to application malfunction
15	HVPS (Deve)	Low	Patch is light due to application malfunction
16	HVPS (1st BTR)	Low	Patch is light due to application malfunction
17	Dispense Unit	Low	Patch is light due to Toner supply malfunction
18	ATC Sensor	Low	Patch is light due to ATC Sensor abnormality.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup].
Select [Fail occurrence state] from the process control value on the screen.

Check the items, [ADC AGC Fail], [ADC Vclean Fail], [ATC Average Fail], [ATC Amplitude Fail], [Temperature Sensor Fail], [Humidity Sensor Fail], [VH Charge Check Fail], [ESV Vcont VH4 Fail], [ESV Vcont VH5 Fail], and [ESV Vcont VH6 Fail] of the applicable color. **Is there NG in any item?**

Y N

Enter [DC 612: Color Test Pattern Print], and run 30 PV in Color Mode including the applicable color (Patch during job is formed in Inter Image).

After the run, enter [DC 938: Procon Check], select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [Job ADC Patch Fail] of the applicable color. **Is the display NG?**

Y N

The density becomes darker or thinner temporarily, causing the Fail. No action necessary.

Perform the following:

- After executing [Procon Setup], execute [Check PG]. Overall low density of output images.
- Enter [DC 612: Color Test Pattern Print], and white spot occurs in the FS direction facing the Rear ADC Sensor and the Front ADC Sensor in the halftone of the applicable color.

Does it apply to any?

Y N

Only the ADC patch may be detected to be light. Check the IBT Belt or 1st BTR, and check if there are dirt, foreign substances, or scratches at the position in FS direction facing the Rear ADC Sensor and Front ADC Sensor. **Are there dirt, foreign substances, or scratches?**

Y N

The density is normal and there is a possibility that the ADC Sensor measurement value is abnormal. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ReC ADC Sensor Assembly (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the applicable part.

- IBT Belt (PL 6.3)
- IBT Belt Cleaner Assembly (PL 6.2)
- 1st Roll Assembly (PL 6.7)

Perform the following:

- First, take care of any problem that falls under [Image problem that must be resolved first].
- Check the Toner Cartridge of the applicable color for presence of Toner. If there is no Toner in it, replace the Toner Cartridge. (PL 5.1)
- For the applicable color, check the Charge Corotron or the FS direction center section of the Drum for contamination, foreign matter, damage, etc. If there is any contamination, foreign matter, damage, etc., replace the Drum Cartridge. (PL 5.2)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

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- If the Toner is low at the FS direction center section on the Developer Housing Mag Roll of the applicable color, or the Toner remains low even after rotating the Gear, replace the Developer Housing Assembly. (PL 5.8)

NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.
- Check the ROS Assembly of the applicable color for contamination. If it is contaminated, clean or replace the ROS Assembly. (PL 2.1, PL 2.2)
- Check the harness, leaf spring, etc. of each HVPS (CC, Deve, 1st BTR) of the applicable color for open circuit, short circuit, and poor contact.

Is the Fail cleared?

Y N

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

End

Proceed to the corresponding FIP to repair it.

092-CF-010 Job ADC TRC Patch Fail H2/L/M1/M2

BSD-ON:CH9.57

The density of the gradation control patch created during the job is not within a certain threshold.

Fault Code

- 092-630/631/632/633/634/635: Job ADC TRC Patch Fail H2 #1/#2/#3/#4/#5/#6
- 092-636/637/638/639/640/641: Job ADC TRC Patch Fail L #1/#2/#3/#4/#5/#6
- 092-686/687/688/689/690/691: Job ADC TRC Patch Fail M1 #1/#2/#3/#4/#5/#6
- 092-692/693/694/695/696/697: Job ADC TRC Patch Fail M2 #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the Image Density Control that uses the ADC Sensor output is not refreshed only for the applicable color when the above Fail occurs, image density error (too dark, too light) might occur. However, as the Toner Density Control that uses the ATC Sensor is operating as usual, the Toner density in the Developer is maintained at the appropriate level. As long as there is no density related image problem in the output image and the Fail does not reoccur after checking for Fail occurrence multiple times, no further action is required.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-310 to 315: VH Charge Check Fail #1 to #6
- 092-316 to 321: ESV Sensor Fail #1 to #6
- 092-606 to 611: Mini Setup ADC Patch Fail #1 to #6
- 092-642/643: ADC AGC Fail #1/#2
- 092-644/645: ADC Vclean Fail #1/#2
- 092-646 to 649: Temperature/Humidity Sensor Fail #1/#2
- 092-650 to 655: ATC Average Fail #1 to #6
- 092-656 to 661: ATC Amplitude Fail #1 to #6
- 092-662 to 667: ESV VH Fail #1 to #6
- 092-668 to 685: ESV Vcont VH4/VH5/VH6 Fail #1 to #6
- 061-xxx: ROS System Fail
- 089-xxx: Regi Con System Fail
- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 093-406 to 411: Toner Near Empry #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Uneven density in surface -> the patch density has changed due to creation position.
- The density is close to a blank print or blank paper, or a particular color is light -> Patch is light.
- White/off-color areas, streaks at the FS (vertical) direction center section -> patch position image is light, the patch is also light
- White/Color fading/Streaks/Parts fading in SS (horizontal) direction -> The Patch on the position where the image is light is light as well
- Carry over (rough print)/Toner fogging -> Falsely detected that the Patch is light because the IBT ground color is detected dark

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ReC ADC Sensor Assembly	High	ADC Sensor failure/Assy Connector, Harness error
2	IOT Main PWB	Low	Abnormality in ADC Sensor electrical system
3	MK_DRV ADC PWB	Low	Abnormality in ADC Sensor electrical system
4	LED Power PWB	Low	Abnormality in ADC Sensor electrical system
5	LVPS H1U	Low	Abnormality in ADC Sensor power supply
6	IBT Belt	Low	Abnormality in reflection output due to contamination, scratches, etc. of IBT Belt
7	IBT Cleaner	Low	It was detected that the Patch is light due to contamination of the IBT Belt
8	Toner Cartridge	Low	Patch is light due to shortage in the Toner
9	Replace the Drum Cartridge	Low	Patch is light due to deterioration of the Drum
10	Charge Corotron	Low	Patch is light due to contamination of the Charge Corotron
11	ROS Assembly	Low	Patch is light due to the contamination of ROS or lack of intensity
12	Replace the 1st BTR Unit	Low	Image is light due to Retract Operation failure of 1st BTR or the patch is light due to contamination of 1st BTR
13	Deve Unit (Developer Housing Assembly)	Low	Patch is light due to eccentric rotation or MOS failure
14	HVPS (Charge Corotron)	Low	Patch is light due to application malfunction
15	HVPS (Deve)	Low	Patch is light due to application malfunction
16	HVPS (1st BTR)	Low	Patch is light due to application malfunction
17	Dispense Unit	Low	Patch is light due to Toner supply malfunction
18	ATC Sensor	Low	Patch is light due to ATC Sensor abnormality.

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup].
Select [Fail occurrence state] from the process control value on the screen.
Check the items, [ADC AGC Fail], [ADC Vclean Fail], [ATC Average Fail], [ATC Amplitude Fail], [Temperature Sensor Fail], [Humidity Sensor Fail], [VH Charge Check Fail], [ESV Vcont VH4 Fail], [ESV Vcont VH5 Fail], and [ESV Vcont VH6 Fail] of the applicable color. **Is there NG in any item?**

Y N

Enter [DC 612: Color Test Pattern Print], and run 30 PV in Color Mode including the applicable color (Patch during job is formed in Inter Image).
After the run, enter [DC 938: Procon Check], select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [Job ADC TRC Patch Fail] of the applicable color. **Is the display NG?**

Y N

The density becomes darker or thinner temporarily, causing the Fail. No action necessary.

Perform the following:

- After executing [Procon Setup], execute [Check PG]. Overall low density of output images.
- Enter [DC 612: Color Test Pattern Print], and white spot occurs in the FS direction facing the Rear ADC Sensor and the Front ADC Sensor in the halftone of the applicable color.

Does it apply to any?

Y N

Only the ADC patch may be detected to be light. Check the IBT Belt or 1st BTR, and check if there are dirt, foreign substances, or scratches at the position in FS direction facing the Rear ADC Sensor and Front ADC Sensor. **Are there dirt, foreign substances, or scratches?**

Y N

The density is normal and there is a possibility that the ADC Sensor measurement value is abnormal. Turn OFF the power and check the following connections for open circuits, short circuits, and poor contacts.

- Between Front ADC Sensor J214 and MK_DRV ADC PWB J725
- Between Rear ADC Sensor J213 and MK_DRV ADC PWB J725
- Between IOT Main PWB J631 and MK_DRV ADC PWB J720

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ReC ADC Sensor Assembly (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)
- IOT Main PWB (PL 18.14)

Replace the applicable part.

- IBT Belt (PL 6.3)
- IBT Belt Cleaner Assembly (PL 6.2)
- 1st Roll Assembly (PL 6.7)

Perform the following:

- First, take care of any problem that falls under [Image problem that must be resolved first].

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- Check the Toner Cartridge of the applicable color for presence of Toner. If there is no Toner in it, replace the Toner Cartridge. (PL 5.1)
- For the applicable color, check the Charge Corotron or the FS direction center section of the Drum for contamination, foreign matter, damage, etc. If there is any contamination, foreign matter, damage, etc., replace the Drum Cartridge. (PL 5.2)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- If the Toner is low at the FS direction center section on the Developer Housing Mag Roll of the applicable color, or the Toner remains low even after rotating the Gear, replace the Developer Housing Assembly. (PL 5.8)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.
- Check the ROS Assembly of the applicable color for contamination. If it is contaminated, clean or replace the ROS Assembly. (PL 2.1, PL 2.2)
- Check the harness, leaf spring, etc. of each HVPS (CC, Deve, 1st BTR) of the applicable color for open circuit, short circuit, and poor contact.

Is the Fail cleared?

Y N

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

End

Proceed to the corresponding FIP to repair it.

092-CF-011 Temperature/Humidity Sensor Info/Fail

BSD-ON:CH9.58

The measured temperature value or the measured humidity value of the Temp and Humidity Sensor is out of the specification range.

Fault Code

- 092-400/401: Temperature Sensor Info #1/#2
- 092-402/403: Humidity Sensor Info #1/#2
- 092-646/647: Temperature Sensor Fail #1/#2
- 092-648/649: Humidity Sensor Fail #1/#2

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the control for temperature or humidity cannot be performed when this Fail occurs, image density error (too dark, too light) might occur due to changes in the temperature or humidity.

Procedure

Enter [DC938: Procon Check] and execute [Procon Setup]. Select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [Temperature Sensor Fail] or [Humidity Sensor Fail]. **Is the display NG?**

Y N

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Turn the power OFF and check the connection between the applicable Temp & Humidity Sensor and MK_DRV ADC PWB J723 for open circuit, short circuit, and poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- The applicable Temp & Humidity Sensor (PL 18.6)
- MK_DRV ADC PWB (PL 18.3)

092-CF-012 ATC Average Fail

BSD-ON:CH9.27, CH9.28, CH9.29, CH9.30, CH9.31, CH9.32

The measurement result of Toner density in the Deve Unit by the ATC Sensor is abnormal.

To be more specific, the output of the ATC Sensor is abnormal (too large or too small). This could be caused by a malfunctioning ATC Sensor or abnormal Toner density in the Deve Unit.

Fault Code

- 092-650/651/652/653/654/655: ATC Average Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

When this Fail occurs, Toner Density Control that uses the ATC Sensor is not performed for the applicable color and ICDC (pixels based Toner Supply Control) is performed instead. Because of that, if the Fail is allowed to remain for a long time, image density error (too dark, too light) might occur. Furthermore, there might be an instant drop in image density if this is caused by the Deve Unit.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 093-310 to 315: Deve Motor Fail #1 to #6
- 093-316 to 321: Dispense Broken #1 to #6
- 093-413 to 418: Dispense Near Broken #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Carrier spill -> this could be due to carrier in the developing powder leaking out to the image section.
- Carry over (rough print) -> this could be due to a reduction in the amount of developing powder.
- Toner smear -> this could be due to dark Toner density of the developing powder.

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ATC Sensor	High	ATC Sensor failure
2	MK_DRV ADC PWB	Low	Abnormality in ATC Sensor electrical system
3	DST 1 (IOT-L) PWB	Low	Abnormality in ATC Sensor electrical system
4	LVPS H1U	Low	Abnormality in ATC Sensor power supply
5	Deve Unit (Developer Housing Assembly)	Low	Auger revolution failure, Toner blocking
6	Deve Motor	Low	Deve Unit drive abnormality, Toner blocking
7	Dispense Unit	Low	Abnormal Toner density due to Toner supply error
8	Toner Cartridge	Low	Toner is not supplied, Toner density is light

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check]. After executing [Procon Setup], execute [Check PG].
Select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [ATC Average Fail] of the applicable color. **Is the display NG?**

Y **N**

Corrective action is not required if Fail does not occur after executing [Check PG] a number of times.

NOTE: *If Fail occurs, return to the previous procedure.*

Select [Monitor Value] from the Procon Monitor Value on the screen, and check the value of [ATC Average Fail] of the applicable color. **Is the value 10 or less?**

Y **N**

Check the density of the image output by [Check PG].

NOTE: *If any of the symptoms indicated in [Image problem that must be resolved first] has appeared, take care of those first.*

Is the image density normal?

Y **N**

The Toner density may be abnormal. Check the NVM value of the applicable color, and check whether the following conditions are satisfied.
[ATC Average Value] > [ATC Temporary Average Fail Upper Limit] or [ATC Temporary Average Value] > [ATC Temporary Average Fail Upper Limit]

- NVM [765-231 to 236]: ATC Average Value (#1/#2/#3/#4/#5/#6)
- NVM [765-053]: ATC Average Fail Upper Limit Value
- NVM [765-225 to 230]: ATC Temporary Average Value (#1/#2/#3/#4/#5/#6)
- NVM [765-051]: ATC Temporary Average Fail Upper Limit Value (Light Toner Density)

Is the condition met?

Y **N**

The toner density is detected to be abnormally dark, and there may be a problem with toner adhesion in the ATC Sensor or Deve Unit.

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Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

The toner density was detected to be abnormally light. Perform the following to correct density abnormality. After that, perform Adjust Toner Density [DC922: Tone Up/Down] to recover the Toner density so that the ATC Average Value is within [+/-20] of the ATC Target Value.

- Check the Toner Cartridge of the applicable color for presence of Toner. If there is no Toner in it, replace the Toner Cartridge. (PL 5.1)
- Check whether toner blocking has occurred on the path from Toner Cartridge of the applicable to Developer Housing Assembly. If there is, remove the blockage.
- Drive the Deve Motor of the applicable color (DC330 [009-025/026/027/028/029/030] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Deve Motor Fail FIP of the applicable color (093-310/311/312/313/314/315), and perform corrective action.
- Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). If it is not working, proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.

Is the Fail cleared?

Y **N**

Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

End

Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.

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If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

Perform [Check PG] a few times. **Does the Fail occur?**

Y **N**

End

Replace the part in the [Related Replacement Parts List] in sequence.

NOTE: *If ATC Sensor is replaced, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

NOTE: *If Developer Housing Assembly has been replaced, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

092-CF-013 ATC Amplitude Fail

BSD-ON:CH9.27, CH9.28, CH9.29, CH9.30, CH9.31, CH9.32

The measurement result of Toner density in the Deve Unit by the ATC Sensor is abnormal.

To be more specific, although the output of the ATC Sensor usually changes cyclically along with the rotation of the Auger in the Deve Unit, the amplitude is small. This could be caused by a malfunctioning ATC Sensor or abnormality in the Deve Unit.

Fault Code

- 092-656/657/658/659/660/661: ATC Amplitude Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

When this Fail occurs, Toner Density Control that uses the ATC Sensor is not performed for the applicable color and ICDC (pixels based Toner Supply Control) is performed instead. Because of that, if this Fail is occurring for a long time, toner density error (too dark, too light) may gradually occur. In addition, there might be an instant drop in image density if this is caused by the Deve Unit.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 093-310 to 315: Deve Motor Fail #1 to #6
- 093-316 to 321: Dispense Broken #1 to #6
- 093-413 to 418: Dispense Near Broken #1 to #6

Image quality trouble that should be handled first

Check the corresponding color image in Print Mode. If the following image quality trouble is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding image quality troubleshooting and restore it first.

- Carrier spill -> this could be due to carrier in the developing powder leaking out to the image section.
- Carry over (rough print) -> this could be due to a reduction in the amount of developing powder.
- Toner smear -> this could be due to dark Toner density of the developing powder.

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ATC Sensor	High	ATC Sensor failure
2	MK_DRV ADC PWB	Low	Abnormality in ATC Sensor electrical system
3	DST 1 (IOT-L) PWB	Low	Abnormality in ATC Sensor electrical system
4	LVPS H1U	Low	Abnormality in ATC Sensor power supply
5	Deve Unit (Developer Housing Assembly)	Low	Auger revolution failure, Toner blocking
6	Deve Motor	Low	Deve Unit drive abnormality, Toner blocking
7	Dispense Unit	Low	Abnormal Toner density due to Toner supply error

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check]. After executing [Procon Setup], execute [Check PG].
Select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [ATC Amplitude Fail] of the applicable color. **Is the display NG?**

Y **N**

Corrective action is not required if Fail does not occur after executing [Check PG] a number of times.

NOTE: *If Fail occurs, return to the previous procedure.*

Select [Monitor Value] from the Procon Monitor Value on the screen, and check the value of [ATC Average Fail] of the applicable color. **Is the value 10 or less?**

Y **N**

Check the density of the image output by [Check PG].

NOTE: *If any of the symptoms indicated in [Image problem that must be resolved first] has appeared, take care of those first.*

Is the image density normal?

Y **N**

Turn OFF the power and remove the Developer Housing Assembly of the applicable color.
Rotate the Drive Gear of the Developer Housing Assembly manually and check whether there is any abnormality in Auger rotation. **Is there any abnormality in Auger rotation?**

Y **N**

Reinstall the Developer Housing Assembly, and drive the Deve Motor of the applicable color (DC330 [009-025/026/027/028/029/030] (#1/#2/#3/#4/#5/#6)). **Does the Deve Motor rotate?**

Y **N**

Proceed to the Deve Motor Fail FIP of the applicable color (093-310/311/312/313/314/315), and perform corrective action.

Drive the Dispense Motor of the applicable color (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)). **Does the Dispense Motor rotate?**

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Y **N**

Proceed to the Dispense Broken Fail FIP of the applicable color (093-316/317/318/319/320/321), and perform corrective action.

There is a possibility of ATC Sensor-related failure. Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

It may be caused by the Augur not rotating. Replace the Developer Housing Assembly of the applicable color. (PL 5.8)

NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

There is a possibility of ATC Sensor-related failure. Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

There is a possibility of ATC Sensor-related failure. Refer to BSD and check the connection between ATC Sensor of the applicable color and MK_DRV ADC PWB for open circuit, short circuit or poor contact.
If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- ATC Sensor (PL 5.10) of the applicable color

  NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

- Developer Housing Assembly (PL 5.8) of the applicable color

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NOTE: *After replacement, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- MK_DRV ADC PWB (PL 18.3)

Perform [Check PG] a few times. **Does the Fail occur?**

Y **N**

End

Replace the part in the [Related Replacement Parts List] in sequence.

NOTE: *If ATC Sensor is replaced, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) for the applicable color.*

NOTE: *If Developer Housing Assembly has been replaced, perform [DC950: ATC Sensor Setup] (ADJ 18.1.6) and [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color. Perform it.*

092-CF-014 ESV VH Fail

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

Any one of the following errors has occurred.

- ESV Sensor fault or electrical system fault
- Potential error on Photoreceptor
- Scorotron error.

Fault Code

- 092-662/663/664/665/666/667: ESV VH Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the charge sensitivity adjustment control on Drum that uses the ESV Sensor output is not refreshed when this Fail occurs, image defects might occur.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ESV Sensor	High	ESV Sensor failure
2	Charge Corotron	High	Charge Corotron scratched, contamination, or it is time for replacement
3	Replace the Drum Cartridge	High	Patch is light due to deterioration of the Drum.
4	MK_DRV ADC PWB	Low	Abnormality in ESV Sensor electrical system
5	DST 1 (IOT-L) PWB	Low	Abnormality in ESV Sensor electrical system
6	LVPS H1U	Low	Abnormality in ESV Sensor power supply
7	HVPS (Charge Corotron)	Low	Voltage application to Charge Corotron failure

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup]. Select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [ESV VH Fail] of the applicable color. **Is the display NG?**

Y N

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Turn OFF the power. Refer to BSD and check the following connections for open circuits, short circuits, and poor contacts.

- Between MK_DRV ADC PWB J724 or J723 and the ESV Sensor PWB of the applicable Engine
- Between DST 1 (IOT-L) J1120 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. After replacement, perform [Procon Setup] of [DC938: PROCON CHECK], and check for Fail occurrence of each replaced part. Also, return part that are free of problem.

- ESV Sensor (PL 5.7) of the applicable color
- MK_DRV ADC PWB (PL 18.3)
- DST 1 (IOT-L) PWB (PL 18.11)

Does the Fail occur?

Y N

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Perform the following:

- Check if the Charge Corotron mesh or wire of the applicable Engine is dirty, perform operations such as Charge Corotron Cleaning to clean it. If there is Charge Corotron Cleaner operation failure, or disconnection of wire, etc., replace the Charge Corotron. (PL 5.14)
- If there is image unevenness, replace the Drum Cartridge of the applicable Engine. (PL 5.2)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- There is a possibility of Charge Corotron HVPS abnormality of the applicable Engine. Check for short circuit, half connection, and if there is no problem, replace the Charge Corotron HVPS. (PL 18.4, PL 18.5)
- Since there is a possibility of GND failure between Drum Shaft and Drum Cartridge, check whether GND failure has occurred.

Execute [Procon Setup]. **Does the Fail occur?**

Y N

End

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

092-CF-015 ESV Vcont VH4/VH5/VH6 Fail

BSD-ON:CH9.15, CH9.16, CH9.17, CH9.18, CH9.19, CH9.20

Any one of the following errors has occurred.

- ESV Sensor fault or electrical system fault
- Potential error on Photoreceptor
- Charging and exposure error

Fault Code

- 092-668/669/670/671/672/673: ESV Vcont VH4 Fail #1/#2/#3/#4/#5/#6
- 092-674/675/676/677/678/679: ESV Vcont VH5 Fail #1/#2/#3/#4/#5/#6
- 092-680/681/682/683/684/685: ESV Vcont VH6 Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Influence

As the charge\exposure sensitivity adjustment control on Drum that uses the ESV Sensor output is not refreshed when this Fail occurs, image defects might occur.

Fail that should be handled first

Enter [DC122: Shutdown History] and check the latest Fail that had occurred. If the following Fail is occurring, there is a high possibility that the problem is caused on your side. Please refer to the corresponding FIP and restore it first.

- 092-662 to 667: ESV VH Fail #1 to #6
- 091-430 to 435: Drum Life Over #1 to #6
- 091-412 to 417: CC Life Over #1 to #6
- 061-xxx: ROS System Fail

Replacement part list

Table 1

No.	Component	Possibility	Reason
1	ESV Sensor	High	ESV Sensor failure
2	Replace the Drum Cartridge	High	Patch is light due to deterioration of the Drum.
3	ROS Assembly	Medium	Contamination of ROS, poor lighting
4	MK_DRV ADC PWB	Low	Abnormality in ESV Sensor electrical system
5	DST 1 (IOT-L) PWB	Low	Abnormality in ESV Sensor electrical system
6	LVPS H1U	Low	Abnormality in ESV Sensor power supply
7	Charge Corotron	Low	Charge Corotron scratched, contamination, or it is time for replacement
8	HVPS (Charge Corotron)	Low	Voltage application to Charge Corotron failure

Procedure

NOTE: *To prevent light-induced fatigue, cover the Drum with a black sheet when removing the Drum. In addition, do not touch the Drum surface.*

Enter [DC938: Procon Check] and execute [Procon Setup]. Select [Fail Occurrence State] from the Procon Monitor Value on the screen, and check [ESV VH Fail] of the applicable color. **Is the display NG?**

Y **N**

Check [ESV Vcont VH4/VH5/VH6 Fail] of the applicable color. **Is it NG?**

Y **N**

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to the initial procedure.*

Turn OFF the power. Refer to BSD and check the following connections for open circuits, short circuits, and poor contacts.

- Between MK_DRV ADC PWB J724 or J723 and the ESV Sensor PWB of the applicable Engine
- Between DST 1 (IOT-L) J1120 and MK_DRV ADC PWB J722

If no problem is found, replace the following part in sequence. After replacement, perform [Procon Setup] of [DC938: PROCON CHECK], and check for Fail occurrence of each replaced part. Also, return part that are free of problem.

- ESV Sensor (PL 5.7) of the applicable color
- MK_DRV ADC PWB (PL 18.3)
- DST 1 (IOT-L) PWB (PL 18.11)

Is the Fail cleared?

Y **N**

Perform the following:

- Clean the ROS Assembly seal glass of the applicable Engine. If the image unevenness occurs, replace the ROS Assembly. (PL 2.1, PL 2.2)
- Check if the Charge Corotron mesh or wire of the applicable Engine is dirty, perform operations such as Charge Corotron Cleaning to clean it. If there is Charge Corotron Cleaner operation failure, or disconnection of wire, etc., replace the Charge Corotron. (PL 5.14)

A B

A B

- If there is image unevenness, replace the Drum Cartridge of the applicable Engine. (PL 5.2)

  NOTE: *After replacement, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the applicable color.*

- There is a possibility of Charge Corotron HVPS abnormality of the applicable Engine. Check for short circuit, half connection, and if there is no problem, replace the Charge Corotron HVPS. (PL 18.4, PL 18.5)
- Since there is a possibility of GND failure between Drum Shaft and Drum Cartridge, check whether GND failure has occurred.

Execute [Procon Setup]. **Does the Fail occur?**

Y **N**

End

Replace the part in the [Replacement Parts List] in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

The procedure is complete if Fail does not occur after executing [Procon Setup] a number of times.

NOTE: *If Fail occurs, return to one previous procedure.*

Proceed to the corresponding FIP (092-CF-014) to repair it.

092-CF-016 Drum CRUM Data Mismatch

BSD-ON:CH9.1, CH9.2, CH9.3, CH9.4

The CRUM authentication area data of Drum Cartridge does not match.

Fault Code

- 092-926/927/928/929/930/931: Drum CRUM Data Mismatch #1/#2/#3/#4/#5/#6

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Drum Cartridge of the applicable color.
3. Check the Drum Cartridge of the applicable color for improper installation.
4. If the problem persists, replace the Drum Cartridge of the applicable color. (PL 5.2)

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

092-CF-017 Drum CRUM Geographic Diff Mismatch Fail

BSD-ON:CH9.1, CH9.2, CH9.3, CH9.4

The Geographic Diff data (identification number for each area where CRUM can be used) of Drum Cartridge CRUM does not match.

Fault Code

- 092-932/933/934/935/936/937: Drum CRUM Geographic Diff Mismatch Fail #1/#2/#3/#4/#5/#6

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Drum Cartridge of the applicable color.
3. Check the Drum Cartridge of the applicable color for improper installation.
4. If the problem persists, replace the Drum Cartridge of the applicable color. (PL 5.2)

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

093-CF-001 Deve Motor Fail

BSD-ON:CH9.21, CH9.22, CH9.23, CH9.24, CH9.25, CH9.26

The Deve Motor rotation error was detected. When the Lock Up (Deve Motor Fail) signal of the Motor Drive output was monitored at an interval between 600 msec and 100 msec after the Deve Motor operation had started, it was found to be Fail (Low) 5 times in a row.

Fault Code

- 093-310/311/312/313/314/315: Deve Motor Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Check the following:

- Half connection of Deve Motor of the applicable color.
- Operation failure of Deve Motor of the applicable color (DC330 [009-025/026/027/028/029/030] (#1/Y/M/C/K/#6)). (PL 5.8)
- The Drive Gear for wear and damage.
- Rotation failure due to abnormality of the applicable Developer Housing. (PL 5.8)

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- MK_EPG 1 MD PWB (PL 18.3)
- MK_EPG Core PWB (PL 18.3)

NOTE: *Remove the Front Inner Cover, and execute while the Front Interlock is being cheated.*

NOTE: *Observe Figure 1 (arrow) and check rotation.*

093-CF-002 Dispense Broken/ Dispense Near Broken

BSD-ON:CH9.33, CH9.40, CH9.41, CH9.42, CH9.43, CH9.44, CH9.45

[Dispense Broken]

The Dispenser is damaged. After detection of Toner shortage in Toner Reserve Tank, cumulative operation time of Toner Dispense Motor after detection exceeded the specified value.

[Dispense Near Broken]

The Dispenser may be damaged. After detection of Toner shortage in Toner Reserve Tank, cumulative operation time of Dispense Motor after detection exceeded the specified value.

Fault Code

[Dispense Broken]

- 093-316/317/318/319/320/321: Dispense Broken #1/#2/#3/#4/#5/#6 (Sub System Fail)

[Dispense Near Broken]

- 093-413/414/415/416/417/418: Dispense Near Broken #1/#2/#3/#4/#5/#6 (Info)

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

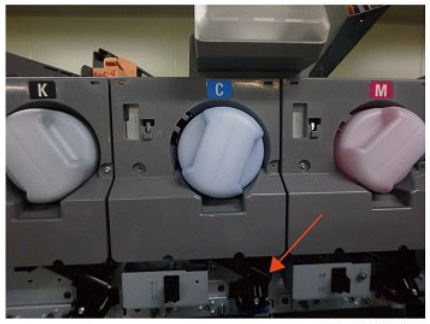
Procedure

Turn M/C OFF then ON. **Does the Fail occur?**

Y **N**

Corrective action complete.

Drive the Dispense Motor of the applicable Engine (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)), and check the Motor rotation status. (PL 5.18)



j0cx220009

Figure 1 j0cx220009

Does it rotate normally (about 2 seconds)?

Y N

Does it not rotate at all or does it operate but stop instantaneously, reverse rotate, and generate teeth jumping sound? Check to which Motor rotation status it applies. **Does it not rotate at all?**

Y N

Check for Toner clogging in the transportation circuit path between the Dispenser Assembly and Developer Housing of the applicable color. **Is Toner clogging occurring?**

Y N

Replace Dispenser, and perform toner installation.

Perform cleaning of the transportation circuit path between the Dispenser Assembly (PL 5.1) and Developer Housing (PL 5.8) of the applicable color.

NOTE: *When confirming the occurrence of Fail, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color.*

Remove the Dispenser, and check the connection of the Connector between Dispense Motor (PL 5.18), Low Toner Sensor (PL 5.16). **Is there poor connection?**

Y N

Connect the connector properly.

NOTE: *When confirming the occurrence of Fail, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color.*

Drive the Dispense Motor of the applicable Engine (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)), and check the Motor rotation status. (PL 5.18)

NOTE: *Remove the Front Inner Cover, and execute while the Front Interlock is being cheated.*

NOTE: *Observe Figure 1 (arrow) and check rotation.*

Does it rotate normally (about 2 seconds)?

Y N

After replacing the Dispenser, drive the Dispense Motor of the applicable Engine (DC330 [009-019/020/021/022/023/024] (#1/#2/#3/#4/#5/#6)), and check the Motor rotation status. (PL 5.18).

NOTE: *Remove the Front Inner Cover, and execute while the Front Interlock is being cheated.*

NOTE: *Observe Figure 1 (arrow) and check rotation.*

Does it rotate normally (about 2 seconds)?

Y N

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

NOTE: *When confirming the occurrence of Fail, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color.*

- Dispense Motor (PL 5.18) of the applicable color.
- Toner Dispense Motor Drive PWB (PL 18.17) of the applicable color (Figure 2)

A B C

A B C

Exit Diag and check Fail. **Does the Fail occur?**

Y N

Perform toner installation.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

NOTE: *When confirming the occurrence of Fail, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color.*

- Low Toner Sensor (PL 5.16) of the applicable color
- Toner Dispense Motor Drive PWB (PL 18.17) of the applicable color (Figure 2)
- MK_EPG 1 MD PWB (in the case of #1/#2/#3/#4) (PL 18.3)
- MK_EPG 2 MD PWB (in the case of #5/#6) (PL 18.3)

Install the Dispenser. Turn ON the M/C power supply, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color, and check if Fail occurs. **Does the Fail occur?**

Y N

Corrective action complete.

Replace the Dispenser with a new one, and turn ON the M/C power supply.

NOTE: *If replacing to a used Dispenser, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color, and check if Fail occurs.*

Does the Fail occur?

Y N

Perform toner installation.

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

NOTE: *When confirming the occurrence of Fail, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color.*

- Low Toner Sensor (PL 5.16) of the applicable color
- Toner Dispense Motor Drive PWB (PL 18.17) of the applicable color (Figure 2)
- MK_EPG 1 MD PWB (in the case of #1/#2/#3/#4) (PL 18.3)
- MK_EPG 2 MD PWB (in the case of #5/#6) (PL 18.3)

Remove the Dispenser, and check the connection of the Low Toner Sensor (PL 5.16) Connector. Turn the M/C power supply Off/On after checking, and after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color, and check if Fail occurs. **Does the Fail occur?**

Y N

Corrective action complete.

D

D

Replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

NOTE: *When confirming the occurrence of Fail, after rewriting the NVM value ((NVM [754-236/237/238/239/240/241] (Dispenser Status #1/#2/#3/#4/#5/#6)) to [0], print a few sheets in Halftone of the applicable color.*

- Low Toner Sensor (PL 5.16) of the applicable color
- Toner Dispense Motor Drive PWB (PL 18.17) of the applicable color (Figure 2)
- MK_EPG 1 MD PWB (in the case of #1/#2/#3/#4) (PL 18.3)
- MK_EPG 2 MD PWB (in the case of #5/#6) (PL 18.3)

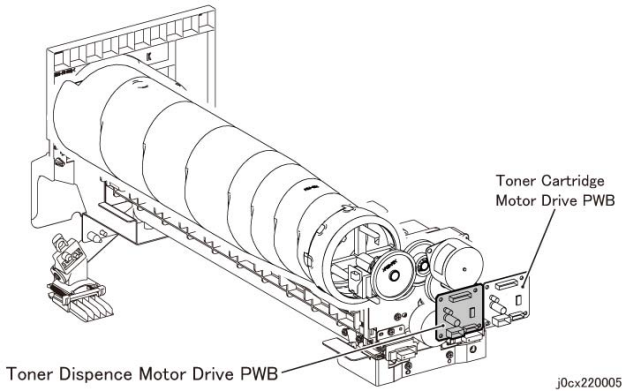


Figure 2 j0cx220005

093-CF-003 Toner CRUM Authentication IC is not Available

BSD-ON:CH9.5, CH9.6, CH9.7, CH9.8

Communication error between the CRUM of Toner Cartridge and the authentication IC was detected.

Fault Code

- 093-329/330/331/332/333/334: Toner CRUM Authentication IC is not Available #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Remove and reinstall the Toner Cartridge of the applicable color and turn the power OFF and ON.
2. If the problem persists, refer to BSD, and check the following connections for open circuits, short circuits, and poor contacts.
   - Between the Toner Cartridge CRUM PWB and Toner CRUM PWB J733_T/ J732_T of the applicable color
   - Between the Toner CRUM PWB J730_T and MK_EPG ADC PWB J732
3. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - The Toner Cartridge CRUM PWB (PL 5.11) of the applicable color
   - The Toner Sub CRUM PWB (PL 18.17) of the applicable color
   - Toner CRUM PWB (PL 18.6)
   - MK_EPG ADC PWB (PL 18.3)

093-CF-004 Mag-Z Fail

BSD-ON:CH9.21, CH9.22, CH9.23, CH9.24, CH9.25, CH9.26

The Mag-Z error was detected.

Fault Code

- 093-335/336/337/338/339/340: Mag-Z Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Fail that should be handled first

Enter [DC122: Shutdown History], and check whether Deve Motor Fail has occurred. If Fail has occurred, proceed to the applicable FIP, and fix the error.

- 093-310/311/312/313/314/315: Deve Motor Fail #1/#2/#3/#4/#5/#6

Cause/Action

1. Check for loose and missing part of the Actuator of Mag Roll Encoder Sensor of the applicable color.
2. Check for contamination of the Detector of Mag Roll Encoder Sensor of the applicable color.
3. Refer to BSD and check the connection between Mag Roll Encoder Sensor of the applicable color and MK_EPG Core PWB J651_X for open circuit, short circuit or poor contact.
4. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - The Mag Roll Encoder Sensor (PL 5.8) of the applicable sensor
   - MK_EPG Core PWB (PL 18.3)

093-CF-005 Toner Pre Near Empty

BSD-ON:CH9.33

Preparation for replacing the Toner Cartridge is required.

Fault Code

- 093-400/401/402/403/404/405: Toner Pre Near Empty #1/#2/#3/#4/#5/#6

Cause/Action

The Toner Cartridge of the applicable color needs to be replaced soon. Prepare a new Toner Cartridge. Replace the Toner Cartridge as required. (PL 5.1)

093-CF-006 Toner Near Empty

BSD-ON:CH9.33

The Toner Cartridge needs to be replaced soon.

Fault Code

- 093-406/407/408/409/410/411: Toner Near Empty #1/#2/#3/#4/#5/#6

Cause/Action

The Toner Cartridge of the applicable color needs to be replaced soon. Replace the Toner Cartridge as required. (PL 5.1)

093-CF-007 Mag-Z Warning

BSD-ON:CH9.21, CH9.22, CH9.23, CH9.24, CH9.25, CH9.26

Mag-Z detection time is outside the expected range.

Fault Code

- 093-600/601/602/603/604/605: Mag-Z Warning #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Check for loose and missing part of the Actuator of Mag Roll Encoder Sensor of the applicable color.
2. Check for contamination of the Detector of Mag Roll Encoder Sensor of the applicable color.
3. Refer to BSD and check the connection between Mag Roll Encoder Sensor of the applicable color and MK_EPG Core PWB J651_X for open circuit, short circuit or poor contact.
4. If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - The Mag Roll Encoder Sensor (PL 5.8) of the applicable sensor
   - MK_EPG Core PWB (PL 18.3)

093-CF-008 Toner CRUM Data Mismatch Fail

BSD-ON:CH9.5, CH9.6, CH9.7, CH9.8

The authentication area data of Toner Cartridge CRUM does not match.

Fault Code

- 093-922/923/924/925/926/927: Toner CRUM Data Mismatch Fail #1/#2/#3/#4/#5/#6

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge of the applicable color.
3. Check the Toner Cartridge of the applicable color for improper installation.
4. If the problem persists, replace the Toner Cartridge of the applicable color. (PL 5.1)

093-CF-009 Toner CRUM Geographic Diff Mismatch Fail

BSD-ON:CH9.5, CH9.6, CH9.7, CH9.8

Error of the Geographic Diff (identification number for each area where CRUM can be used) of Toner Cartridge CRUM was detected.

Fault Code

- 093-928/929/930/931/932/933: Toner CRUM Geographic Diff Mismatch Fail #1/#2/#3/#4/#5/#6

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge of the applicable color.
3. Check the Toner Cartridge of the applicable color for improper installation.
4. If the problem persists, replace the Toner Cartridge of the applicable color. (PL 5.1)

093-CF-010 Toner Cartridge Not In Position

BSD-ON:CH9.5, CH9.6, CH9.7, CH9.8

The Tone Cartridge is not set properly.

Fault Code

- 093-934/935/936/937/938/939: Toner Cartridge Not In Position #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

1. Turn the power OFF and ON.
2. Remove and reinstall the Toner Cartridge of the applicable color.
3. Check the Toner Cartridge of the applicable color for improper installation.
4. Turn OFF the power and check the connection between the Toner Cartridge CRUM PWB and Toner CRUM PWB J733_T/ J732_T of the applicable color for open circuit, short circuit, and poor contact.
5. If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.
   - The Toner Cartridge (PL 5.1) of the applicable color
   - The Toner Cartridge CRUM PWB (PL 5.11) of the applicable color
   - The Toner Sub CRUM PWB (PL 18.17) of the applicable color
   - Toner CRUM PWB (PL 18.6)

094-CF-001 1st BTR Fail #1

BSD-ON:CH9.52, CH9.53, CH9.54, CH9.55, CH9.56

The resistance detection result of the 1st BTR exceeds the specified value (the applied voltage is high).

Fault Code

- 094-600/601/602/603/604/605: 1st BTR Fail #1/#2/#3/#4/#5/#6

NOTE: *Refer to BSD CH1.83 for the output of DC power supply during Fail occurrence.*

Cause/Action

Turn OFF the power and check the following:

- The connection between the 1st BTR HVPS of the applicable color and MK_EPG ADC PWB J737 for open circuit, short circuit, and poor contact.
- The connection between the MK_EPG Core PWB P/J644_X and 1st BTR HVPS of the applicable color for open circuit, short circuit, and poor contact.
- Installation failure of the 1st BTR of the applicable color.

If no problem is found, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- 1st BTR HVPS (PL 6.11) of the applicable color
- MK_EPG ADC PWB (PL 18.3)
- MK_EPG Core PWB (PL 18.3)

094-CF-002 Toner Empty

BSD-ON:CH9.33, CH9.34, CH9.35, CH9.36, CH9.37, CH9.38, CH9.39

The applicable color toner has run out.

Fault Code

- 094-930/931/932/933/934/935: Toner Empty #1/#2/#3/#4/#5/#6

Procedure

Replace the Toner Cartridge (PL 5.1) of the applicable color.
If the error occurs even though the Toner is adequate in the Toner Cartridge, enter Diag, and drive the Toner Cartridge Motor (DC330 [009-013/014/015/016/017/018] (#1/#2/#3/#4/#5/#6)) of the applicable color.

NOTE: *Open the Left/Right Dispense Cover, and execute while the Interlock SW is being cheated.*

Does the Toner Cartridge Motor rotate?

Y **N**

Turn OFF the power and check the connection between the Toner Cartridge Motor and Toner Cartridge Motor Drive PWB of the applicable color for open circuit, short circuit, and poor contact.
If no problem is found, replace the Toner Cartridge Motor of the applicable color. (PL 5.18) **Does the Toner Cartridge Motor rotate?**

Y **N**

Turn OFF the power and replace the Reserve Housing Assembly of the applicable color. (PL 5.15)
If the problem persists, replace the following part in sequence. However, each time a part is replaced, check whether the Fail is still occurring and reinsert the original part if it has no problems.

- Toner Cartridge Motor Drive PWB (PL 18.17) of the applicable color (Figure 1)
- MK_EPG 1 MD PWB (in the case of #1/#2/#3) (PL 18.3)
- MK_EPG 2 MD PWB (in the case of #4/#5/#6) (PL 18.3)

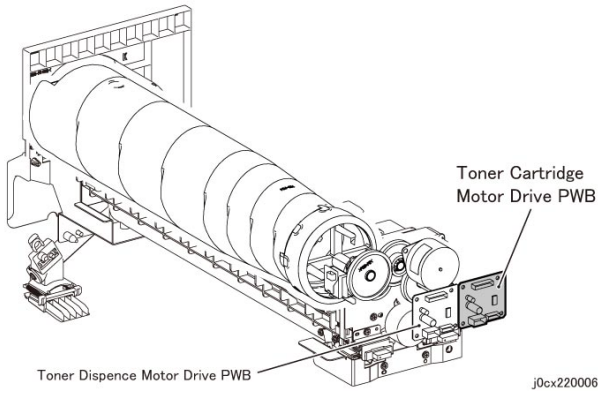


Figure 1 j0cx220006

A B

A B

End

End

2.3.1 System Start Malfunction FIP

Table 1

No.	Symptom	Cause	Corrective Actions
1	The power indicator lamp on the front panel of the device is OFF	Power supply error	Check in the following order and replace the parts as necessary. 1. Check whether the power cord is plugged into the AC outlet of the device. 2. Check the cable connection between the power supply and the Mother Board. 3. Disconnect the cable and remove the option board, and then check whether there is any short-circuited location. 4. Measure the power supply voltage of +/-5V and +/-12V with the check voltage in loaded state. (Install the Mother Board before doing this) 5. Replace the Power Supply. (PL 1.2) 6. Replace the Mother Board. (PL 1.2)
2	The system which has become unstable during startup stops intermittently and may experience the occurence of disk error	Hard Disk or MB error	Check in the following order and replace the parts as necessary. 1. Check Hard Disk cable connection. 2. Replace the Hard Disk. (PL 1.2) 3. Replace the Mother Board. (PL 1.2)
3	Unable to input using keyboard or mouse	Keyboard or mouse operation error	Check in the following order and replace the parts as necessary. 1. Check whether the connector of the keyboard/mouse is inserted. 2. Replace the keyboard/mouse. (PL 1.2) 3. Replace the Mother Board. (PL 1.2)
4	The display is blank	LCD operation error	Check in the following order and replace the parts as necessary. 1. Check whether the LCD is ON. 2. Adjust the brightness and contrast control knob of the LCD. 3. Check the cable connection between the Mother Board LCD connector and the LCD. 4. Check the cable connection between the AC power supply and the LCD. 5. Replace the LCD. (PL 1.2) 6. Replace the Mother Board. (PL 1.2)

2.3.2 Error Messages FIP

If the symptom remains unchanged after restarting the PC, follow the Corrective Actions in the following table to continue operation.

Table 1

No.	Error Message	Message Content	Cause	Corrective Actions
1	Keyboard Error	Keyboard error	Keyboard is malfunctioning or is not connected.	If there is still error after checking that the keyboard is connected, 1. Replace the keyboard. (PL 1.1) 2. Replace the Mother Board. (PL 1.2)
2	Keyboard Controller Failed	Keyboard error or Controller error	The Keyboard or the Controller is malfunctioning.	Replace the Mother Board. (PL 1.2)
3	System RAM Failed at offset:	Error in basic memory	Memory error (basic memory) was detected.	If there is still error after checking the installation status, Replace the Memory (DIMM). (PL 1.2)
4	Shadow Ram Failed at offset:	Error in memory	Memory error (shadow RAM) was detected.	If there is still error after checking the installation status, Replace the Memory (DIMM). (PL 1.2)
5	Extended RAM Failed at address line:	Error in extended memory	Memory error (extended memory) was detected.	If there is still error after checking the installation status, Replace the Memory (DIMM). (PL 1.2)
6	System CMOS checksum bad - Default configuration used	CMOS checksum error	CMOS checksum error was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
7	System timer error	Timer error	System timer error was detected.	Replace the Mother Board. (PL 1.2)
8	Real time clock error	RTC error	RTC (Real Time Clock) error was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
9	Check date and time settings	Incorrect date and time	RTC failure was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
10	Previous boot incomplete - Default configuration used	-	It was detected that an error has occurred during previous startup.	-
11	System cache error - Cache disabled	Cache error	System cache error was detected.	Replace the Mother Board. (PL 1.2)
12	CPU Fan Alarm occurred	CPU Fan error	CPU Fan rotation count error was detected.	If there is still error after checking the installation status, 1. Replace CPU Fan. 2. Replace the Mother Board. (PL 1.2)
13	Fan 1 Alarm occurred	Fan 1 error	Fan 1 rotation count error was detected.	If there is still error after checking the installation status, 1. Replace Fan 1. (PL 1.2) 2. Replace the Mother Board. (PL 1.2)
14	The error occurred during temperature sensor reading	Temperature sensor error	Failure to read the temperature sensor was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
15	System Temperature out of the range	Temperature error	The system temperature was detected to be abnormal.	If it does not start even after being left alone for a period of time, Replace the Mother Board. (PL 1.2)
16	The error occurred during voltage sensor reading	Voltage sensor error	Failure to read the voltage sensor was detected.	If there is still error after SETUP is redone, 1. Replace the Power Supply. (PL 1.2) 2. Replace the Mother Board. (PL 1.2)

Table 1

No.	Error Message	Message Content	Cause	Corrective Actions
17	System Voltage out of the range	Voltage error	The voltage value was detected to be abnormal.	If there is still error after SETUP is redone, 1. Replace the Power Supply. (PL 1.2) 2. Replace the Mother Board. (PL 1.2)
18	The error occurred during fan sensor reading	Fan sensor error	Failure to read the fan sensor was detected.	If there is still error after checking the installation status, 1. Replace Fan 1 or 2. (PL 1.2) 2. Replace the Mother Board. (PL 1.2)
19	Boot Monitoring failed 3 times	Boot monitoring error	It was detected that Boot Monitoring has failed 3 times.	Replace the Mother Board. (PL 1.2)
20	System Configuration Data Read Error	Flash ROM is defective	Failure to read the system data was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
21	System Configuration Data Write Error	Flash ROM Write is defective	Failure to write the system data was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
22	Invalid System Configuration Data - run configuration utility	Flash ROM is defective	The System Configuration Data was detected to be incorrect.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
23	Expansion Rom not initialized	SETUP settings error	The Extension ROM of the PCI Card was detected to be not initialized.	If there is still error after checking the connection status of the Option PWB, Replace the Mother Board. (PL 1.2)
24	Warning: IRQ not configured	SETUP settings error	The PCI interrupt was detected to be not correctly set.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
25	Resource Conflict	SETUP settings error	The resource of the PCI Card was detected to be not correctly mapped.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)
26	No Microcode Update Loaded for Booting Processor	SETUP settings error	Failure of Micro Code Update was detected.	If there is still error after SETUP is redone, Replace the Mother Board. (PL 1.2)

2.3.3 Corrective Actions for Undetectable Errors

Table 1

	Error Details	Symptoms	Details	Corrective Action
1	Hardware error	PC does not start, etc.	Error of hardware such as Hard Disk, RAM, Display, and etc.	Check the OS and the hardware.
2	OS error	PC does not start, Windows error message is displayed, etc.	Error such as unable to start the OS.	Check the OS and the hardware.
3	JAVA error	After starting up the PC, the desktop is displayed without the UI application running.	JAVA has not been installed.	Install the JAVA Runtime Environment.
4	UI application error	After starting up the PC, the desktop is displayed without the UI application running (Sometimes, Windows error message is also displayed).	Although it has been registered in startup (via automatic startup mechanism), there are no executable files, no access rights, directories and registry are strange, etc.	Install the UI application.
5	Required resource is not available at UI	When starting up the PC-UI, Windows error message (102-310 or 102-311 is detected, and the UI Error screen may also be displayed) is displayed and the UI application does not start up.	The DLL is not found (including PATH environmental variable failure).	Install the UI application.

2.4.1 Reflective Sensor Failure FIP

Procedure

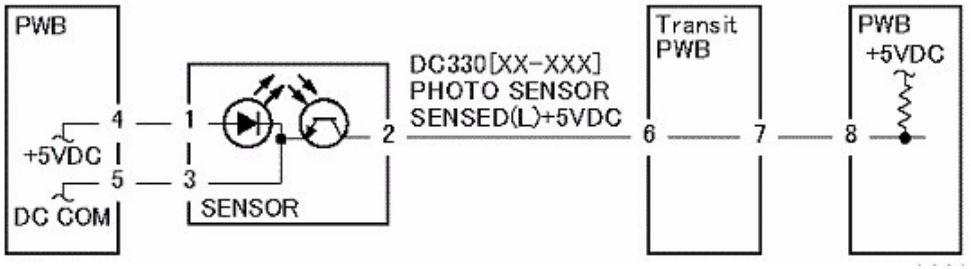


Figure 1 2001

Enter DC330[XXXX-XXX]. Block the sensor with a sheet of blank paper. Is [LOW] displayed?

Y N

Is +5VDC measured between the sensor pin-2 (+) and the GND (-)?

Y N

Check the connection between the sensor pin-2 and the PWB pin-8 for an open circuit and poor contact.
If no problem is found, replace the PWB.

Is +5VDC measured between the sensor pin-1 (+) and pin-3 (-)?

Y N

Is +5VDC measured between the PWB pin-4 (+) and pin-5 (-)?

Y N

Replace the PWB.

Check the connection between the PWB pin-4 and the sensor pin-1, as well as between the PWB pin-5 and the sensor pin-3 for open circuits and poor contacts.

Check the sensor for contamination and improper installation.
If no problems are found, replace the sensor.

Remove the sheet of paper blocking the sensor. Is [HIGH] displayed?

Y N

Disconnect the sensor connector. **Does the display change to [HIGH]?**

Y N

Check the connection between the sensor pin-2 and the PWB pin-8 for a short circuit.
If no problem is found, replace the PWB.

Check the sensor for improper installation and incident light diffraction. If no problems are found, replace the sensor.

Check the installation of the sensor. If no problems are found, replace the sensor.

2.4.2 Permeable Sensor Failure FIP

Procedure

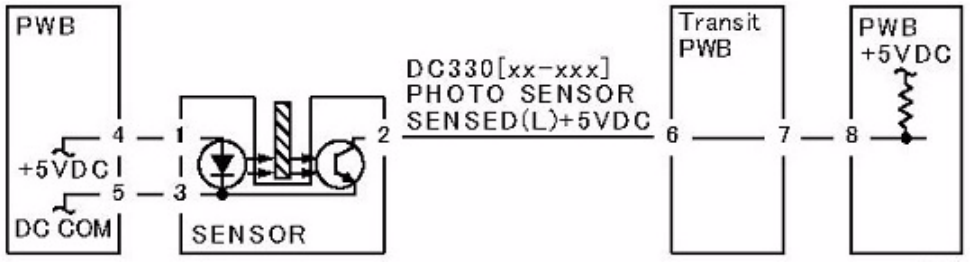


Figure 1 2002

Enter DC330[XXX-XXX]. Block the sensor. **Is [HIGH] displayed?**

Y N

Disconnect the sensor connector. **Does the display change to [HIGH]?**

Y N

Check the connection between the sensor pin-2 and the PWB pin-8 for a short circuit. If no problem is found, replace the PWB.

Replace the sensor.

Remove any obstruction on the sensor light path. **Does the display change to [LOW]?**

Y N

Is +5VDC measured between the sensor pin-2 (+) and the GND (-)?

Y N

Check the connection between the sensor pin-2 and the PWB pin-8 for an open circuit and poor contact.
If no problem is found, replace the PWB.

Is +5VDC measured between the sensor pin-1 (+) and pin-3 (-)?

Y N

Check the connection between the PWB pin-4 and the sensor pin-1, as well as between the PWB pin-5 and the sensor pin-3 for open circuits and poor contacts.
If no problem is found, replace the PWB.

Check the sensor for contamination.
If no problems are found, replace the sensor.

Check the sensor for improper installation and the Actuator for bending or failure.
If no problems are found, replace the sensor.

2.4.3 Switch (Normal/Open) Failure FIP

Procedure

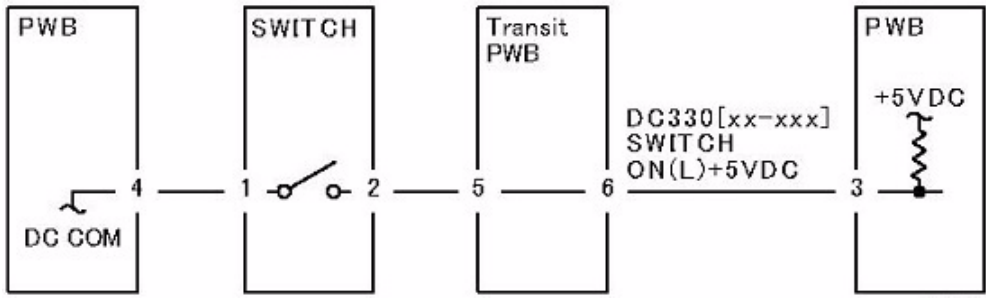


Figure 1 2003

Enter DC330[XXX-XXX]. Turn the switch ON. Is [LOW] displayed?

Y **N**

Is +5VDC measured between the switch pin-2 (+) and the GND (-) **?**

Y **N**

Check the connection between the switch pin-2 and the PWB pin-3 for an open circuit and poor contact.
If no problem is found, replace the PWB.

Is +5VDC measured between the switch pin-1 (+) and the GND (-) **?**

Y **N**

Replace the switch.

Check the connection between the switch pin-1 and the PWB pin-4 for an open circuit and poor contact.
If no problem is found, replace the PWB.

Turn the switch OFF. Is [HIGH] displayed?

Y **N**

Disconnect the switch connector. Is [HIGH] displayed?

Y **N**

Check the connection between the switch pin-2 and the PWB pin-3 for a short circuit.
If no problem is found, replace the PWB.

Replace the switch.

Check the installation of the switch.
If no problems are found, replace the switch.

2.4.4 Solenoid/Clutch Not Energized Failure FIP

Procedure

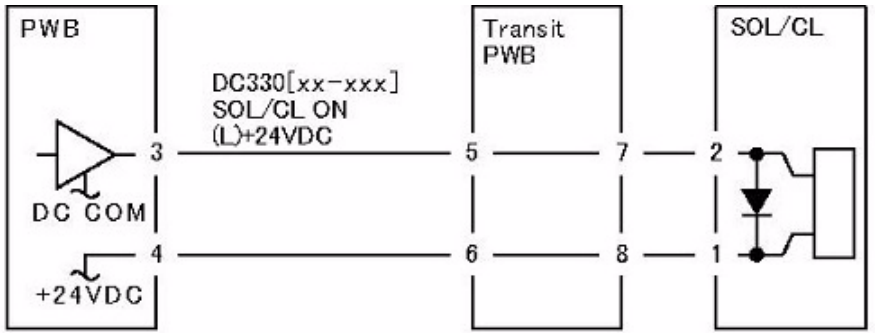


Figure 1 2004

NOTE: *Before performing this FIP, ensure that there is no (mechanical) operation failure with the solenoid and the clutch.*

Enter DC330[XXX-XXX] and turn it ON. **Is +24VDC measured between the PWB pin-3 (+) and the GND (-)?**

Y **N**

Is +24VDC measured between the solenoid/clutch pin-2 (+) and the GND (-) **?**

Y **N**

Is +24VDC measured between the solenoid/clutch pin-1 (+) and the GND (-) **?**

Y **N**

Check the connection between the PWB pin-4 and the solenoid/clutch pin-1 for an open circuit and poor contact.
If no problem is found, replace the PWB.

Replace the solenoid/clutch.

Check the connection between the PWB pin-3 and the solenoid/clutch pin-2 for an open circuit and poor contact.

Replace the PWB.

2.4.5 Solenoid/Clutch Left Energized Failure FIP

Procedure

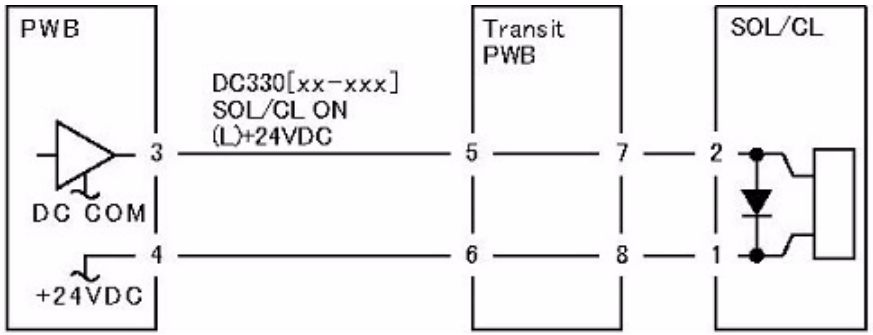


Figure 1 2004

Turn OFF the power.
Disconnect the PWB connector. **Is the resistance between the connector pin-3 and the frame 10Ohm or less?**

Y **N**

Replace the PWB.

Check the connection between the connector pin-3 and the solenoid/clutch pin-2 for a short circuit.
If no problems are found, replace the solenoid/clutch.

2.4.6 Motor Does Not Rotate Failure FIP

Procedure

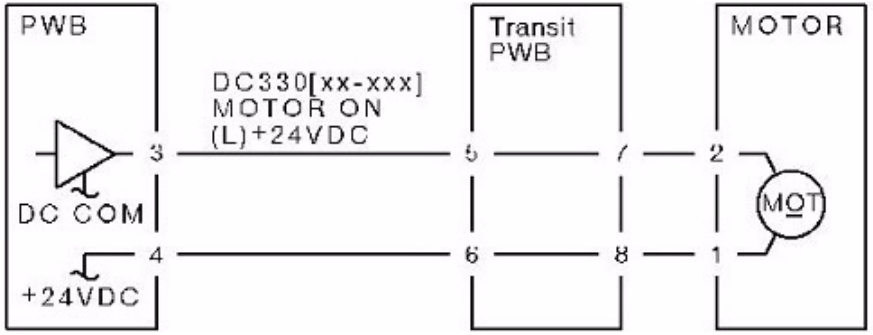


Figure 1 2005

NOTE: *Before performing this FIP, ensure that the motor is not locked or loaded.*

Enter DC330[XXX-XXX] and turn it ON.
Is +24VDC measured between the PWB pin-3 (+) and the GND (-) **?**

Y **N**

Is +24VDC measured between the motor pin-2 (+) and the GND (-) **?**

Y **N**

Is +24VDC measured between the motor pin-1 (+) and the GND (-) **?**

Y **N**

Is +24VDC measured between the PWB pin-4 (+) and the GND (-) **?**

Y **N**

Replace the PWB.

Check the connection between the PWB pin-4 and the motor pin-1 for an open circuit and poor contact.

Replace the motor.

Check the connection between the PWB pin-3 and the motor pin-2 for an open circuit and poor contact.

Replace the PWB.

2.4.7 Motor Left Running Failure FIP

Procedure

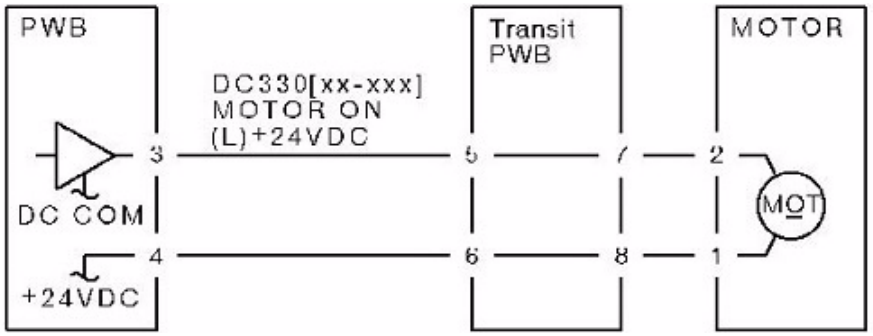


Figure 1 2005

Turn OFF the power. Disconnect the PWB connector. Is the resistance between the connector pin-3 and the frame 10Ohm or less?

Y N

Replace the PWB.

Check the connection between the connector pin-3 and the motor pin-2 for a short circuit.
If no problems are found, replace the motor.

2.4.8 NIP/RELEASE SOLENOID Not Energized Failure FIP

Procedure

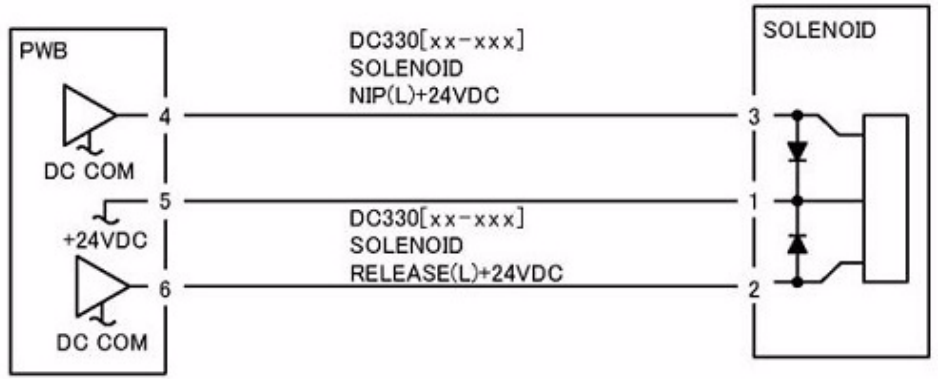


Figure 1 2017

NOTE: *Before performing this FIP, ensure that there is no (mechanical) operation failure with the solenoid.*

Is +24VDC measured between the NIP/RELEASE SOLENOID pin-1 (+) and the GND (-)?

Y N

Is +24VDC measured between the PWB pin-5 (+) and the GND (-)?

Y N

Check the +24VDC inputs of the PWB. If no problem is found, replace the PWB.

Check the connection between the PWB pin-5 and the NIP/RELEASE SOLENOID pin-1 for an open circuit and poor contact.

Use the following FIP when there is a problem with the NIP.
Enter DC330[XXX-XXX] and turn the SOL NIP ON. **Is +24VDC measured between the PWB pin-4 (+) and the GND (-)?**

Y N

Enter DC330[XXX-XXX] and turn the SOL NIP ON. **Is +24VDC measured between the NIP/RELEASE SOLENOID pin-3 (+) and the GND (-)?**

Y N

Replace the NIP/RELEASE SOLENOID.

Check the connection between the PWB pin-4 and the NIP/RELEASE SOLENOID pin-3 for an open circuit and poor contact.

Use the following FIP when there is a problem with the RELEASE.
Enter DC330[XXX-XXX] and turn the SOL RELEASE ON. **Is +24VDC measured between the PWB pin-6 (+) and the GND (-)?**

Y N

Enter DC330[XXX-XXX] and turn the SOL RELEASE ON. Is +24VDC measured between the NIP/RELEASE SOLENOID pin-2 (+) and the GND (-)?

A

A

Y **N**

Replace the NIP/RELEASE SOLENOID.

Check the connection between the PWB pin-6 and the NIP/RELEASE SOLENOID pin-2 for an open circuit and poor contact.

Replace the PWB.

2.5.1 About LogHarvest2

LogHarvest2 is a tool which takes IOT logs for Turin. This tool is installed in PCUI on IOT, and used to take logs when problems occur on the machine.

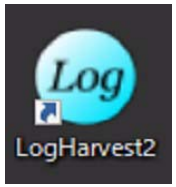


Figure 1 j0kol250001

2.5.2 List of Obtainable Logs

The table below shows a list of logs that can be obtained by using LogHarvest2. Only major logs are shown.

Table 1

Name	Description
Sys Soft Log	Sys Sofware Log
Acl Soft Log	Sys (Acl) Software Log
Com Board Log	Com Software Log
UI Soft Log	UI Software Log
PC Diag Tool Log	PCDiag Tool Log
Download Tool Log	Download Tool Log
Fault Trigger Log	This log is obtained automatically when fault is occurred.
Windows Event Log	Windows Event Log
Crush Dump Log	Crush Dump Log
TQMS Cache Data	Tqms Cache Data
IOT Main Log	IOT-Main PWBA Main Log
Fusing Main Log	Fusing-Inverter PWBA Main Log
PH Main Log	PH PWBA Main Log
EPG Main Log	Mk-EPG PWBA Main Log
Drive Main Log	Mk-Drive PWBA Main Log
ILS Main Log	ILS PWBA Main Log
HCF Log	HCF Log (When device connected)
CDM Log	CDM Log (When device connected)
HCS 1st Log	HCS 1st Log (When device connected)
HCS 2nd Log	HCS 2nd Log (When device connected)
D-Finisher Log	D-Finisher Log (When device connected)

2.5.3 Take the Log Procedure

This chapter described for taking the log by using the LogHarvest2.

Start the LogHarvest2

1. Turn on the IOT.
2. Click the [Log Harvest2] on the desktop.

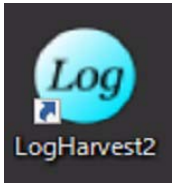


Figure 1 j0kol250001

Appear taking the log screen.

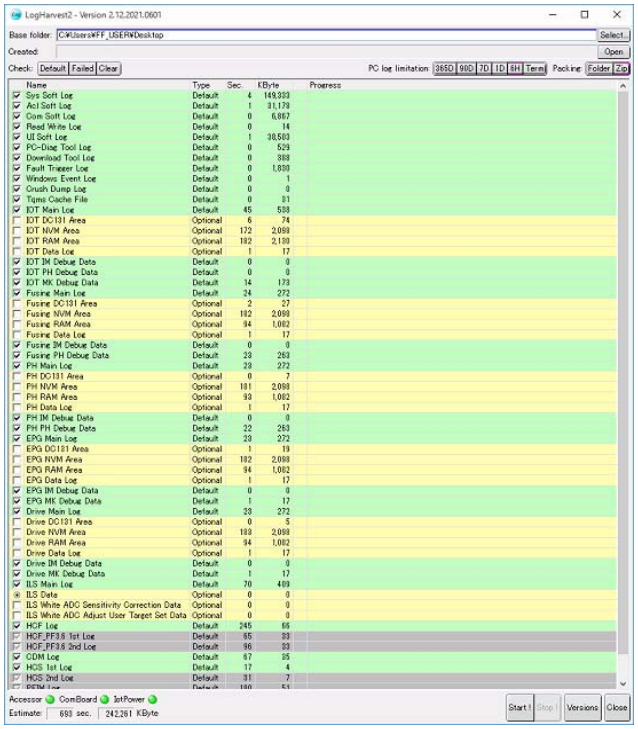


Figure 2 j0kol250002

Take the IOT Log

1. Check the taking targeted logs.

   NOTE: *Usually, it is no problem to keep the default settings.*

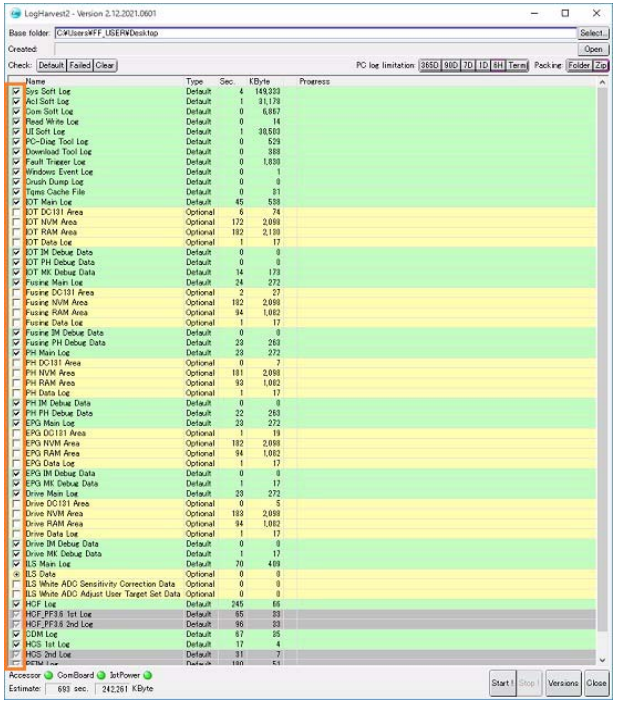


Figure 3 j0kol250003

2. Select the [Select], and specify the destination to save for the log files.

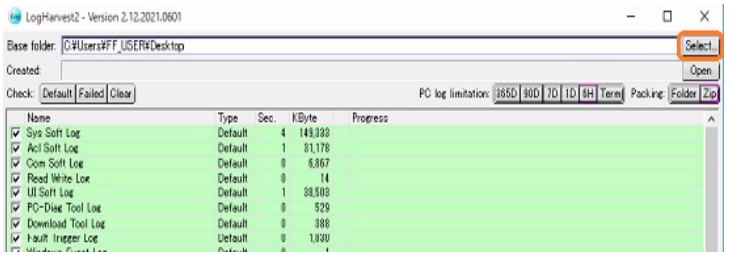


Figure 4 j0kol250004

3. Select the [Finish], and specify the folder to save for the log files.

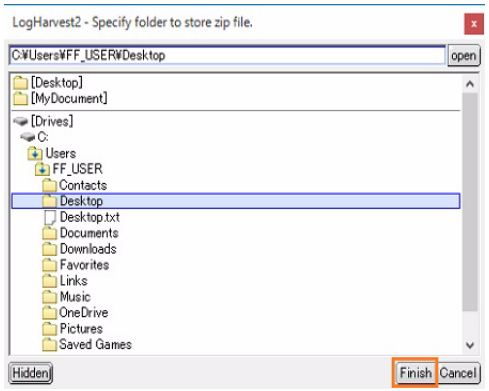


Figure 5 j0kol250005

4. Specify the period of taking targeted logs from the [365D], [90D], [7D], [1D], [6H], [Term].
Usually, it is no problem to keep the default setting for [1D].

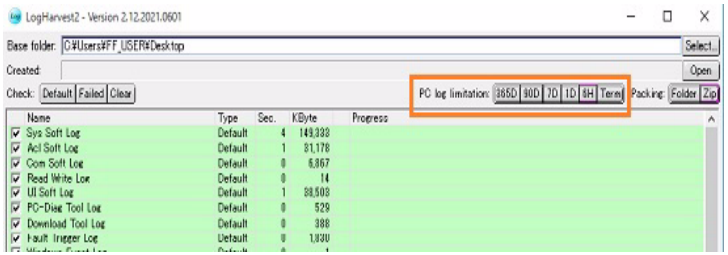

LogHarvest2 - Version 2.12.2021.0601
Base folder: C:¥Users¥FF_USER¥Desktop
Select...
Created:
Open
Check: Default Failed Clear
PC log limitation: 365D 90D 7D 1D 6H Term
Packing: Folder Zip
Name Type Sec. KByte Progress
Sys Soft Log Default 4 149,333
Acl Soft Log Default 1 31,178
Com Soft Log Default 0 6,867
Read Write Log Default 0 14
UI Soft Log Default 1 88,503
PC-Diag Tool Log Default 0 529
Download Tool Log Default 0 388
Fault Trigger Log Default 0 1,830

Figure 6 j0kol250006

5. Specify the folder to save for the log files from [Folder]or [Zip].

NOTE: When save the log compressed file, specify the [Zip].

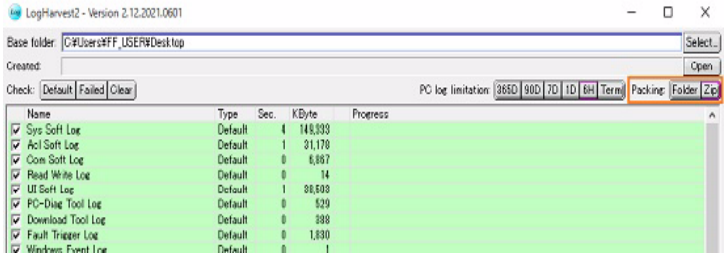

LogHarvest2 - Version 2.12.2021.0601
Base folder: C:¥Users¥FF_USER¥Desktop
Select...
Created:
Open
Check: Default Failed Clear
PC log limitation: 365D 90D 7D 1D 6H Term
Packing: Folder Zip
Name Type Sec. KByte Progress
Sys Soft Log Default 4 149,333
Acl Soft Log Default 1 31,178
Com Soft Log Default 0 6,867
Read Write Log Default 0 14
UI Soft Log Default 1 88,503
PC-Diag Tool Log Default 0 529
Download Tool Log Default 0 388
Fault Trigger Log Default 0 1,830

Figure 7 j0kol250007

6. Click the [Start] to start taking the logs.

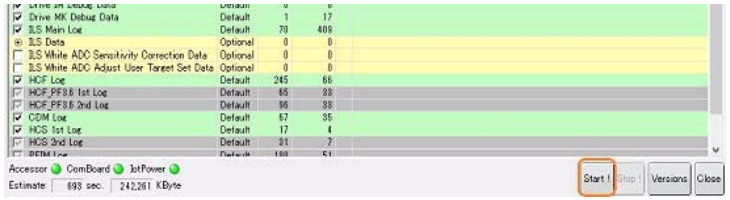

Drive MK Debug Data Default 1 17
ILS Main Log Default 70 409
ILS Data Optional 0 0
ILS White ADC Sensitivity Correction Data Optional 0 0
ILS White ADC Adjust User Target Set Data Optional 0 0
HCF Log Default 245 66
HCF_PF3.6 1st Log Default 65 33
HCF_PF3.6 2nd Log Default 96 33
CDM Log Default 67 35
HCS 1st Log Default 17 4
HCS 2nd Log Default 31 7
Accessor ComBoard IotPower
Estimate: 693 sec. 242,261 KByte
Start
Stop
Versions
Close

Figure 8 j0kol250008

When start the taking logs, displayed the progress bar.
When completed the taking logs, put the light on green indicator.

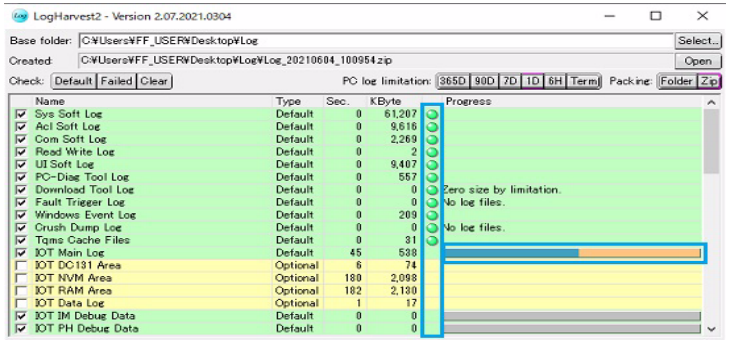

LogHarvest2 - Version 2.07.2021.0304
Base folder: C:¥Users¥FF_USER¥Desktop¥Log
Select...
Created: C:¥Users¥FF_USER¥Desktop¥Log¥Log_20210604_100954.zip
Open
Check: Default Failed Clear
PC log limitation: 365D 90D 7D 1D 6H Term
Packing: Folder Zip
Name Type Sec. KByte Progress
Sys Soft Log Default 0 61,207
Acl Soft Log Default 0 9,616
Com Soft Log Default 0 2,269
Read Write Log Default 0 2
UI Soft Log Default 0 9,407
PC-Diag Tool Log Default 0 567
Download Tool Log Default 0 0
Zero size by limitation.
Fault Trigger Log Default 0 0
No log files.
Windows Event Log Default 0 209
Crush Dump Log Default 0 0
No log files.
Tqms Cache Files Default 0 31
IOT Main Log Default 45 538
IOT DC131 Area Optional 6 74
IOT NVM Area Optional 180 2,098
IOT RAM Area Optional 182 2,130
IOT Data Log Optional 1 17
IOT IM Debug Data Default 0 0
IOT PH Debug Data Default 0 0

Figure 9 j0kol250009

Chapter 3 Image Quality Troubleshooting

3 Image Quality Troubleshooting

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3.1.1 Using Image Quality Troubleshooting

Chapter 3 describes the following 2 items of image quality troubleshooting.

- 3.2 Image Quality Troubleshooting
- 3.3 Image Defect Samples

For how to use this chapter, first go to [IQ-1 Image Quality Entry FIP] in 3.2 Image Quality Troubleshooting to check the symptoms of the image quality problem, then proceed from IQ-2 to IQ21 to restore image quality.

Also, as 3.3 Image Defect Samples contains representative samples of defects, compare them against image quality defects collected by the customer, and if they are the same, restore image quality according to its corrective action.

IQ-1 Image Quality Entry FIP

How to use Image Quality Troubleshooting

Perform the following procedure to check the NG samples obtained during the service call or from the customer and proceed to the applicable IQ-FIP.

1. If the defected sample is determined as the same problem with the one covered in this chapter ("Defect Image Sample") through visual observation, check the part which is causing the poor image quality.
2. When the problem cannot be determined or there was no corresponding NG sample in 1 above, proceed to the corresponding FIP below to repair the problem.

Table 1

Image Quality Problem	Symptoms	FIP
Periodical spots, streaks, bands, and etc.	Spots, streaks, or bands appear on the image at a regular pitch.	IQ-2
Spots, streaks, and bands, etc. appearing at specific locations from the leading edge	Spots, streaks, and bands, etc. appearing at fixed locations.	IQ-3
Overall light printing	Every color on the image is equally light in density.	IQ-4
A particular color is light	Only a particular color on the image is light in density.	IQ-5
All white	Paper is printed completely white.	IQ-6
Solid black	Paper is printed completely black.	IQ-7
Solid color	Paper is completely printed in a particular color.	IQ-8
Vertical blank areas	There are extremely light or completely white part on the image. These part appear vertically over an extensive area in the process direction.	IQ-9
Vertical off-color areas	Extremely light part of a particular color appear vertically over an extensive area on the image in the process direction.	IQ-10
Horizontal blank areas	There are extremely light or completely white part on the image. These part with no image appear horizontally over an extensive area perpendicular to the process direction.	IQ-11
Horizontal off-color areas	Extremely light part of a particular color appear horizontally over an extensive area perpendicular to the process direction on the image.	IQ-12
Vertical streaks (irregular)	Black lines or streaks of a particular color running in the vertical direction of the paper.	IQ-13
Horizontal streaks (irregular)	Black lines or streaks of a particular color running in the horizontal direction of the paper.	IQ-14
Partial image omission	There are extremely light part on the image or part that are completely omitted. These omitted part appear on limited areas on the paper.	IQ-15
Spots	Black toner spots or toner spots of a particular color are scattered randomly across the entire page.	IQ-16

Table 1

Image Quality Problem	Symptoms	FIP
Ghost Image	Ghost images appear on the paper. A previously printed image gets printed onto the subsequent sheet of paper, or part of the printed image was transferred repeatedly.	IQ-17
Background	The entire page or part thereof is covered by a very light layer of black toner or toner of a particular color.	IQ-18
Skew	Printed images are not parallel to the edges of the paper.	IQ-19
Paper wrinkle	The printed paper is creased, folded or torn.	IQ-20
Unfused image	Printed images are not properly fused onto the paper. When rubbed, the image comes off easily.	IQ-21

IQ-2 Periodical spots, streaks, bands, etc. FIP

Spots, streaks, or bands appear on the image at a regular pitch. (Figure 1)

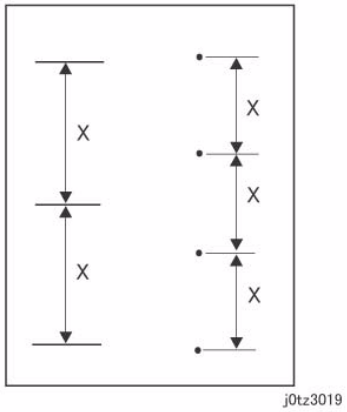

Figure 1 j0tz3019

Procedure

Measure the distance of the periodical pitches (marked 'X' above).
Look for the measured 'X' and the corresponding number in the following table.

Table 1

No	X (mm)	Component Name	PL No.
1	0.3	ROS Assembly (Y, M, C, K, CT)	PL 2.1 - Item 1, PL 2.2 - Item 1
2	1.43	Gear (Z37)	PL 5.8 - Item 8
3	1.88	IBT Belt Drive Roll Gear (T56)	PL 6.5 - Item 10
4	1.7	ROS Assembly (Y, M, C, K, CT)	PL 2.1 - Item 1, PL 2.2 - Item 1
5	2 - 2.5	Wire	PL 5.14 - Item 7
6	6.5	Gear	PL 5.11 - Item 11
7	6.5	Idler Gear (14)	PL 5.11 - Item 12
8	8.5 - 11	Grid Plate	PL 5.14 - Item 14
9	53	Magnet Roll	PL 5.9 - Item 29
10	63	Exit Drive Roll	PL 16.24 - Item 6
11	82	Pene Roll	PL 16.23 - Item 24
12	88	1st Roll Assembly (Y, M, C, K)	PL 6.7 - Item 1
13	88	BUR Roll Assembly	PL 6.15 - Item 2
14	94	Refresh Roll Assembly	PL 7.10 - Item 1
15	105.5	Belt Encoder Sensor Assembly	PL 6.5 - Item 13
16	105.5	IBT Belt Drive Roll Gear (T56)	PL 6.5 - Item 10
17	110	Upper Roll Assembly	PL 12.3 - Item 10

Table 1

No	X (mm)	Component Name	PL No.
18	110	Burr Press Roll Assembly	PL 12.4 - Item 8
19	129	Decurler Belt	PL 16.24 - Item 10
20	129.1	2nd Belt Assembly	PL 16.20 - Item 4
21	157	External Heat Roll Assembly	PL 7.7 - Item 26
22	241	Transport Belt (V-Tra 4)	PL 7.5 - Item 15
23	264	Drum Cartridge (Y, M, C, K, CT, SLV/GLD, W)	PL 5.2 - Item 7
24	283	Heat Roll Assembly	PL 7.14 - Item 26
25	314	Press Roll	PL 7.3 - Item 19
26	402	Transport Belt (Exit V-Tra)	PL 7.6 - Item 27
27	528	Fusing Belt	PL 7.4 - Item 1
28	1148	Upper Cooling Belt	PL 16.5 - Item 1
29	1148	Lower Cooling Belt	PL 16.7 - Item 1

Check the part that correspond to the closest X value with the following perspectives.

Table 2

No	OK	Action
1	Check the surface of the part. Are there any foreign substances?	Remove the foreign substances.
2	Is the surface uneven or distorted?	Replace the part if it cannot be repaired.
3	Has it been replaced by a component of another color?	If yes, replace it with the part before replacement.
4	When the problem cannot be determined visually.	If the trouble persists after replacement, restore it to its original state and look for other possible causes.

IQ-3 Spots, streaks, and bands, etc. appearing at specific locations from the leading edge FIP

Spots, streaks, and bands, etc. appearing at fixed locations from paper leading edge. (Figure 1)

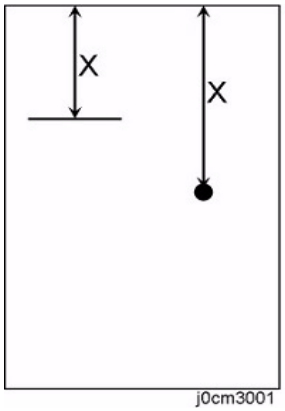

Figure 1 j0cm3001

Procedure

Measure distance (X above) from paper leading edge.
Look for the measured 'X' and the corresponding number in the following table.
Table 1

NO	X(mm)	Cause/Corrective Actions
1	50mm or 132mm	Exposure point vibration when the front end of the toner image on the Drum reaches the Primary Transfer Unit Fine-tune the Drum speed. Change the value of NVM 750-001 from 27756 to 27770 or 27742 (+/-0.05% change).
2	130mm	Check the 2nd BTB and replace if there is any error Parts Replacement Candidate: 2nd Belt Assembly (PL 6.20) / BTB Frame Assembly (PL 6.20)
3	Other Positions For details, refer to Tables 2 and 3	Cause: When stiff cardboard paper enters the 2nd BTB or when the trail edge of the paper leaves the 2nd BTB, the belt speed fluctuates and smears occur at the Primary Transfer Unit and Exposure Point. Action: As a guideline, occurrence at 350 gsm or more is within the performance range. If it occurs even on soft paper with a grain size of 300 gsm or less, take the following actions. Also, if it occurs even on the 1st and 2nd sheet, replace the Drum Cartridge (PL 5.2). • Check the installation state of the Fly Wheel • Check if the paper and the paper type setting of the Tray match • Check the IBT Drive Gear (56T) (PL 6.5) for gutter in the rotation direction and wear on the tooth surface. -> If gutter or wear is large, replace it. • Mot screw looseness of IBT Drive Motor Assembly (PL 6.5). -> If there is any looseness, replace it (PL 6.5). • Check the contamination state of the Belt Drive Roll (PL 6.5). -> Clean it. • Check the contamination state inner surface of the IBT Belt (PL 6.3). -> Clean it. Parts Replacement Candidate: IBT Drive Gear (56T) (PL 6.5) / IBT Drive Motor Assmbly (PL 6.5) / Belt Drive Roll (PL 6.5) IBT Belt (PL 6.3) / Belt Encoder Sensor Assembly (PL 6.5)
4	-	Confirm the possibility of Toner Cover opening and closing impact
5	-	Confirm the possibility of Paper Tray opening and closing impact

Table2 2nd Entry Smear

		Primary Transfer Smear								Exposure Streak							
		K		C		M		Y		K		C		M		Y	
		From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)
13x19.2 inch	Tray	3	26.4	3	237.5	3	448.6	-	-	3	157.3	3	368.4	-	-	4	130.8
	MBT	-	-	-	-	3	184.7	3	395.8	-	-	3	104.5	3	315.6	-	-
	Fusing Performance Priority	-	-	-	-	2	184.7	2	395.8	-	-	2	104.5	2	315.6	-	-
	Embossed High Quality	-	-	-	-	3	52.8	3	263.9	-	-	-	-	3	183.6	3	394.7
13x19 inch	Tray	3	290.3	-	-	4	184.7	4	395.8	3	421.1	4	104.5	4	315.6	-	-
	MBT	-	-	-	-	3	184.7	3	395.8	-	-	3	104.5	3	315.6	-	-
	Fusing Performance Priority	2	26.4	2	237.5	2	448.6	-	-	2	157.3	2	368.4	-	-	-	-
	Embossed High Quality	-	-	-	-	3	52.8	3	263.9	-	-	-	-	3	183.6	3	394.7
12X18 inch	Tray	3	290.3	-	-	4	184.7	4	395.8	3	421.1	4	104.5	4	315.6	-	-
	MBT	-	-	-	-	3	184.7	3	395.8	-	-	3	104.5	3	315.6	-	-
	Fusing Performance Priority	2	26.4	2	237.5	2	448.6	-	-	2	157.3	2	368.4	-	-	-	-
	Embossed High Quality	-	-	-	-	3	52.8	3	263.9	-	-	-	-	3	183.6	3	394.7
SRA3	Tray	3	290.3	-	-	4	184.7	4	395.8	3	421.1	4	104.5	4	315.6	-	-
	MBT	-	-	-	-	3	184.7	3	395.8	-	-	3	104.5	3	315.6	-	-
	Fusing Performance Priority	2	26.4	2	237.5	2	448.6	-	-	2	157.3	2	368.4	-	-	-	-
	Embossed High Quality	-	-	-	-	3	52.8	3	263.9	-	-	-	-	3	183.6	3	394.7
11X17 inch	Tray	3	290.3	-	-	4	184.7	4	395.8	3	421.1	4	104.5	4	315.6	-	-
	MBT	-	-	3	105.6	3	316.7	-	-	3	25.3	3	236.4	-	-	-	-
	Fusing Performance Priority	2	26.4	2	237.5	-	-	-	-	2	157.3	2	368.4	-	-	-	-
	Embossed High Quality	-	-	-	-	3	52.8	3	263.9	-	-	-	-	3	183.6	3	394.7

		Primary Transfer Smear								Exposure Streak							
		K		C		M		Y		K		C		M		Y	
		From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)
A3	Tray	3	290.3	-	-	4	184.7	4	395.8	-	-	4	104.5	4	315.6	-	-
	MBT	-	-	3	105.6	3	316.7	-	-	3	25.3	3	236.4	-	-	-	-
	Fusing Performance Priority	2	26.4	2	237.5	-	-	-	-	2	157.3	2	368.4	-	-	-	-
	Embossed High Quality	-	-	-	-	3	184.7	3	395.8	-	-	3	104.5	3	315.6	-	-
A4_SEF	Tray	5	26.4	5	237.5	6	118.8	-	-	5	157.3	6	38.5	6	249.6	7	130.8
	MBT	3	26.4	3	237.5	-	-	-	-	3	157.3	-	-	-	-	4	130.8
	Fusing Performance Priority	2	26.4	2	237.5	-	-	-	-	2	157.3	-	-	-	-	-	-
	Embossed High Quality	-	-	-	-	3	184.7	-	-	-	-	3	104.5	-	-	-	-
8.5x11 inch	Tray	5	26.4	5	237.5	6	118.8	-	-	5	157.3	6	38.5	6	249.6	7	130.8
	MBT	-	-	-	-	4	184.7	-	-	-	-	4	104.5	-	-	-	-
	Fusing Performance Priority	-	-	-	-	3	184.7	-	-	-	-	3	104.5	-	-	-	-
	Embossed High Quality	-	-	-	-	4	184.7	-	-	-	-	4	104.5	-	-	-	-
A4_LEF	Tray	6	26.4	-	-	7	184.7	8	131.9	6	157.3	7	104.5	8	51.7	-	-
	MBT	-	-	4	171.5	-	-	5	131.9	4	91.3	-	-	5	51.7	-	-
	Fusing Performance Priority	3	26.4	-	-	-	-	-	-	3	157.3	-	-	-	-	4	130.8
	Embossed High Quality	-	-	-	-	4	184.7	-	-	-	-	4	104.5	-	-	-	-

Table3 2nd Exit Smear

		Primary Transfer Smear								Exposure Streak							
		K		C		M		Y		K		C		M		Y	
		From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)
13x19.2 inch	Tray	-	-	4	68	4	279.1	-	-	-	-	4	198.8	4	409.9	-	-
	MBT	3	252.7	3	463.8	-	-	4	94.3	3	383.5	-	-	4	14.1	4	225.2
	Fusing Performance Priority	2	252.7	2	463.8	-	-	-	-	2	383.5	-	-	-	-	-	-
	Embossed High Quality	3	120.8	3	331.9	-	-	-	-	3	251.6	3	462.7	-	-	4	27.2
13x19 inch	Tray	4	247.6	4	458.7	5	142	5	353.1	4	378.5	5	61.8	5	272.9	-	-
	MBT	3	247.6	3	458.7	-	-	4	89.2	3	378.5	-	-	4	9	4	220.1
	Fusing Performance Priority	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Embossed High Quality	3	115.7	3	326.8	-	-	-	-	3	246.5	3	457.6	-	-	4	22.2
12X18 inch	Tray	4	222.2	4	433.3	5	116.6	5	327.7	4	353.1	5	36.4	5	247.5	-	-
	MBT	3	222.2	3	433.3	-	-	4	63.8	3	353.1	-	-	-	-	4	194.7
	Fusing Performance Priority	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Embossed High Quality	3	90.3	3	301.4	-	-	-	-	3	221.1	3	432.2	-	-	-	-
SRA3	Tray	4	215	4	426.1	5	109.4	5	320.5	4	345.9	5	29.2	5	240.3	-	-
	MBT	3	215	3	426.1	-	-	4	56.6	3	345.9	-	-	-	-	4	187.5
	Fusing Performance Priority	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Embossed High Quality	3	83.1	3	294.2	-	-	-	-	3	213.9	3	425	-	-	-	-
11X17 inch	Tray	4	196.8	4	407.9	5	91.2	5	302.3	4	327.7	5	11	5	222.1	-	-
	MBT	3	328.8	-	-	4	25.3	4	236.4	-	-	-	-	4	156.1	4	367.2
	Fusing Performance Priority	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Embossed High Quality	3	64.9	3	276	-	-	-	-	3	195.7	3	406.8	-	-	-	-

		Primary Transfer Smear								Exposure Streak							
		K		C		M		Y		K		C		M		Y	
		From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)	From what sheet does it start to occur (sheet)	Position from lead edge (mm)
A3	Tray	4	185	4	396.1	5	79.4	5	290.5	4	315.9	-	-	5	210.3	-	-
	MBT	3	317	-	-	4	13.5	4	224.6	-	-	-	-	4	144.3	4	355.4
	Fusing Performance Priority	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Embossed High Quality	3	185	3	396.1	-	-	4	26.6	3	315.9	-	-	-	-	4	157.5
A4_SEF	Tray	-	-	6	207.2	7	88.4	-	-	6	126.9	7	8.1	7	219.2	8	100.5
	MBT	-	-	-	-	4	88.4	-	-	-	-	4	8.1	4	219.2	-	-
	Fusing Performance Priority	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Embossed High Quality	3	62	3	273.1	-	-	-	-	3	192.9	-	-	-	-	4	34.5
8.5x11 inch	Tray	-	-	6	189.6	7	70.8	-	-	6	109.3	-	-	7	201.6	8	82.9
	MBT	4	44.4	4	255.5	-	-	5	149.9	4	175.3	-	-	5	69.7	-	-
	Fusing Performance Priority	3	44.4	3	255.5	-	-	-	-	3	175.3	-	-	-	-	4	16.9
	Embossed High Quality	4	44.4	4	255.5	-	-	5	149.9	4	175.3	-	-	5	69.7	-	-
A4_LEF	Tray	-	-	7	186.1	8	133.3	9	80.5	7	105.9	8	53.1	9	0.3	-	-
	MBT	4	172.9	-	-	5	133.3	-	-	-	-	5	53.1	-	-	6	13.5
	Fusing Performance Priority	-	-	-	-	4	1.4	-	-	-	-	-	-	4	132.2	-	-
	Embossed High Quality	-	-	4	186.1	-	-	5	80.5	4	105.9	-	-	5	0.3	-	-

IQ-4 Overall Light Printing FIP

Every color on the image is equally light in density.

Figure 1 j0tz3001

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original parts and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Perform the operation according to MAX SET UP procedures (ADJ 18.1.5). **Does the problem persist?**

Y **N**

End

Pull out the IBT module and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Remove each connector of 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Check the 2nd Belt. **Is the surface of the 2nd Belt free from dirt or damage?**

Y **N**

Replace the 2nd Belt (PL 6.27).

A

A

Install a new IBT Belt (PL 6.3). Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-5 A Particular Color is Light FIP

Only a particular color on the image is light in density.

Figure 1 j0tz3002

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

Check the relevant toner cartridge. **Is there any toner left in the toner cartridge?**

Y **N**

Replace Toner Cartridge

Drive the Toner Dispense Motor for the corresponding color. **Is the Toner Dispense Motor for the corresponding color operating normally?**

Y **N**

Check the drive system of the Toner Dispense Motor.

Perform the operation according to MAX SET UP procedures (ADJ 18.1.5). **Does the problem persist?**

Y **N**

End

Remove the IBT module and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Check the MM Assembly (PL 5.6) of the corresponding color. **Is the Mag Roll of the MM Assembly free from foreign substances?**

Y **N**

Remove the foreign substances. Or replace the MM Assembly.

Check the installation of the MM Assembly of the corresponding color. **Is the MM Assembly properly installed?**

Y **N**

Install the MM Assembly properly.

Replace the Drum Cartridge of the corresponding color. Turn the power OFF and ON, then make a printout. **Does the same problem recur?**

Y **N**

End

Replace Deve Bias HVPS (Y, M, C, K, CLR, GLD, SLV, TX, CR, PINK, PA) (PL 5.5), EPG CORE PWB (PL 18.3), MK_EPG ADC PWB (PL 18.3) in sequence.

IQ-6 Printout is Blank FIP

Paper is printed completely white.

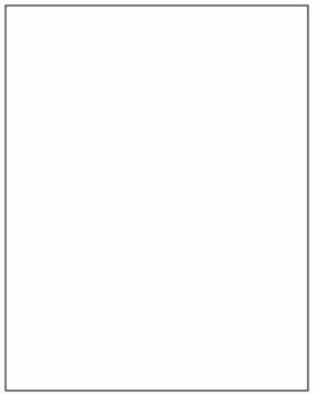

Figure 1 j0tz3003

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Print a page that is entirely black. During the print cycle, turn OFF the power after the feeding sound is heard. (Stop the printing when it is in progress) Check the IBT Belt surface. **Is there a considerable amount of toner left on the surface of the IBT Belt?**

Y **N**

Check the connection of connectors on each ROS Assembly. **Are the connectors connected securely?**

Y **N**

Connect the connector cable securely.

Check the installation of the each ROS Assembly. **Is each ROS Unit properly installed?**

Y **N**

Install the ROS Assembly.

Check the connection of IOT MAIN PWB connectors. **Are the connectors connected securely?**

Y **N**

Connect the connector cable securely.

Replace the ROS Assembly (PL 2.1), IOT MAIN PWB (PL 18.14) in sequence.

A

A

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-7 Solid Black Print FIP

Paper is printed completely black.

Figure 1 j0tz3004

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

Remove the K Drum Cartridge (PL 5.2), and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Remove the K Drum Cartridge (PL 5.2), and install a new K Drum Cartridge (PL 5.2). Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Remove each connector of CC HVPS K (PL 18.4), DST 1 (IOT-L) PWB (PL 18.11), DST 2 (IOT-R) PWB (PL 18.7), LVPS H1U (PL 18.12), and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

A

Check the connection of connectors on ROS Assembly (K) (PL 2.3). Remove each connector and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Replace the IOT MAIN PWB (PL 18.14).

IQ-8 Solid Color Print FIP

Paper is completely printed in a particular color.

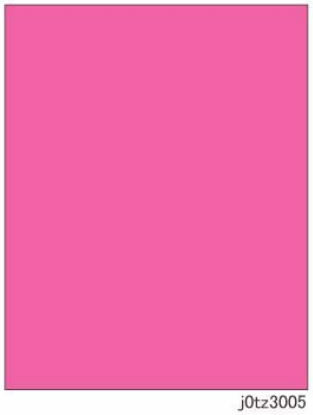

Figure 1 j0tz3005

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

Remove Drum Cartridge (Y, M, C, K, CLR, GLD, SLV TX, PINK) (PL 5.2) of the corresponding color, and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Install new Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2) of the corresponding color. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Remove each connector of CC HVPS (PL 18.4) or CC HVPS 2 (PL 18.5), EPG CORE PWB (PL 18.3) of the corresponding color, and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

A

A

Check the connection of connectors on the ROS Assembly of the corresponding color. Remove each connector and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Replace the EPG CORE PWB (PL 18.3).

IQ-9 Vertical Blank Areas FIP

There are extremely light or completely white part on the image. These part appear vertically over an extensive area in the process direction.

Figure 1 j0tz3006

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Print a page that is entirely black. Force stop the printing when it is in progress. Check the surface of the IBT Belt. **Is the surface of the IBT Belt in proper condition i.e. no omission of image?**

Y N

Check the surface of the IBT Belt for distortion and foreign substances. **Is the surface of the IBT in proper condition with no distortion or foreign substances?**

Y N

Replace the IBT Belt (PL 6.3)

Replace the 1st Roll Assembly (PL 6.7) of the corresponding color.

Check the 2nd Belt (PL 6.27). **Is the surface of the 2nd Belt (**PL 6.27**) in proper condition with no distortion or foreign substances?**

Y N

Replace the 2nd Belt (PL 6.27).

Remove each connector of HVPS-2 and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y N

End

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-10 Vertical Off-color Areas FIP

Extremely light part of a particular color appear vertically over an extensive area on the image in the process direction.

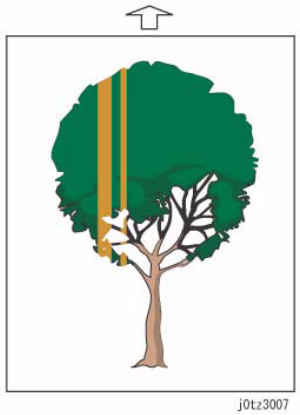

Figure 1 j0tz3007

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Perform CC cleaning of corresponding color from Key Operator Mode. Print Full Halftone (about 50%) on entire surface in the corresponding color. **Does the problem recur?**

Y N

End

Replace the CC Assembly (PL 5.14) of the corresponding color. Print Full Halftone (about 50%) on entire surface in the corresponding color. **Does the problem recur?**

Y N

End

Clean the ROS seal glass of the corresponding color. Print Full Halftone (about 50%) on entire surface in the corresponding color. **Does the problem recur?**

Y N

End

Print a page that is entirely black. Force stop the printing when it is in progress. Check the surface of the IBT Belt. **Is the surface of the IBT Belt in proper condition i.e. no omission of image?**

Y N

Check the surface of the IBT Belt for distortion and foreign substances. **Is the surface of the IBT in proper condition with no distortion or foreign substances?**

Y N

Replace the IBT Belt (PL 6.3)

Replace the 1st Roll Assembly (PL 6.7) of the corresponding color.

Check the MM Assembly (PL 5.6) of the applicable color. **Is there any Developer on the surface of the Mag Roller at the position corresponding to the discolored area?**

Y N

Insert a piece of paper near the white streaks and move it left and right to clean.

Is the film on the Upper Cover (PL 5.7) abnormal (scratch marks or stretched marks)?

Y N

Replace the Upper Cover Assembly (PL 5.7).

Check the installation of the MM Assembly of the corresponding color. **Is the MM Assembly properly installed?**

Y N

Install the MM Assembly (PL 5.6) properly.

Remove each connector of Deve Bias HVPS (PL 5.5) of the corresponding color and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y N

End

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-11 Horizontal Blank Areas FIP

There are extremely light or completely white part on the image. These part with no image appear horizontally over an extensive area perpendicular to the process direction.

Figure 1 j0tz3008

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Print a page that is entirely black. Force stop the printing when it is in progress. Check the surface of the IBT Belt. **Is the surface of the IBT Belt in proper condition i.e. no omission of image?**

Y N

Check the surface of the IBT Belt for distortion and foreign substances. **Is the surface of the IBT in proper condition with no distortion or foreign substances?**

Y N

Replace the IBT Belt (PL 6.3)

Replace the 1st Roll Assembly (PL 6.7) of the corresponding color.

Check the 2nd Belt (PL 6.27). **Is the surface of the 2nd Belt (**PL 6.27**) in proper condition with no distortion or foreign substances?**

Y N

Replace the 2nd Belt (PL 6.27).

Remove each connector of 2ND BTB HVPS (PL 6.12) and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y N

End

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-12 Horizontal Off-color Areas FIP

Extremely light part of a particular color appear horizontally over an extensive area perpendicular to the process direction on the image.

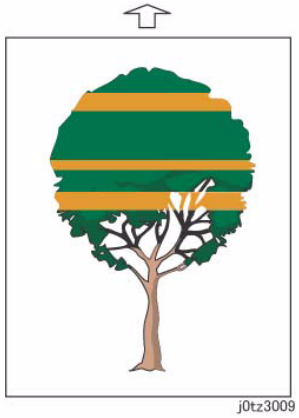

Figure 1 j0tz3009

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Print a page that is entirely black. Force stop the printing when it is in progress. Check the surface of the IBT Belt. **Is the surface of the IBT Belt in proper condition i.e. no omission of image?**

Y N

Check the surface of the IBT Belt for distortion and foreign substances. **Is the surface of the IBT in proper condition with no distortion or foreign substances?**

Y N

Replace the IBT Belt (PL 6.3)

Replace the 1st Roll Assembly (PL 6.7) of the corresponding color.

Check the MM Assembly (PL 5.6) of the corresponding color. **Is the Mag Roll of the MM Assembly free from foreign substances?**

Y N

Remove the foreign substances. Or replace the MM Assembly.

Check the installation of the MM Assembly of the corresponding color. **Is the MM Assembly properly installed?**

Y N

Install the MM Assembly (PL 5.6) properly.

Remove each connector of 2ND BTB HVPS (PL 6.12) and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y N

End

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-13 Vertical Streaks FIP

Black lines or streaks of a particular color running in the vertical direction of the paper.

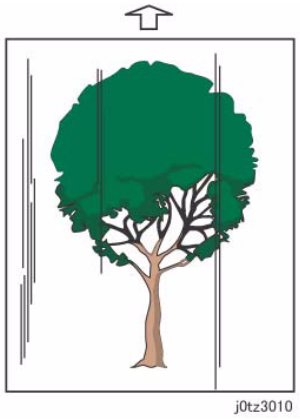

Figure 1 j0tz3010

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (*ADJ 20.1.6*) for the corresponding color.*

Do streaks appear on the printed side when feeding on one side?

Y **N**

Replace the 2nd Belt (PL 6.27).

Do streaks occur on Single Color?

Y **N**

Check if it occurs again after replacing the IBT Belt Cleaner Assembly (PL 6.2). if this failure recurs, replace the IBT Belt (PL 6.3).

Remove Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2) of the corresponding color, and install new Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2). Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

A

Remove each connector of ROS Assembly (PL 2.1) of the corresponding color and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Replace the ROS Assembly (PL 2.1), IOT MAIN PWB (PL 18.14) of the corresponding color.

IQ-14 Horizontal Streaks FIP

Black lines or streaks of a particular color running in the horizontal direction of the paper.

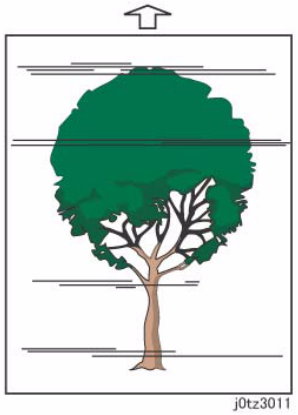

Figure 1 j0tz3011

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

Check the 1st Roll Assembly (PL 6.7) of the corresponding color. **Is the surface of the 1st Roll Assembly (PL 6.7) of the corresponding color in proper condition with no distortion or foreign substances?**

Y **N**

Replace the 1st Roll Assembly (PL 6.7) of the corresponding color.

Check the 2nd Belt (PL 6.27). **Is the surface of the 2nd Belt (PL 6.27) in proper condition with no distortion or foreign substances?**

Y **N**

Replace the 2nd Belt (PL 6.27).

Remove Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2) of the corresponding color, and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

A

A

Remove Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2) of the corresponding color, and install new Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2). Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Remove each connector of ROS Assembly (PL 2.1) of the corresponding color and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Replace the ROS Assembly (PL 2.1), IOT MAIN PWB (PL 18.14) of the corresponding color.

IQ-15 Partial Image Omission FIP

There are extremely light part on the image or part that are completely omitted. These omitted part appear on limited areas on the paper.

Figure 1 j0tz3012

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (*ADJ 20.1.6*) for the corresponding color.*

Check the paper type. **Is the paper used within specifications?**

Y **N**

Use paper within specifications.

Use paper from a freshly opened packet. **Does the problem recur?**

Y **N**

End

Remove each Drum Cartridge (Y, M, C, K, CLR, GLD, SLV, TX, PINK) (PL 5.2), and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

A

Check the surface of the IBT Belt for distortion and foreign substances. **Is the surface of the IBT Belt in proper condition with no distortion or foreign substances?**

Y **N**

Replace the IBT Belt (PL 6.3)

Check the 2nd Belt (PL 6.27). **Is the surface of the 2nd Belt (**PL 6.27**) in proper condition with no distortion or foreign substances?**

Y **N**

Replace the 2nd Belt (PL 6.27).

Check the 2nd BTB CAM mechanism (PL 6.23). If there is no problem, replace 2ND BTB HVPS (PL 6.12), 2ND BTB DTR/ESB HVPS (PL 6.20), and IOT MAIN PWB (PL 18.14) in sequence.

IQ-16 Spots FIP

Black toner spots or toner spots of a particular color are scattered randomly across the entire page.

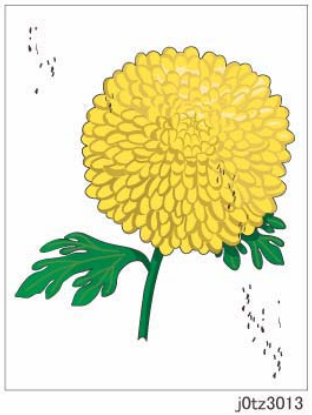

Figure 1 j0tz3013

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) for the corresponding color.*

Check the MM Assembly (PL 5.6) of the applicable color. **Developer Housing (PL 5.8), Drum Cartridge (PL 5.2), and CC Assembly of Wire (PL 5.14) are clean.**

Y N

Clean the relevant parts (if the Developer is contaminated, clean according to FTI3-054). Or replace it.

Check the Drum Cartridge of the subsequent engine of the applicable color and it is clean.

Y N

Clean it. Or replace it.

Is there contamination on the printed side when feeding on one side?

Y N

Replace the 2nd Belt (PL 6.27).

Check for contamination in the paper transport path. **Is the paper transport path free from dirt?**

Y N

the Paper Feed Roll and the Chute.

Remove the Fuser Assembly (PL 7.2), and check for dirt on the surface of the Fusing Belt and inlet section. **Is the surface of the Fusing Belt and the inlet free from dirt?**

Y N

the Paper Feed Roll and the Chute. If there is difficulty in removing the dirt, replace the Fusing Belt (PL 7.4).

Check the paper type. **Is the paper used within specifications?**

Y N

Use paper within specifications.

Use paper from a freshly opened packet. **Does the problem recur?**

Y N

End

Replace the IOT MAIN PWB (PL 18.14).

IQ-17 Ghost Image FIP

Ghost images appear on the paper. A previously printed image gets printed onto the subsequent sheet of paper, or part of the printed image was transferred repeatedly.

Figure 1 j0tz3014

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

NOTE: *After reseating or replacing the Drum Cartridge, perform [DC972 Impression Density Adjustment Cycle] (*ADJ 20.1.6*) for the corresponding color.*

Remove the Fusing Assembly, and check for dirt on the surface of the Heat Roll. **Is the surface of the Heat Roll free from dirt?**

Y **N**

the Paper Feed Roll and the Chute. If there is difficulty in removing the dirt, replace the Fusing Assembly (PL 7.2).

Remove the Drum Cartridge of the color for which the ghost image occurred and install a new Drum Cartridge (PL 5.2). **Turn the power OFF and ON, then make a printout. Does the problem recur?**

Y **N**

End

Replace the IOT MAIN PWB (PL 18.14).

IQ-18 Background FIP

The entire page or part thereof is covered by a very light layer of black toner or toner of a particular color.

Figure 1 j0tz3015

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Print in single color for each color to determine for which color background occurs. Remove the MM Assembly (PL 5.6) and reinstall MM Assembly (PL 5.6) properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Remove the MM Assembly (PL 5.6) for which background occurred and install a new MM Assembly (PL 5.6). Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Restore the MM Assembly (PL 5.6) to its original state. Remove each connector of Deve Bias HVPS (PL 5.5) of the corresponding color and reconnect it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Replace the IOT MAIN PWB (PL 18.14).

IQ-19 Skew FIP

Printed images are not parallel to the edges of the paper.

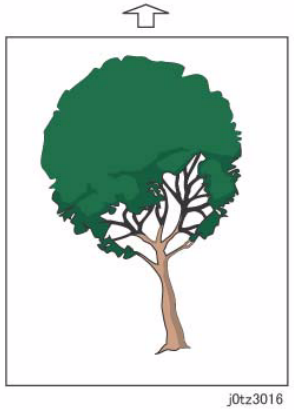

Figure 1 j0tz3016

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Check the paper type. **Is the paper used within specifications?**

Y **N**

Use paper within specifications.

Use paper from a freshly opened packet. **Does the problem recur?**

Y **N**

End

Check for foreign substances and distortion in the paper transport path. **Is the paper transport path free from foreign substances and distortion?**

Y **N**

Remove the foreign substances and correct the distortion.

Check each roll in the paper transport path. **Is each roll properly installed?**

Y **N**

Install each roll properly.

Replace the IOT MAIN PWB (PL 18.14).

IQ-20 Paper Wrinkle FIP

The printed paper is creased, folded or torn.

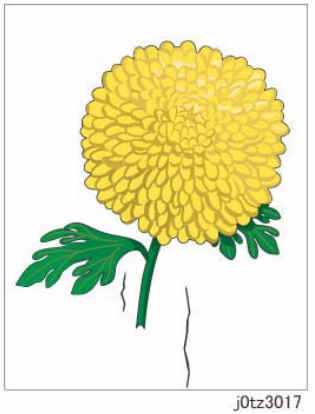

Figure 1 j0tz3017

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD CH6.1 and output the various Test Patterns to isolate the problem. Check the Fiery Server also.*

Is the position of the side guide of the paper tray correct?

Y **N**

Correct the position of the side guide.

Check the paper type. **Is the paper used within specifications?**

Y **N**

Use paper within specifications.

Use paper from a freshly opened packet. **Does the problem recur?**

Y **N**

End

Remove the Fusing Assembly (PL 7.2) and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

A

A

Check for foreign substances and distortion in the paper transport path. **Is the paper transport path free from foreign substances and distortion?**

Y **N**

Remove the foreign substances. Correct the distortion.

Replace the Fusing Assembly (PL 7.2).

IQ-21 Unfused Image FIP

Printed images are not properly fused onto the paper.

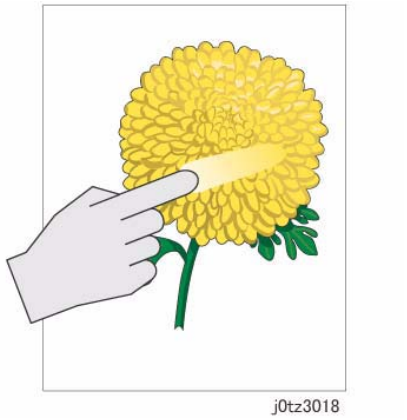

Figure 1 j0tz3018

Procedure

NOTE: *This FIP describes procedures for when the part inside the machine that are affecting the image are presumed to be not working at all. As electrical part affect the image quality differently depending on their output level, perform the analysis while taking into consideration that the actual output image quality could differ from the sample image in the various FIP. Also, if an item in the procedure instructed the replacement of a part that could have caused the problem but the problem persists, reinstall the original part and look for other possible causes. We also recommend that you refer to BSD* CH6.1 *and output the various Test Patterns to isolate the problem. Check the Fiery Serveralso.*

Check the paper type. **Is the paper used within specifications?**

Y **N**

Use paper within specifications.

Use paper stored under room conditions. **Does the problem recur?**

Y **N**

End

Check the power supply voltage. **Is the voltage within the specified range?**

Y **N**

Connect a power supply with voltage within the specified range.

Remove the Fusing Assembly (PL 7.2) and reinstall it properly. Turn the power OFF and ON, then make a printout. **Does the problem recur?**

Y **N**

End

Check the fusing temperature using the Diagnostics. **Is a normal fusing temperature set?**

Y **N**

Set a normal fusing temperature.

Replace the Fusing Assembly (PL 7.2).

Image Defect Sample (IDS)

The image defect samples (IDSxx: IDS stands for Image Defect Sample) described under this item are problem confirmed in an experimental environment.

The degree of defects may differ due to different installation environments.

Check the relevant part and interchange or replace the part to identify the NG part only when there is a corresponding sample after a visual comparison with the actual image defect samples.

- IDS1xx are image defects related to roughness
- IDS2xx are image defects of color streaks appearing in the FS direction
- IDS3xx are image defects of color streaks appearing in the SS direction
- IDS4xx are image defects related to color unevenness
- IDS5xx are image defects related to color spots
- IDS6xx are image defects related to image disarray
- IDS7xx are image defects related to paper wrinkle

IDS103 Roughness in Low Area Coverage Continuous Run

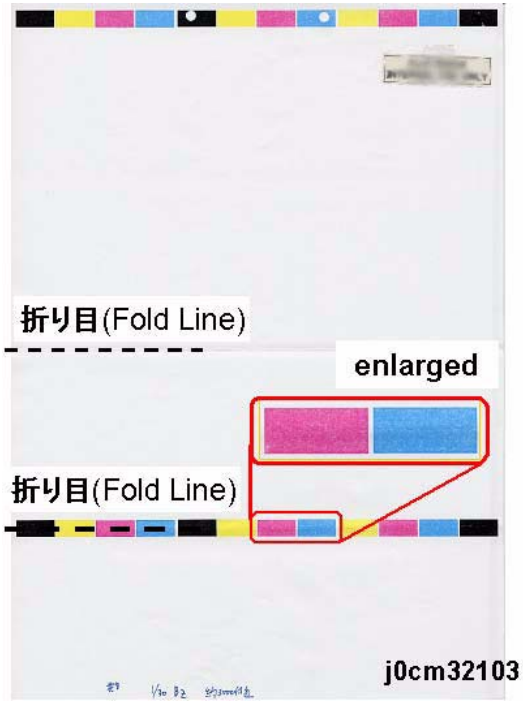

Figure 1 j0cm32103

[Phenomenon/Symptom]

Occurs in repetition of area coverage of 1%, R/L = 1000

[Cause]

Low area coverage continuous Run will cause the developer to be excessively charged, resulting in poor developability and transferability.

[Check Method]

Confirm after printing about 50 sheets with Cin = 60% (4C) over the entire surface; print with Cin = 60% (YMCK single color) and check if there is a recovery tendency.

[Actions]

Deletion recovery mode or toner discharge.

IDS106 Roughness at End of In/Out

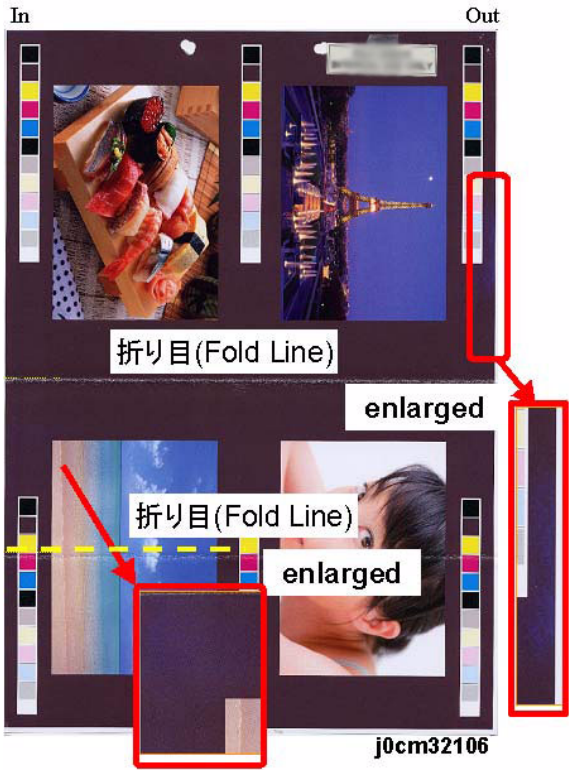

Figure 1 j0cm32106

[Phenomenon/Symptom]

Roughness occurs at both ends (I/B side, O/B side).

[Cause]

Paper is dried and becomes highly resistant, and transfer voltage was insufficient.

[Check Method]

Check with Custom Paper Type Settings.

[Actions]

Change Secondary Transfer output with custom paper type, and check whether there is improvement. Turn OFF the Air Assist Heater with custom paper type.

IDS107 Roughness at Trailing Edge

Figure 1 j0cm32107

[Phenomenon/Symptom]

Roughness occurs at the trailing edge.

[Cause]

Occurs when image density at the trailing edge is high, and the transfer voltage is insufficient.

[Check Method]

Check with TES adjustment of Custom Paper Type Settings.

[Actions]

Change Secondary Transfer output with TES adjustment in Custom Paper Type Settings, and check whether there is improvement. If transfer voltage at trailing edge of the sheet is too low, roughness (transfer failure) occurs, and if it is too high, density increases due to dot scattering, and if it is even higher, blank areas will occur due to discharge.

IDS111 Roughness at Leading Edge

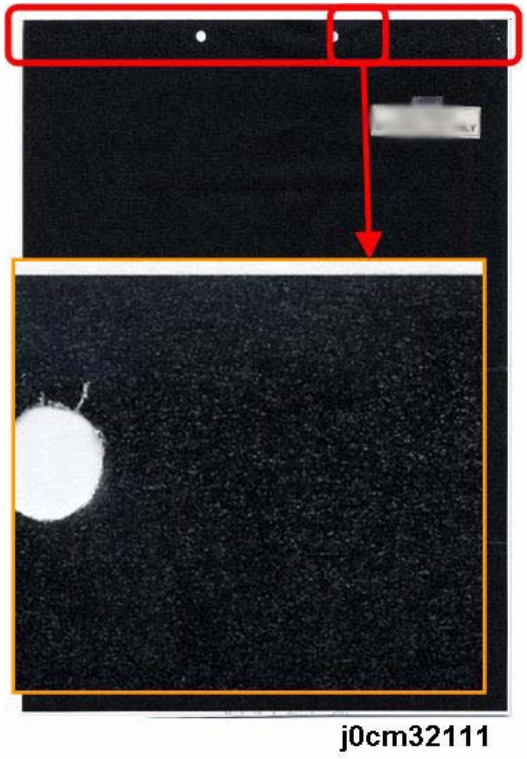

Figure 1 j0cm32111

[Phenomenon/Symptom]

Roughness occurs at the leading edge of 2 cm width.

[Cause]

When leading edge of the paper strikes the peeling pad at the nip portion, the conveyance of the paper is slightly delayed. At this time, roughness occurs due to excessive amount of heat.

[Check Method]

Improvement is possible by lowering the fusing temperature with Custom Paper Type Settings.

[Actions]

Check the image quality while gradually lowering the fusing temperature to -10 degrees C, -15 degrees C, and -20 degrees C in Custom Paper Type Settings. At this time, rub the image section with nail or a coin to check that the toner does not come off.

IDS113 Roughness on Entire Surface

Figure 1 j0cm32113

[Phenomenon/Symptom]

Roughness occurs on entire surface. It is especially prominent in halftone.

[Cause]

The toner penetrates too much into the paper because the toner amount is low or the temperature of the Fusing Assembly is high.

[Check Method]

Improvement is possible by increasing density and lowering the fusing temperature with Custom Paper Type Settings.

[Actions]

Print on high. Problem is alleviated if print is left for a while. Problem is also alleviated if density is high.

Improvement is possible by lowering the fusing temperature with Custom Paper Type Settings.

IDS115 Gloss Unevenness at Leading Edge (FS Direction)

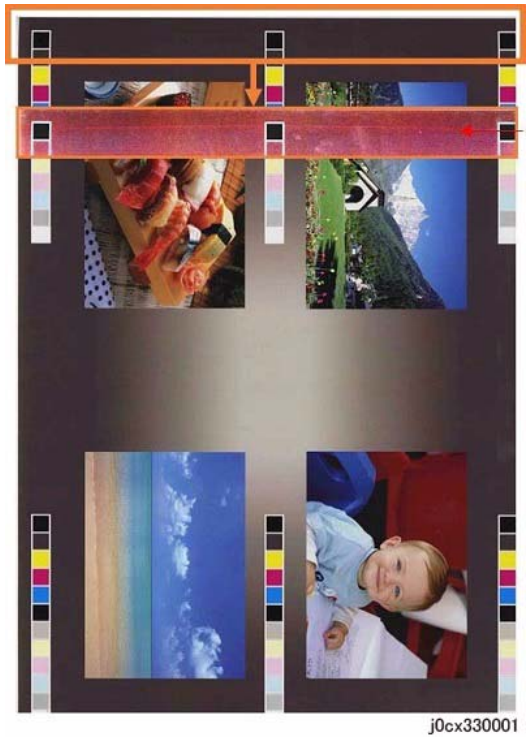

Figure 1 j0cx330001

[Phenomenon/Symptom]

Gloss unevenness occurs at 15 mm from the leading edge in FS direction.

May appear in 210 gsm or more coated paper, HT3C: 240%, B Color, K Color 100%.

[Cause]

The amount of heat becomes excessive due to paper delay when the paper strikes the peeling Pad at the nip portion

[Check Method]

Improvement is possible by lowering the fusing temperature with Custom Paper Type Settings.

[Actions]

Action 1

Check the image quality while gradually lowering the fusing temperature to -10 degrees C, -15 degrees C, and -20 degrees C in Custom Paper Type Settings. At this time, rub the image section with nail or a coin to check that the toner does not come off.

Action 2

If improvement is difficult with Action 1, set to Low Speed Mode of Fusibility Priority Mode in Custom Paper Type Settings, and check the image quality while gradually lowering the fusing temperature to -10 degrees C, -15 degrees C, and -20 degrees C. At this time, rub the image section with nail or a coin to check that the toner does not come off.

Action 3

If improvement is difficult with Action 2, in addition to Action 2, change NVM 740-433 to -50 [degrees C], and check the image quality while lowering the fusing temperature of Custom Paper Type Settings by 5 degrees C at a time to -20 degrees C or less. At this time, rub the image section with nail or a coin to check that the toner does not come off.

IDS302 White Streaks

Figure 1 j0cm32302

[Phenomenon/Symptom]

Blank areas occur in the Process direction for specific colors only

[Cause]

Foreign substances/dirt is adhering to the Corotron Wire.

[Check Method]

Replace with the adjacent Corotron, and check with HT Cin 40%.

[Actions]

Procedure

Do blank areas occur for specific colors only?

Y N

Check if there is any contamination on the IBT Belt at the corresponding position, and replace the IBT Belt (PL 6.3) if any foreign matter is found.

A

A

Cleaning the CC does not solve the problem.

Y N

End

Is there any Developer on the surface of the Mag Roller at the position corresponding to the discolored area?

Y N

Insert a piece of paper near the white streaks and move it left and right to clean.

Is the film on the Upper Cover (PL 5.7) abnormal (scratch marks or stretched marks)?

Y N

Replace the Upper Cover Assembly (PL 5.7).

End

IDS305 Fine Streaks at Leading Edge

Figure 1 j0cm32305

[Phenomenon/Symptom]

Fine streaks occur at the leading edge of paper. (M and Y in sample)

[Cause]

Poor cleaning occurred with toner patch/toner band created with inter-image.

[Check Method]

Check if it occurs with Single Color print.

[Actions]

Procedure

Do streaks appear on the printed side when feeding on one side?

Y **N**

Replace the 2nd Belt (PL 6.27).

A

A

Do streaks occur on Single Color?

Y **N**

Check if it recurs after replacing the IBT Belt Cleaner Assembly (PL 6.2). if this failure recurs, replace the IBT Belt (PL 6.3).

Replace the Drum Cartridge (PL 5.2).

IDS306 Blank Bands in SS Direction

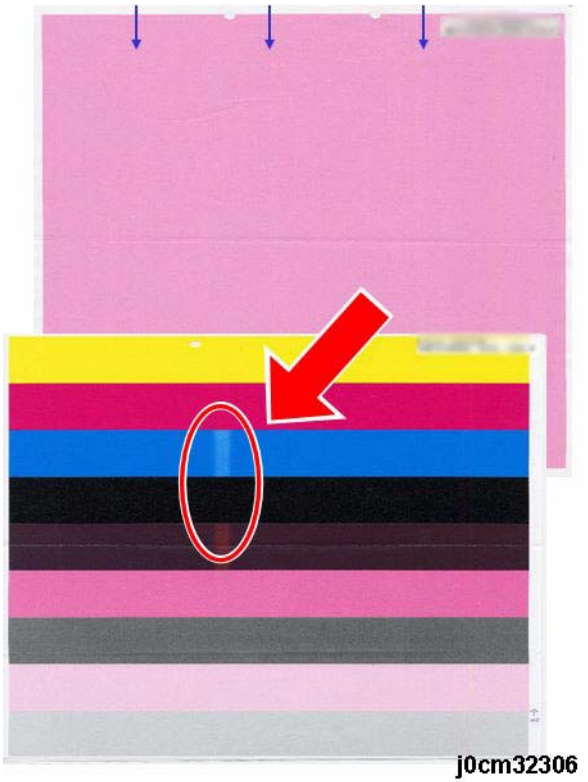

Figure 1 j0cm32306

[Phenomenon/Symptom]
Blank bands occur in the SS direction.

[Cause]
Foreign substances are adhering to the back of the Trimmer.

[Check Method]
Replace the CC assy with another engine and check with halftone Cin = 40%.

[Actions]
Remove the foreign substances at the back of the Trimmer.

IDS313 Color Streaks in SS Direction

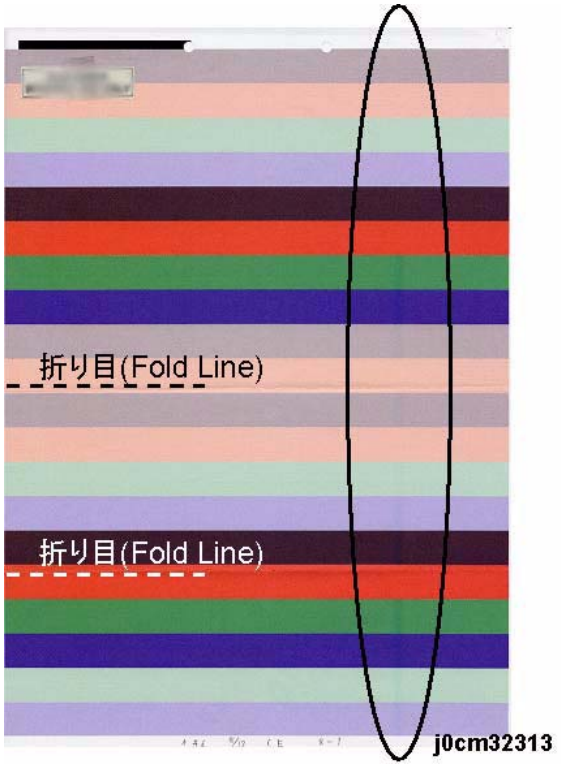

Figure 1 j0cm32313

[Phenomenon/Symptom]
Color streaks occur in the SS direction for a specific color (C in sample).

[Cause]
Poor charging due to contamination of Corotron Grid (foreign substance adhesion, etc.)

[Check Method]
Replace with the adjacent Corotron, and check with HT Cin 40%.

[Actions]
Perform Corotron cleaning from the [Clean Consumables] tab of [Maintenance] window.

IDS314 Streaks on Entire Surface (SS Direction)

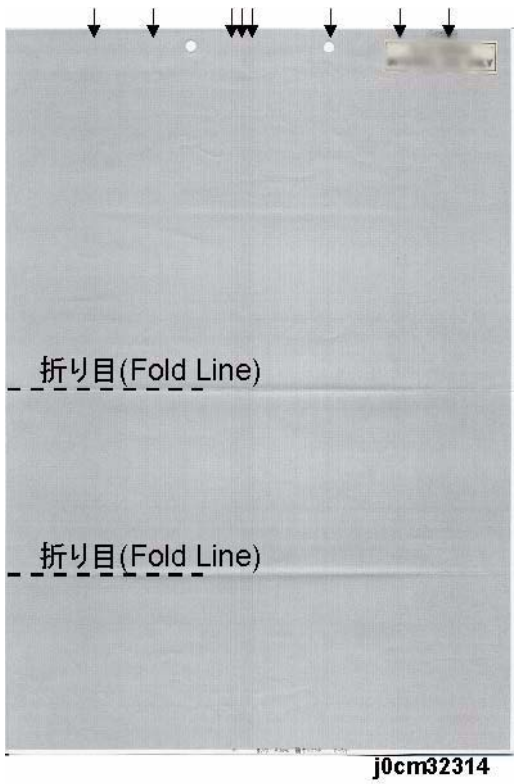

Figure 1 j0cm32314

[Phenomenon/Symptom]

After remaining at high temperature and high humidity, streaks in the SS direction occur on the entire surface in the morning. Tends to appear in K halftone.

[Cause]

Condensation in the machine/moisture adhering to the photoreceptor surface.

[Check Method]

Replace EPG ERU with the adjacent engine and check.

[Actions]

Turn ON the Forced Entry Switch from the Key Operator Tools screen.

IDS315 Strip Stains (SS Direction)

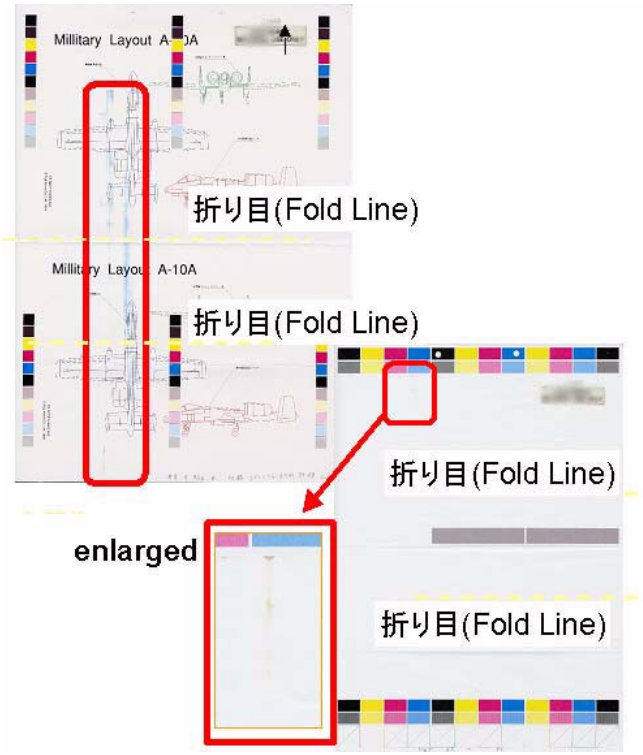

Figure 1 j0cm32315

[Phenomenon/Symptom]

Mixed color streaks in the SS direction appear on the printing side.

[Cause]

Poor cleaning by IBT Cleaner.

[Check Method]

Check image on IBT.

[Actions]

Procedure

Do streaks appear on the printed side when feeding on one side?

Y **N**

Replace the 2nd Belt (PL 6.27).

A

A

Do streaks occur on Single Color?

Y **N**

Check if it occurs again after replacing the IBT Belt Cleaner Assembly (PL 6.2). if this failure recurs, replace the IBT Belt (PL 6.3).

Replace the Drum Cartridge (PL 5.2).

IDS316 Diagonal Streaks

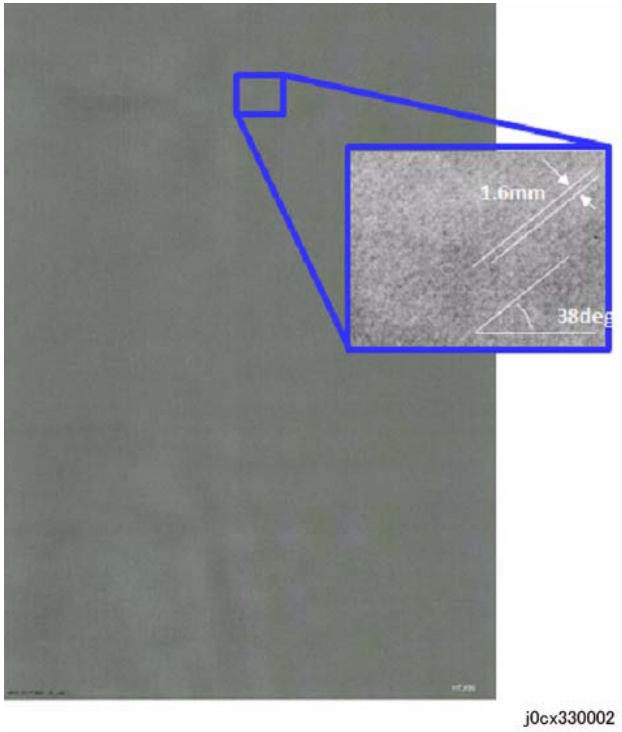

Figure 1 j0cx330002

[Phenomenon/Symptom]

Diagonal banding density unevenness occurs all over the surface (1.6 mm pitch, about 38 degrees).

[Cause]

Charge unevenness due to Corotron Wire vibration and Corotron Grid mesh-shape interference.

[Check Method]

After swapping with the adjacent Corotron, output with HT40-60%.

[Actions]

Replace Corotron.

IDS401 Impression Color Unevenness

Figure 1 j0cm32401

[Phenomenon/Symptom]

Impression color unevenness of the installation sample is large.

[Cause]

The influence of electric potential (VH/VL) of EPG and the primary transfer pressure bias is great.

[Check Method]

Print (DC612) Smile pattern.

[Actions]

Perform Smile correction if there is shading with Single Color. If there is shading in secondary and process colors, investigate factors after Secondary Transfer.

IDS501 Color Spots

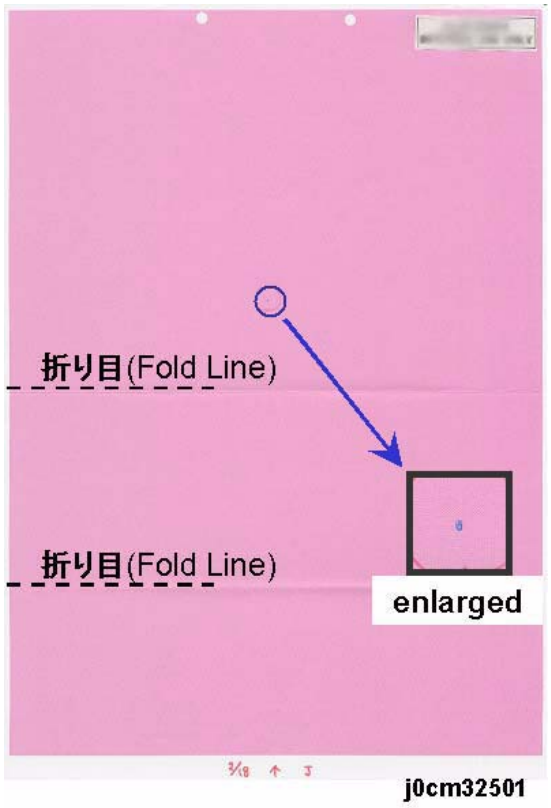

Figure 1 j0cm32501

[Phenomenon/Symptom]
Color spot (case of C color) occurs at 264 mm pitch.

[Cause]
Scratches on the photoreceptor (damage, etc. when attaching/detaching the ERU)

[Check Method]
Output each color with HT Cin20% and check whether it occurs at the drum cycle (264 mm pitch).

[Actions]
Replace the EPG-ERU of the color in which the problem is occurring.

IDS502 Color Unevenness (88 mm Pitch)

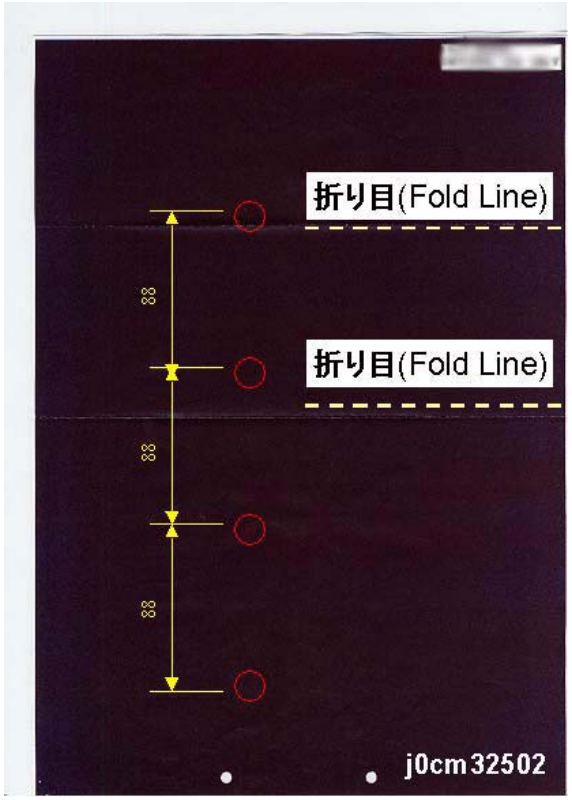

Figure 1 j0cm32502

[Phenomenon/Symptom]
Color unevenness and color spots occur at 88 mm pitch.

[Cause]
Foreign substance adhesion to BUR (Back Up Roll)

[Check Method]
Check with entire surface halftone of multicolor (3C, R, G).

[Actions]
Remove foreign substance on Back Up Roll, or replace Back Up Roll.

IDS504 White Spots on Entire Surface (BCO)

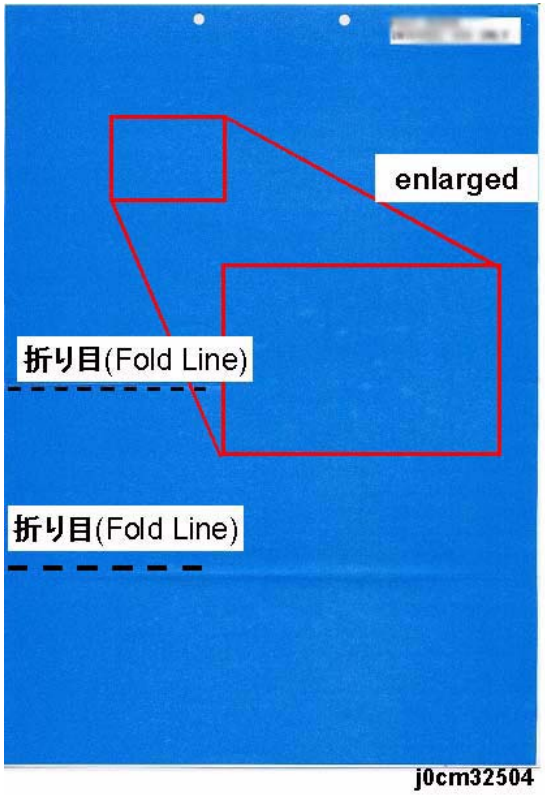

Figure 1 j0cm32504

[Phenomenon/Symptom]

White spots occur on the entire surface of 100% solid image.

[Cause]

Toner degradation (BCO) due to continuous run at low image density.

[Check Method]

Output and confirm with entire surface of solid Cin = 100%. Confirm whether the area coverage of the previous job was low.

[Actions]

Procedure

Does white spots occur when outputting a 100% solid image on full page?

Y N

If white spots appear at 60% output on the full page, replace the Developer (PL 5.2) of the one upstream engine of the corresponding color. (REP 5.2.5)

Execute toner discharge. Any improvement?

Y N

Replace the Developer (PL 5.2) of the applicable color. (REP 5.2.5)

End

IDS506 Blank Areas at 88 mm Pitch

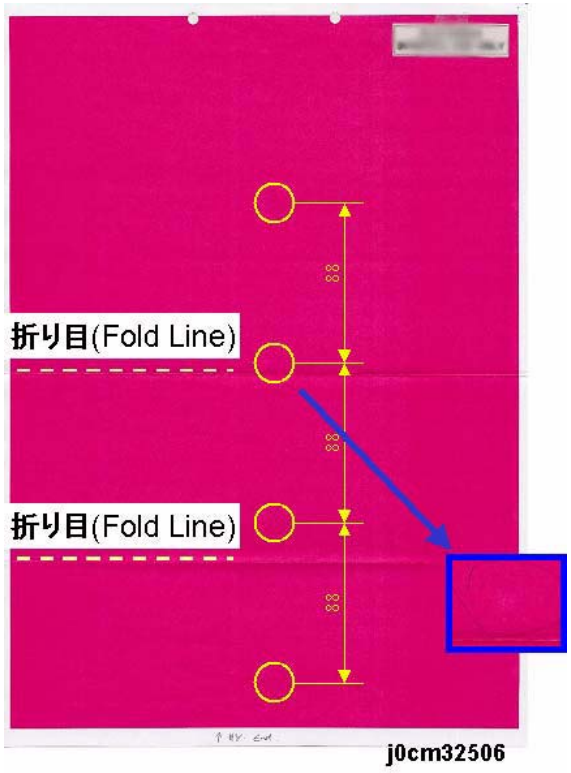

Figure 1 j0cm32506

[Phenomenon/Symptom]

88 mm Pitch Blank Area

[Cause]

1st BTR foreign substance, failure.

[Check Method]

For each color of YMCK, output with Single Color on entire surface Cin=100%. Does the problem occur with only a particular color?

[Actions]

Replace 1st BTR

IDS508 Carrier Spilling (Center)

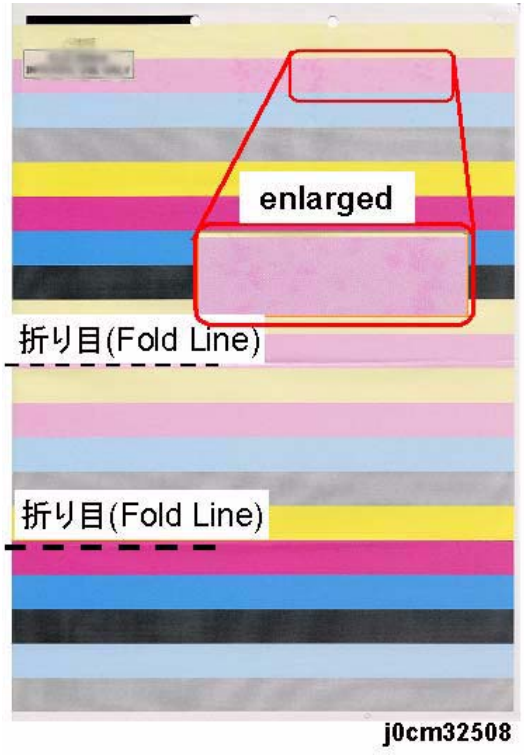

Figure 1 j0cm32508

[Phenomenon/Symptom]

Carrier spilling occurs at the center portion of image.

[Cause]

When paper passes through the chute at the Secondary Transfer Inlet, the carrier and paper dust accumulated on the chute adhere to the paper. After fusing, white spots appear and become apparent.

[Check Method]

Print HT of 40% to 60% and check the presence of white spots.

[Actions]

Clean the chute at the Secondary Transfer Inlet

IDS601 Transfer Failure

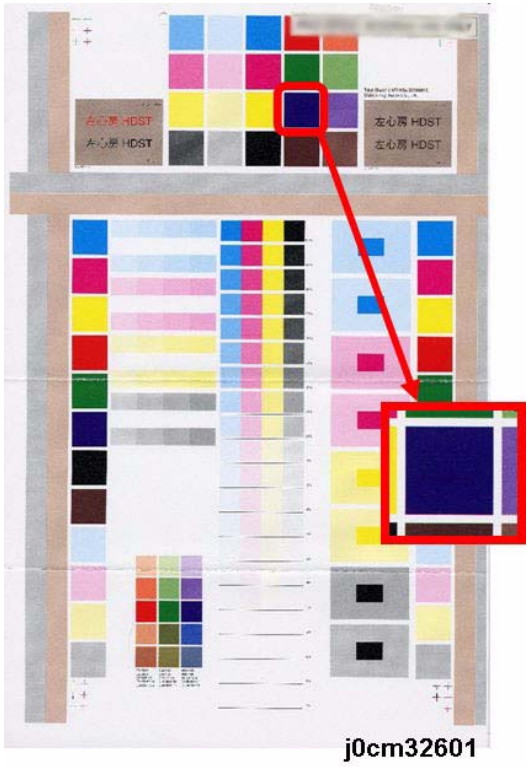

Figure 1 j0cm32601

[Phenomenon/Symptom]

Transfer failure occurs in patch (200%).

[Cause]

The set value of transfer voltage is different from the optimum voltage of paper used.

[Check Method]

Custom Paper Type Settings, Secondary Transfer Settings.

[Actions]

Use custom paper type.

IDS602 Raindrops

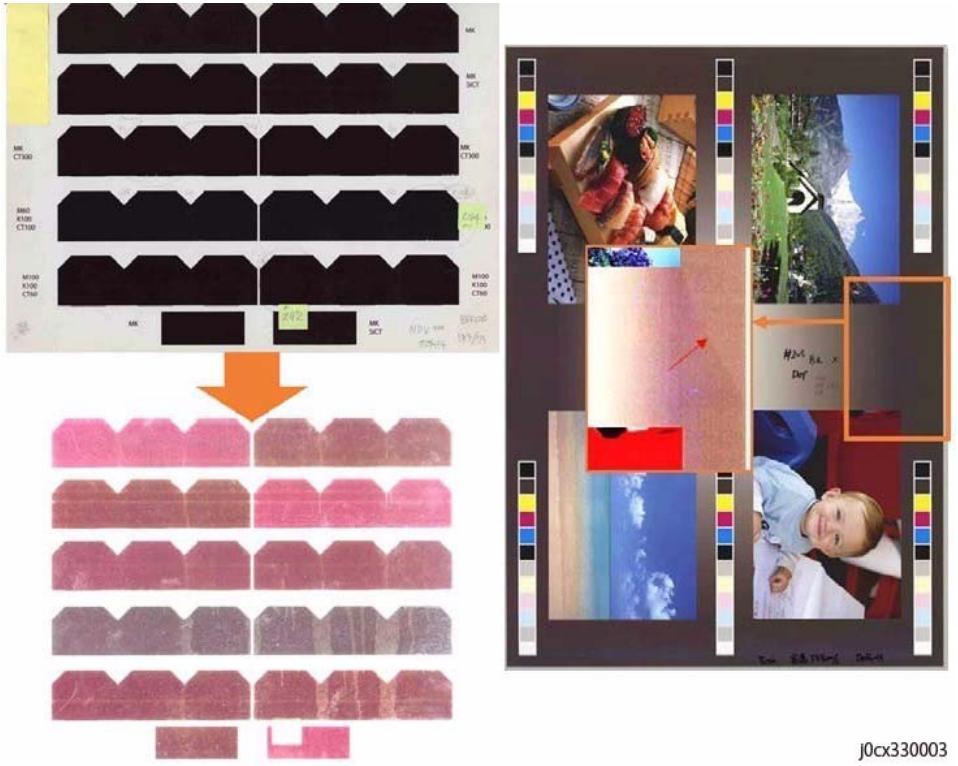

Figure 1 j0cx330003

[Phenomenon/Symptom]

At locations where the image density difference is large, liquid droplets pattern image defect occurs in water-resistant film, 210 gsm or more, and occurs with HT of 100% or more (the figure above shows an example of water-resistant white film).

[Cause]

Moisture contained in toner and paper volatilizes and changes the gloss. If there is an image level difference, a gap is partially formed and it is likely to occur.

[Check Method]

The Image quality defect is characteristic and easy to judge. Improvement is possible by selecting Low Speed Mode of Fusibility Priority Mode in Custom Paper Type Settings.

[Actions]

Set to Low Speed Mode of fusibility priority mode in Custom Paper Type Settings, and check the image quality while gradually lowering the fusing temperature to -10 degrees C, -15 degrees C, and -20 degrees C. At this time, rub the image section with nail or a coin to check that the toner does not come off.

Chapter 4 Disassembly/Assembly and Adjustments

4 Disassembly/Assembly and Adjustment

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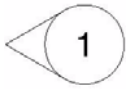
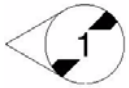
4.1 Introduction

This section contains procedures required for parts disassembly, assembly, replacement and adjustment in the field service.

4.1.1 How to Use the Disassembly/Assembly and Adjustment

1. For installation procedures, only NOTES are described here since installation procedures are reverse of removal ones.
2. (Figure X) at the beginning of a procedure indicates that its detailed steps are shown in illustration.
   Numbers in the illustration indicate the sequence of the steps.
3. (REPX.X.X) at the end of a procedure indicates the replacement procedure to be referred to.
4. Item numbers of disassembly/assembly and adjustment procedures (i.e. REP/ADJ No.) correlate to PL No. in Chapter 5 Parts List. Therefore, an appropriate replacement or adjustment procedure can easily be referred to a PL No. or vice versa. E.g. The replacement or adjustment procedure of Component PL1.1 is REP1.1.X or ADJ1.1.X.
5. When replacement/adjustment procedures or title items vary by modification or model, the modification number or the model are indicated at the beginning or the end of the respective titles or procedures.
   E.g. 1 REPX.X.X Main PWB [w/Tag 1V]
   *Indicates that the entire procedure under this title applies to machines with Tag 1.
   E.g. 2

Table 1

Symbols	Remarks
 **Figure 1 4001**	Illustration 1: Indicates a specific part has been modified by the tag number within the circle.
 **Figure 2 4002**	Illustration 2: Indicates that the configuration of the part shown is the configuration before the part was modified by the number within the circle.

6. Positions or directions of the machine and directions inside the machine used in the procedure are defined as listed below.
   (1) Front: Front of the machine
   (2) Right: Right-hand side facing the machine.
   (3) Left: Left-hand side facing the machine.
   (4) Rear: Rear facing the machine.

4.1.2 Terms and Symbols

The terms and symbols used throughout this manual are explained here.

Danger

Indicates an imminently hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

Warning

Indicates a potential hazardous situation, such as death or serious injury if operators do not handle the machine correctly by disregarding the statement.

CAUTION

Indicates a potential hazardous situation, such as injury or property damage if operators do not handle the machine correctly by disregarding the statement.

Instruction: Used to alert you to a procedure, if not strictly observed, could result in damage to the machine or equipment.

NOTE: *Used when work procedures and rules are emphasized.*

NOTE: *Used when other explanations are given.*

Purpose

Used to describe the purposes of Adjustment.

Safety Critical Components (SCC)

For the safety control of the Safety Critical Components and the components specified, follow the regulations regarding the Safety Critical Components set by our company.

As to replacement of any component designated SCC, the complete component unit must be replaced. It must never be disassembled or no individual internal parts of it must be replaced. However, even the parts specified as SCC can be disassembled if they include spare parts at the lower level.

Installation of any part other than the ones designated by our company shall be strictly prohibited because it cannot be guaranteed in quality and safety.

Important Information Stored Component (ISC)

This component stores all the important customer information that is input after the installation. When performing replacement, follow the procedures in 'Chapter 4 Disassembly/Assembly Adjustment' to replace/discard. Make absolutely sure that no customer information gets leaked outside.

REP 1.2.1 Top Cover

Parts List on PL 1.2

Removal

WARNING

Shutdown the PC, turn off the PC power supply and the LCD, and unplug the power cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Top Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Top Cover in the direction of the arrow.

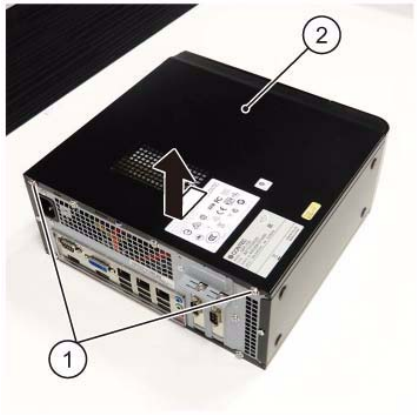


Figure 1 j0kol401001

Replacement

1. To install, carry out the removal steps in reverse order.

REP 1.2.2 Front Cover

Parts List on PL 1.2

Removal

WARNING

Shutdown the PC, turn off the PC power supply and the LCD, and unplug the power cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Top Cover. (REP 1.2.1)
2. Remove the Front Cover. (Figure 1)
   (1) Remove the Front Cover tab (x2), then open and remove the cover in the direction of the arrow.

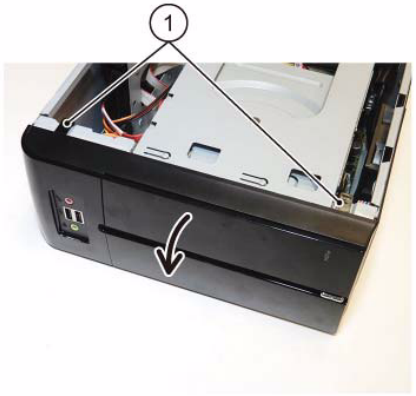


Figure 1 j0kol401002

Replacement

1. To install, carry out the removal steps in reverse order.

REP 1.2.3 Power Supply

Parts List on PL 1.2

Removal

WARNING

Shutdown the PC, turn off the PC power supply and the LCD, and unplug the power cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Top Cover. (REP 1.2.1)
2. Remove the Mother Board. (REP 1.2.6)
3. Remove the Inlet. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Inlet.

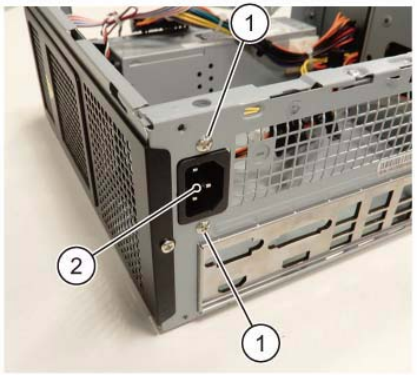


Figure 1 j0kol401003

4. Remove the Power Supply. (Figure 2)
   (1) Disconnect the Connector (x2).
   (2) Remove the Power Supply in the direction of the arrow.

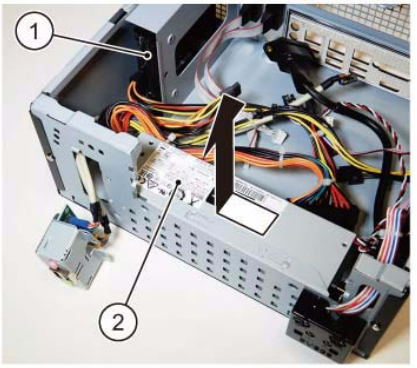


Figure 2 j0kol401004

Replacement

1. To install, carry out the removal steps in reverse order.

REP 1.2.4 DVD-ROM

Parts List on PL 1.2

Removal

WARNING

Shutdown the PC, turn off the PC power supply and the LCD, and unplug the power cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Top Cover. (REP 1.2.1)
2. Remove the Front Cover. (REP 1.2.2)
3. Remove the DVD-ROM Assembly. (Figure 1)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x2).
   (3) Remove the DVD-ROM Assembly.

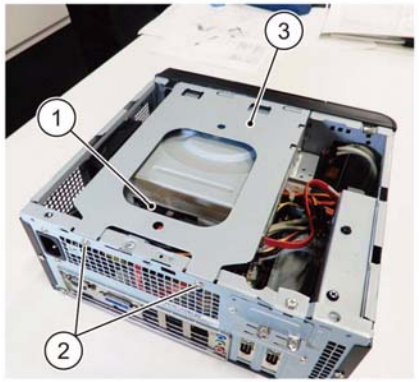


Figure 1 j0kol401005

4. Remove the DVD-ROM. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the DVD-ROM.

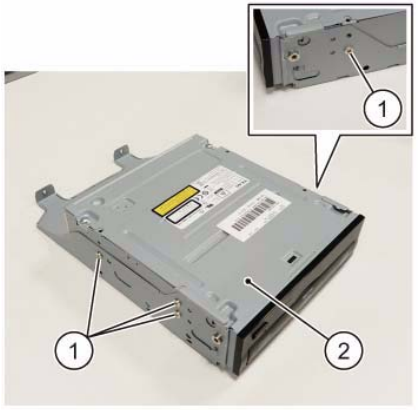


Figure 2 j0kol401006

Replacement

1. To install, carry out the removal steps in reverse order.

REP 1.2.5 (ISC) HDD

Parts List on PL 1.2

Removal

WARNING

Shutdown the PC, turn off the PC power supply and the LCD, and unplug the power cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Top Cover. (REP 1.2.1)
2. Remove the HDD Unit. (Figure 1)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw.
   (3) Remove the HDD Unit in the direction of the arrow.

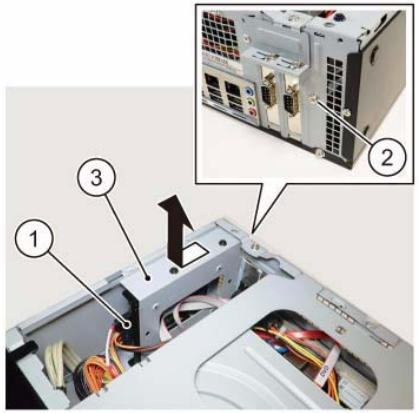


Figure 1 j0kol401007

3. Remove the HDD Assembly. (Figure 2)
   (1) Remove the Screw (x4) from the HDD Bracket Frame.
   (2) Remove the HDD Assembly.

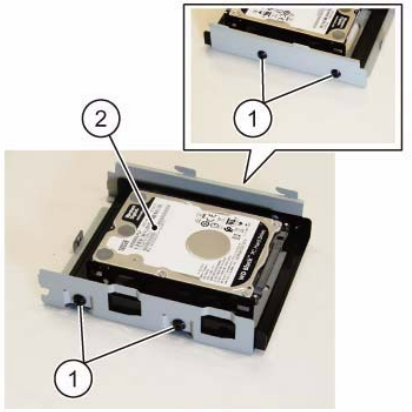


Figure 2 j0kol401008

4. Remove the HDD. (Figure 3)
   (1) Remove the Screw (x4).
   (2) Remove the HDD.

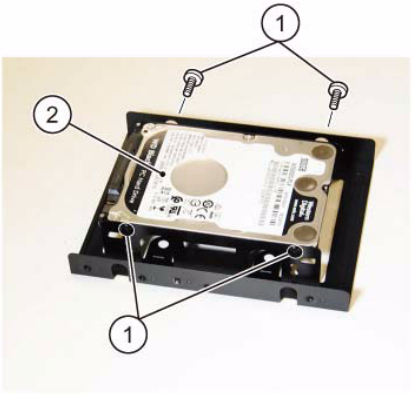


Figure 3 j0kol401009

Replacement

1. Follow the "Recovery procedure (ADJ 18.1.3)" to install the PC-UI software.

   NOTE: *This is because software has not been installed in the spare part HDD.*

2. If requested for activation, perform according to the instructions. (ADJ 18.1.9)

REP 1.2.6 Mother Board

Parts List on PL 1.2

Removal

WARNING

Shutdown the PC, turn off the PC power supply and the LCD, and unplug the power cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Top Cover. (REP 1.2.1)
2. Remove the DVD-ROM Assembly. (REP 1.2.4)
3. Pull Front Board Assembly forward. (Figure 1)
   (1) Remove the Screw.
   (2) Pull Front Board Assembly forward.

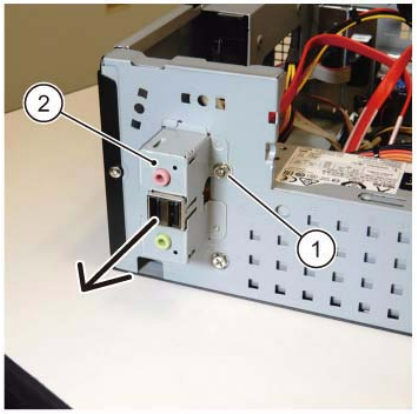


Figure 1 j0kol401010

4. Move the Power Supply. (Figure 2)
   (1) Remove the Screw.
   (2) Move the Power Supply in the direction of the arrow.

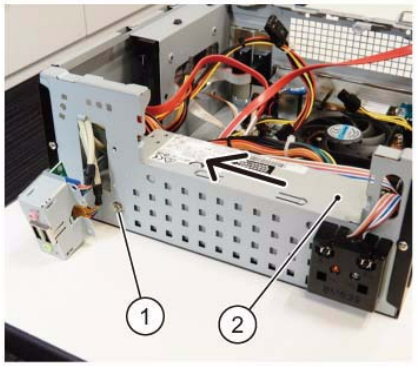


Figure 2 j0kol401011

5. Disconnect the Connector (x13) that is connected to the Mother Board and remove the Mother Board. (Figure 3)
   (1) Disconnect the Connector (x13).
   (2) Remove the Screw (x4).
   (3) Remove the Mother Board.

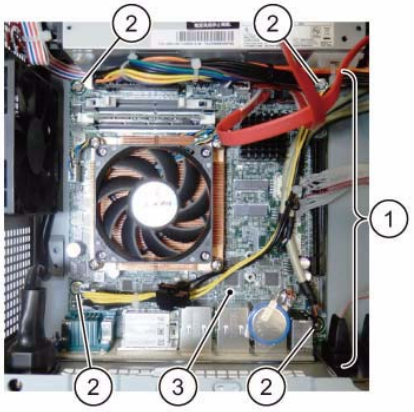


Figure 3 j0kol401012

6. Remove the CPU Heat Sink and DRAM. (Figure 4)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x4).
   (3) Remove the CPU Heat Sink.
   (4) Remove the DRAM.

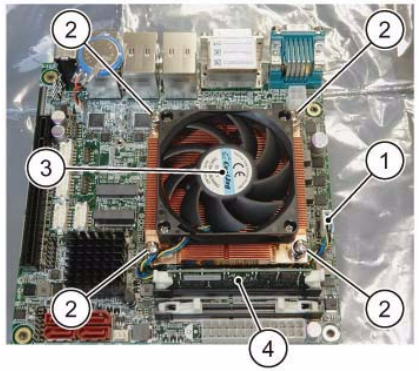


Figure 4 j0kol401013

Replacement

1. To install, carry out the removal steps in reverse order.
   (1) Install the CPU Heart Sink and DRAM removed in Steps 6 on the new Mother Board.

   NOTE: *LED and SW connection position (Figure 5)*

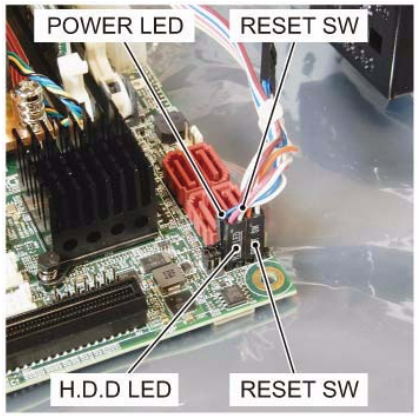


Figure 5 j0kol401014

2. If requested for activation, perform according to the instructions. (ADJ 18.1.9)

REP 2.1.1 ROS Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 2.1 , PL 2.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *Before replacing the ROS Assembly, make a note of 16 digits of the barcode label attached on top of the cover. This is for input of the replaced ROS special data using PC-DIAG after servicing.*

NOTE: *The steps for removing the ROS Assembly (K (#5)) are described here. Other types of ROS Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6) are also the same as (K (#5)).*

1. Remove the Toner Dispenser Assembly (K (#5)). (REP 5.1.1)
2. Remove the Dispenser Inner Cover of Toner Dispenser Assembly (#6).
   (1) Remove the Screw (x2).
   (2) Remove the Dispenser Inner Cover.

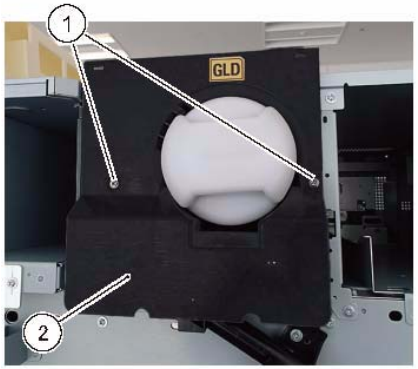


Figure 1 j0kol402001

3. Remove the IOT -L Top Cover. (Figure 2)
   (1) Remove the Screw (x5).
   (2) Remove the IOT -L Top Cover.

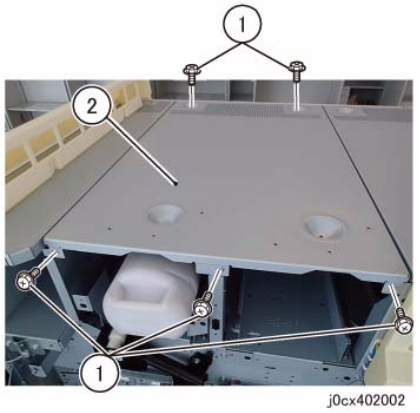


Figure 2 j0cx402002

4. Remove the ROS Cover. (Figure 3)
   (1) Remove the Screw (x6).
   (2) Remove the ROS Cover.

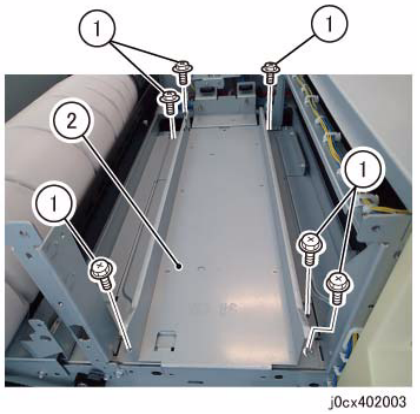


Figure 3 j0cx402003

5. Remove the ROS Assembly (K (#5)). (Figure 4)
   (1) Disconnect the Connector.
   (2) Loosen the Screw (x2) and disconnect the Connector.
   (3) Remove the Screw (x3).
   (4) Remove the ROS Assembly (K (#5)).

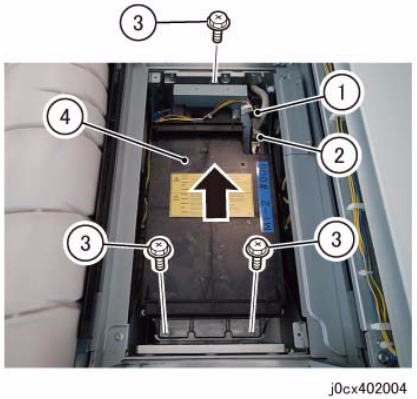


Figure 4 j0cx402004

Replacement

1. To install, carry out the removal steps in reverse order. However, after turning on the power, carry out the following procedure.

   NOTE: *Before installation, peel off the barcode label from the ROS Assembly to be replaced, and paste it on the Service Log.*

2. Launch PC-DIAG.
3. Enter [Subsystem Check] and select [DC961 Stitching Correct].
4. Select [ROS Data] at the bottom of the screen.
5. Check the engine of the replaced ROS.
6. Enter 16 digits you have noted down previously, and click [Set].
7. Perform Lead Regi Adjustment by the following procedure.
   - Perform DC685 Color Regi Adjustment.
   - Output 1 sheet (built-in PG). (Output to paper regardless of image)
   - Perform Lead Regi Adjustment. (Refer to ADJ 15.6.6)

REP 3.1.1 Drum Drive Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/ #6)

Parts List on PL 3.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for removing the Drum Drive Assembly (K (#5)) are described here. The procedures for other Drum Drive Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6) are the same as (K (#5)).*

1. Remove the ECO Box Unit. (REP 4.9.1)
2. Remove the Drum Cartridge (K (#5)). (REP 5.2.2)
3. Pull out MM Assembly (K (#5)) completely.
4. Remove the Drive Fan Assembly. (REP 18.1.1)
5. Remove the Duct Assembly (K (#5)). (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Duct Assembly (K (#5)).

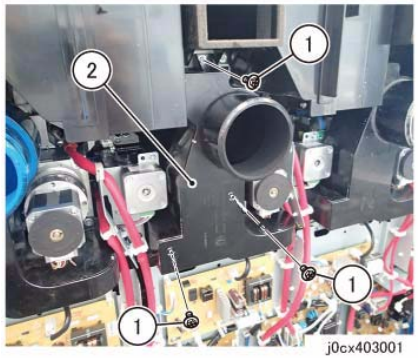


Figure 1 j0cx403001

6. Release the cable from the Joint Assembly (K (#5)) Clamp. (Figure 2)
   (1) Free the Clamp (x2) and release the cable.
   (2) Release the cable from Drum Drive Assembly (K (#5)).

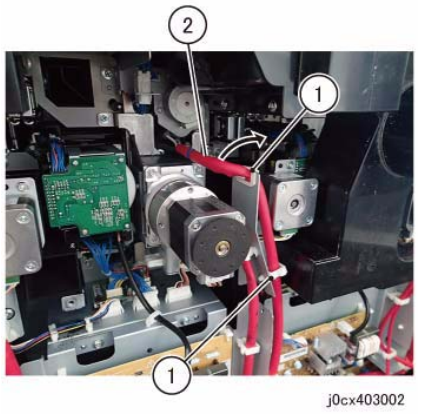


Figure 2 j0cx403002

7. Remove the Drum Drive Assembly (K (#5)). (Figure 3)

   NOTE: *When removing the Drum Drive Assembly (K (#5)), remove Drive Shaft tip so as not to touch IBT Belt and Mag.Roll.*

   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x3).
   (3) Remove the Drum Drive Assembly (K (#5)).

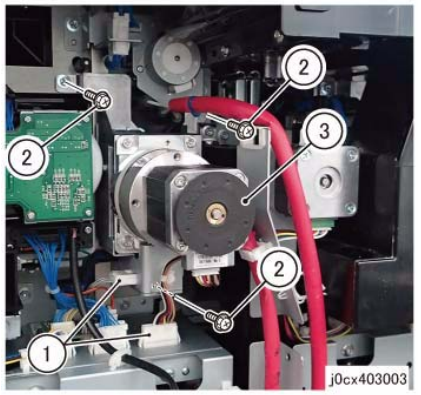


Figure 3 j0cx403003

Replacement

1. Pull out MM Assembly (K (#5)) completely. However, you can leave Drum Cartridge (K (#5)) removed.

2. Install the Drum Drive Assembly (K (#5)), and loosely affix the Screw (x3).

   NOTE: *When installing the Drum Drive Assembly (K (#5)), remove Drive Shaft tip so as not to touch IBT Belt and Mag.Roll.*

3. Push in MM Assembly (K (#5)) and tighten the Screw (x3).
4. Tighten the Drum Drive Assembly (K (#5)) Screw (x3).
5. Connect the Drum Drive Assembly (K (#5)) Connector (x2).
6. Perform removal Step 6 to Step 1 in reverse to return the machine to its original state.
7. When replacing the Drum Drive Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6), clear the counter of the part you replaced from the following of HFSI (DC135).
   - Drum Drive Assembly (#1) : DC135[004-800]
   - Drum Drive Assembly (Y (#2)) : DC135[004-802]
   - Drum Drive Assembly (M (#3)) : DC135[004-802]
   - Drum Drive Assembly (C (#4)) : DC135[004-802]
   - Drum Drive Assembly (K (#5)) : DC135[004-803]
   - Drum Drive Assembly (#6) : DC135[004-801]

REP 4.6.1 (SCC) Sensor Holder 1/2 Assembly

Parts List on PL 4.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

NOTE: *Do not bring magnetically charged objects close to the sensing part of the Waste Bottle 1/2 Full Sensor.*

NOTE: *Since the removal procedures for Sensor Holder 1 Assembly and Sensor Holder 2 Assembly are the same, this section will describe the removal procedure for Sensor Holder 2 Assembly only.*

1. Remove the Toner Bottle Cover, and remove the Waste Bottle (x2).
2. Press the tab and slide it to the left side to remove the Sensor Cover. (Figure 1)
   (1) Press the tab.
   (2) Slide it to the left side to remove the Sensor Cover.

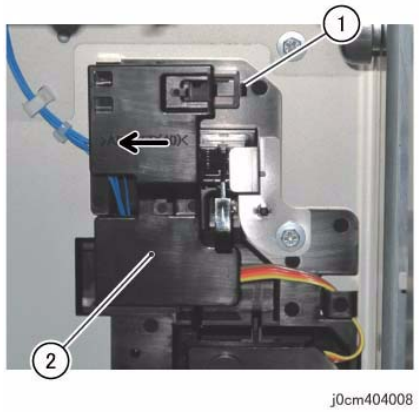


Figure 1 j0cm404008

3. Remove the Sensor Holder 2 Assembly. (Figure 2)
   (1) Release the wire harness from the holder.
   (2) Disconnect the Connector (x2).
   (3) Remove the Screw (x3).
   (4) Remove the Sensor Holder 2 Assembly.

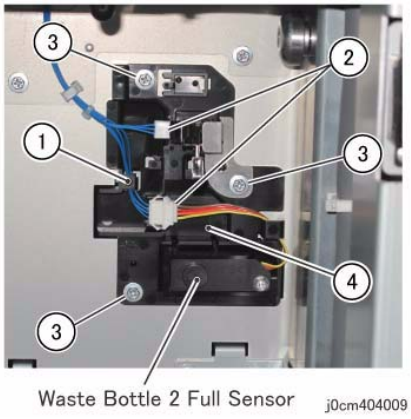


Figure 2 j0cm404009

Replacement

1. To install, carry out the removal steps in reverse order.

REP 4.6.2 (SCC) Bottle Bracket Assembly

Parts List on PL 4.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Left Cover. (REP 19.5.1)
3. Remove the IOT-L Rear Mid Cover. (PL 19.5)
4. Open the Right PWB Chassis. (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Release the wire harness from the Clamp (x2).
   (3) Remove the Screw (x6).
   (4) Open the Right PWB Chassis.

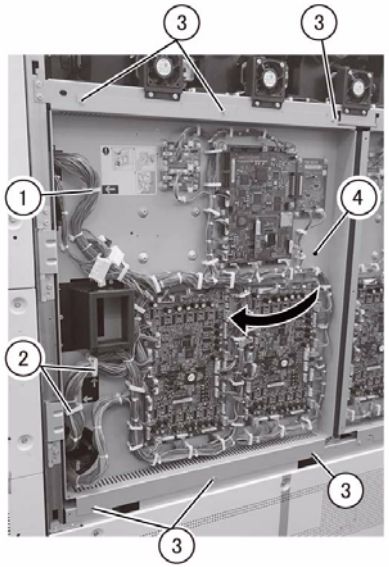


Figure 1 dar404001

5. Move the L&R Pipe of the BTB Joint Assembly until it stops in the direction of the arrow. (Figure 2)
   (1) Remove the Screw.
   (2) Move the L&R Pipe.

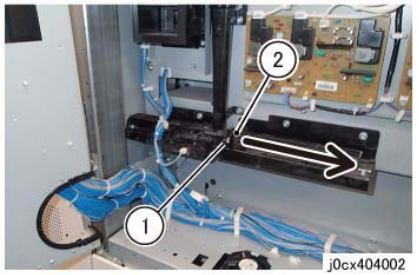


Figure 2 j0cx404002

6. Close the Right PWB Chassis.
7. Remove the IOT-R Rear Left Cover. (PL 19.9)
8. Open the Toner Bottle Cover. Remove the Waste Bottle (x2).
9. Push the left and right Stopper to remove Box 1/2. (Figure 3)

   NOTE: *Illustration indicates only Box 2, but remove Box 1 as well.*

   (1) Push the left and right Stopper and remove Box 2.

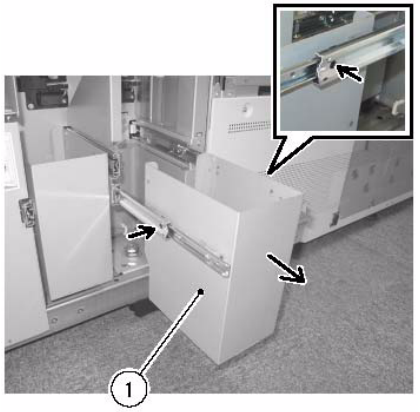


Figure 3 j0kol404002

10. Remove the Rail Plate. (Figure 4)
    (1) Remove the Screw (x4).
    (2) Remove the Rail Plate.

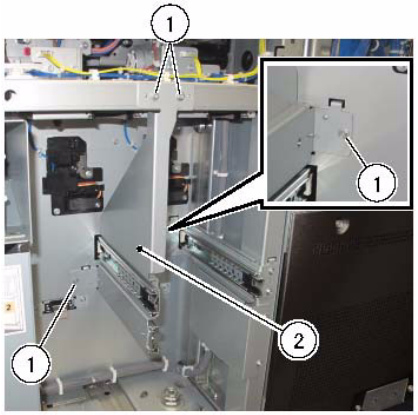


Figure 4 j0kol404003

11. Remove the Sensor Cover of the Sensor Holder 1/2 Assembly. (Figure 5)

    NOTE: *Do not bring magnetically charged objects close to the sensing part of the Waste Bottle 1/2 Full Sensor.*

    NOTE: *Illustration indicates only the Sensor Cover of Sensor Holder 2 Assembly, but remove Sensor Cover of Sensor Holder 1 Assembly as well.*

    (1) Press the tab.
    (2) Slide it to the left side to remove the Sensor Cover.

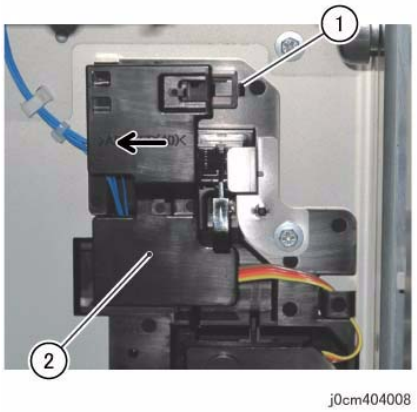


Figure 5 j0cm404008

12. Disconnect the Connector (x4) that are connected to the Sensor Holder 1/2 Assembly. (Figure 6)
    (1) Release the wire harness from the Clamp.
    (2) Disconnect the Connector (x2).
    (3) Release the wire harness from the Clamp.
    (4) Disconnect the Connector (x2).

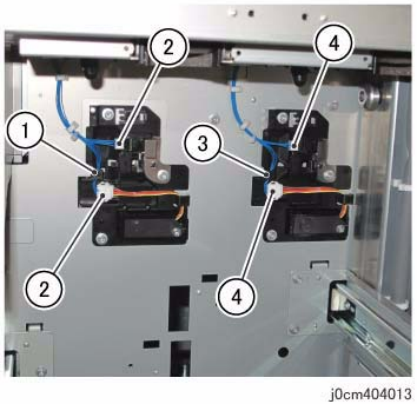


Figure 6 j0cm404013

13. Disconnect the Connector (x5). (Figure 7)
    (1) Release the wire harness from the Clamp (x3).
    (2) Disconnect the Connector (x4).
    (3) Release the wire harness from the Clamp (x2).
    (4) Disconnect the Connector.

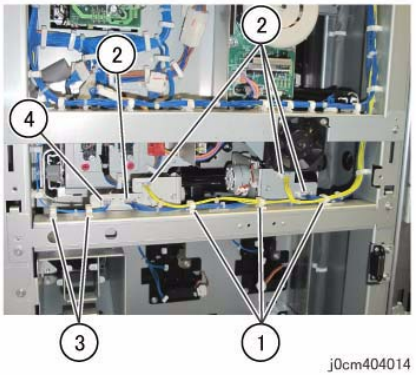


Figure 7 j0cm404014

14. Remove the Tie Plate Assembly. (Figure 8)
    (1) Remove the Screw (x4).
    (2) Remove the Tie Plate Assembly.

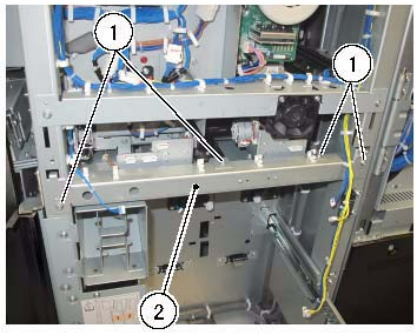


Figure 8 j0kol404004

15. Remove the Bottle Bracket Assembly. (Figure 9)
    (1) Disconnect the various Connectors that are connected behind.
    (2) Remove the Screw (x3).
    (3) Remove the Bottle Bracket Assembly.

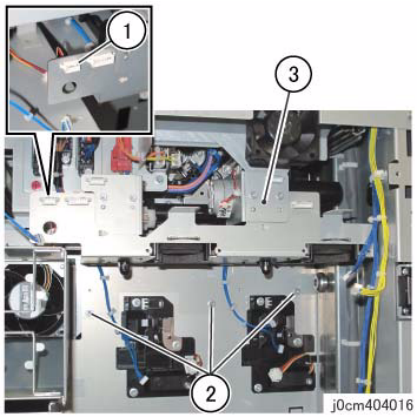


Figure 9 j0cm404016

Replacement

1. To install, carry out the removal steps in reverse order.

REP 4.9.1 ECO Box Unit

Parts List on PL 4.9

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the following parts:
    - ECO Rear Upper Cover (PL 4.9)
    - ECO Rear Lower Cover (PL 4.9)
    - ECO2 Rear Upper Cover (PL 4.11)
2. Remove the Foot Bracket. (Figure 1)
    (1) Remove the Screw (x2).
    (2) Remove the Foot Bracket.

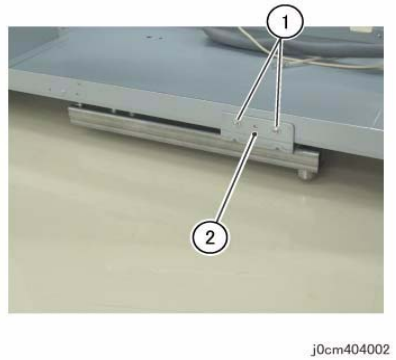


Figure 1 j0cm404002

3. Pull out the Side Foot. (Figure 2)
    (1) Pull out the Side Foot.
    (2) Loosen the Screw (x2).

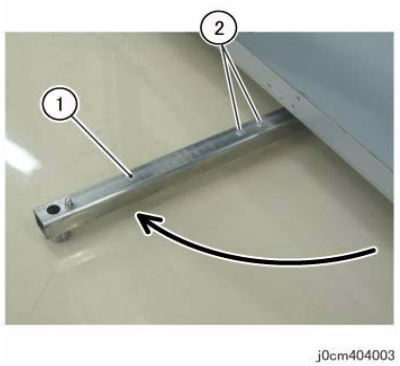


Figure 2 j0cm404003

4. Install the Foot Bracket that was removed in Step 3 by reusing the Screw (x2). (Figure 3)

   NOTE: *Secure the Side Foot to prevent the ECO Box Unit from falling.*

   (1) Install the Foot Bracket.
   (2) Tighten the Screw (x2).
   (3) Tighten the Screw (x2).

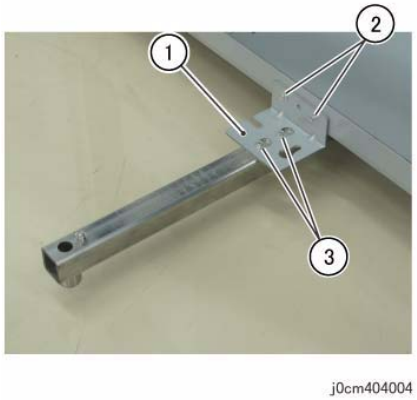


Figure 3 j0cm404004

5. Disconnect the Connector and remove the Strain Relief. (Figure 4)
   (1) Disconnect the Connector.
   (2) Remove the Screw and remove the Strain Relief.

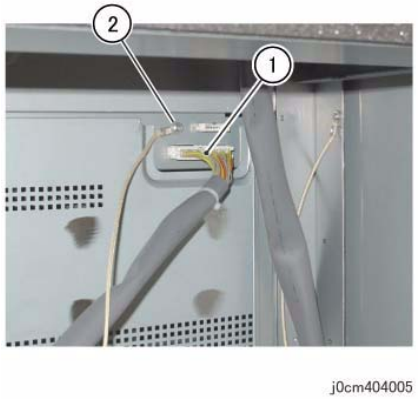


Figure 4 j0cm404005

6. Pull out Hose (x4) from the Main Unit and hook it on the Hose Hook (x4). (Figure 5)

   NOTE: *In the case of 5-color machine, Hose (x5). In the case of 6-color machine, Hose (x6).*

   NOTE: *Hooking on the Hose Hook is for preventing forgetting attachment of Hose when ECO Box Unit is installed.*

   (1) Pull out and remove the Hose (x4).
   (2) Hook on the Hose Hook.

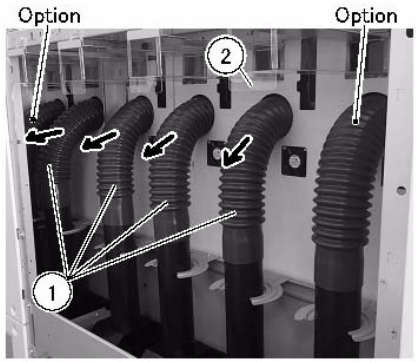


Figure 5 j0kol404005

7. Loosen Docking Screw and Thumb Screw (x3), and move the ECO Box Unit. (Figure 6)
   (1) Loosen the Docking Screw.
   (2) Loosen the ThumbScrews (x3).
   (3) Move the ECO Box Unit.

Figure 6 j0kol406006

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.1.1 Toner Dispenser Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for removing the Toner Dispenser Assembly (K (#5)) are described here. They are the same for other types of Toner Dispenser Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6).*

1. Open the Left/Right Dispenser Cover. (PL 19.2)
2. Remove the Toner Cartridge (K (#5)). (PL 5.1)
3. Open the IOT-L Front Left Door/Front Right Door. (PL 19.1)
4. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

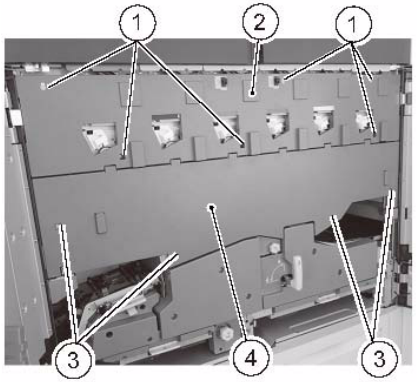


Figure 1 j0kol405001

5. Lower the IBT Lever to lower the IBT Belt Assembly. (Figure 2)
   (1) Bring down the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

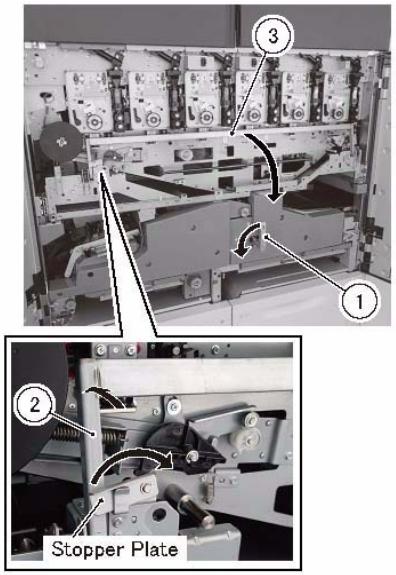


Figure 2 j0kol405002

6. Remove the Wheel Assembly only when pulling out the MM Assembly (#6). (Figure 3)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

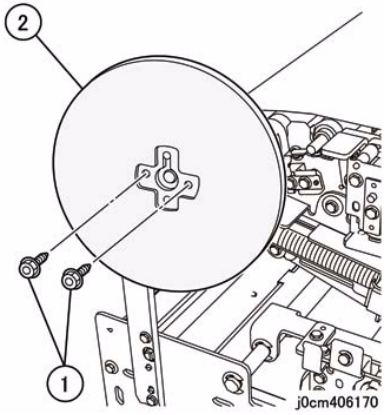


Figure 3 j0cm406170

7. Pull out the MM Assembly (K (#5)) slightly. (Figure 4)
   (1) Loosen the Screw.

(2) Loosen the Screw (x2).
(3) Hold the Handle and pull out the MM Assembly (K (#5)) slightly.

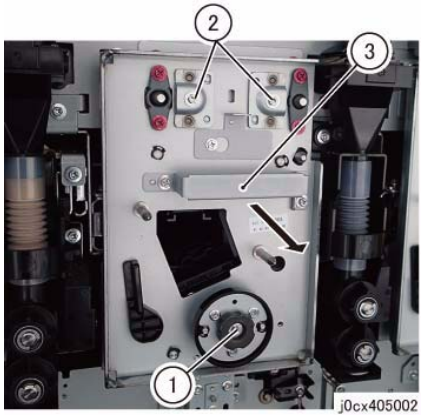


Figure 4 j0cx405002

8. Remove the Toner Dispenser Assembly (K (#5)). (Figure 5)
(1) Remove the Screw (x2).
(2) Loosen the Screw.
(3) Remove the Toner Dispenser Assembly (K (#5)).

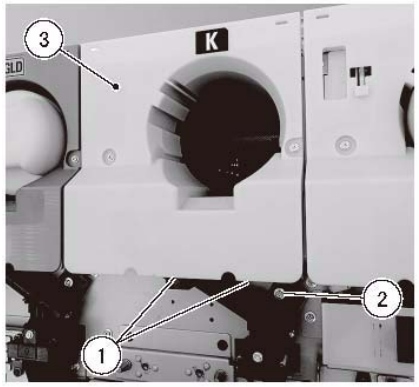


Figure 5 j0kol405008

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.2.1 MM Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

When removing the MM Assembly, do not hold the pin at the Rear Frame of the MM Assembly. It might damage the pin and cause the MM Assembly to drop.

NOTE: *When doing other work with the Drum Cartridge removed, be sure to put the Drum Cartridge in the ERU BAG to prevent light fatigue.*

NOTE: *As the MM Assembly is very heavy, be careful about your posture when performing the task. (MM Assembly: 8 kg or less)*

NOTE: *The steps for removing the MM Assembly (K (#5)) are described here. The steps for other types of MM Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6) are the same as (K (#5)).*

1. Remove the Drum Cartridge (K (#5)). (REP 5.2.2)
2. Remove the MM Assembly (K (#5)). (Figure 1)
(1) Remove the Shoulder Screw (M4x10:2).
(2) While pressing the Lever, pull out the MM Assembly (K (#5)) slightly.
(3) Hold the Handle at the front of the MM Assembly (K (#5)) and the base of the Pin at the rear, and remove the MM Assembly (K (#5)).

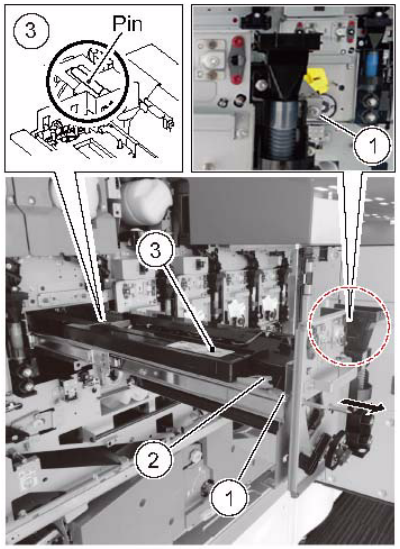


Figure 1 j0kol405003

3. For safety reasons, store the Left and Right MM Rail Assembly inside the Machine. (Figure 2)
   (1) Release the stopper (x2) of the Left and Right MM Rail Assembly and push in the MM Rail Assembly (x2).

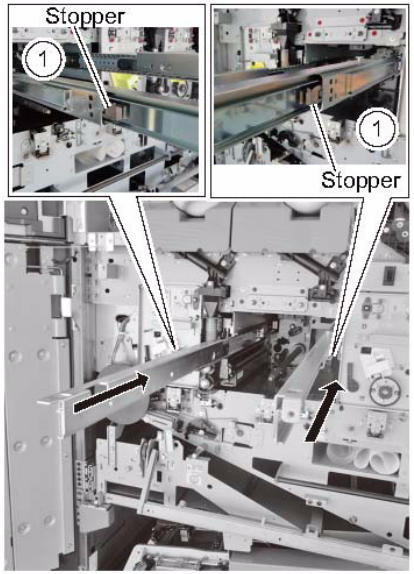


Figure 2 j0kol405004

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the MM Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6), clear the counter of the part you replaced from the following of HFSI (DC135).
   - MM Assembly (CLR (#1)) : DC135[009-812]
   - MM Assembly (GLD (#1)) : DC135[009-814]
   - MM Assembly (SLV (#1)) : DC135[009-819]
   - MM Assembly (WHT (#1)) : DC135[009-813]
   - MM Assembly (TX (#1)) : DC135[009-825]
   - MM Assembly (Y (#2)) : DC135[009-820]
   - MM Assembly (M (#3)) : DC135[009-821]
   - MM Assembly (C (#4)) : DC135[009-822]
   - MM Assembly (K (#5)) : DC135[009-823]
   - MM Assembly (GLD (#6)) : DC135[009-816]
   - MM Assembly (SLV (#6)) : DC135[009-818]
   - MM Assembly (WHT (#6)) : DC135[009-815]
   - MM Assembly (P (#1)) : DC135[009-827]
   - MM Assembly (P (#6)) : DC135[009-829]
   - MM Assembly (WHT N (#1)) : DC135[011-832]
   - MM Assembly (WHT N (#6)) : DC135[011-848]
   - Erase Lamp (#1) : DC135[009-852]
   - Erase Lamp (Y (#2)) : DC135[009-853]
   - Erase Lamp (M (#3)) : DC135[009-854]
   - Erase Lamp (C (#4)) : DC135[009-855]
   - Erase Lamp (K (#5)) : DC135[009-856]
   - Erase Lamp (#6) : DC135[009-857]
3. After installation of MM Assembly (Y (#2) / M (#3) / C (#4) / K (#5)), perform correction based on the SS direction (paper direction) of the DC972. (Within page density adjustment in SS direction (paper direction) for ADJ 20.1.6)

REP 5.2.2 Drum Cartridge (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for removing the Drum Cartridge (K (#5)) are described here. They are the same for other types of Drum Cartridges (#1/Y (#2)/M (#3)/C (#4)/#6).*

1. Open the IOT-L Front Left Door/Front Right Door. (PL 19.1)
2. Remove the CC Assembly (K (#5)). (REP 5.2.3)
3. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

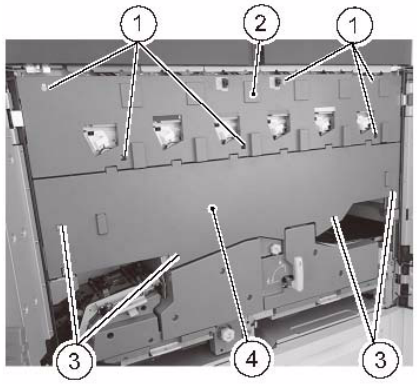


Figure 1 j0kol405001

4. Lower the IBT Lever to lower the IBT Belt Assembly. (Figure 2)
   (1) Bring down the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

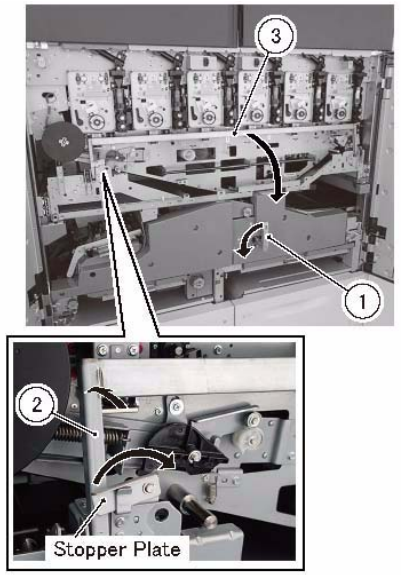


Figure 2 j0kol405002

5. Remove the Wheel Assembly only when pulling out the MM Assembly (#6). (Figure 3)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

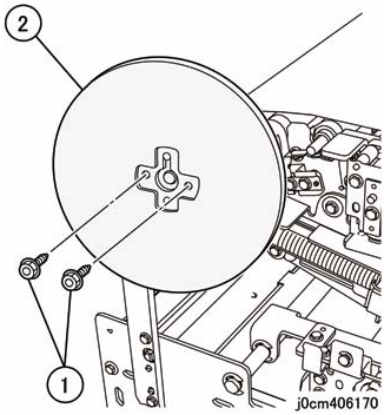


Figure 3 j0cm406170

6. Pull out the MM Assembly (K (#5)). (Figure 4)
   (1) Loosen the Screw.
   (2) Loosen the Screw (x2).

(3) Hold the Handle and pull out the MM Assembly (K (#5)).

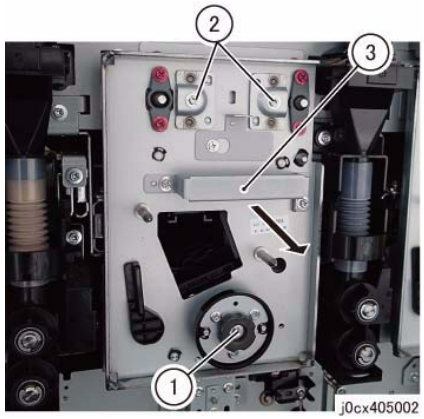


Figure 4 j0cx405002

7. Remove the Drum Cartridge (K (#5)). (Figure 5)

   NOTE: *When removing the Drum Cartridge (K (#5)), do not touch the surface of the Drum with your bare hands*

   (1) Pull and rotate the Knob at the same time to secure it.
   (2) Pull and rotate the Knob Assembly at the same time to secure it.
   (3) Free the tab from the square hole of the EPG Frame and remove the Drum Cartridge (K (#5)).

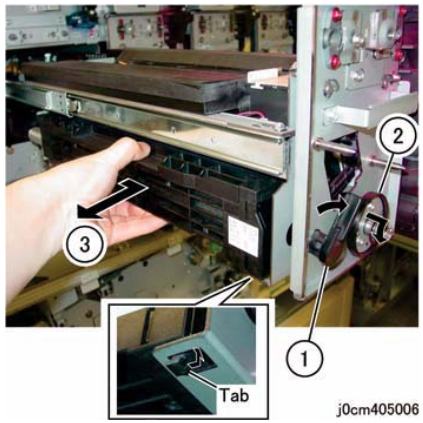


Figure 5 j0cm405006

8. When doing other work with the Drum Cartridge removed, be sure to put the Drum Cartridge in the ERU BAG to prevent light fatigue. (Figure 6)
   (1) Loosen the Screw at the inner side of the IOT-L Front Right Door.
   (2) Remove the Blind Cover.
   (3) Take out the ERU BAG.
   (4) Orientate the Drum Cartridge as shown in the figure.
   (5) Put the Drum Cartridge into the ERU BAG.

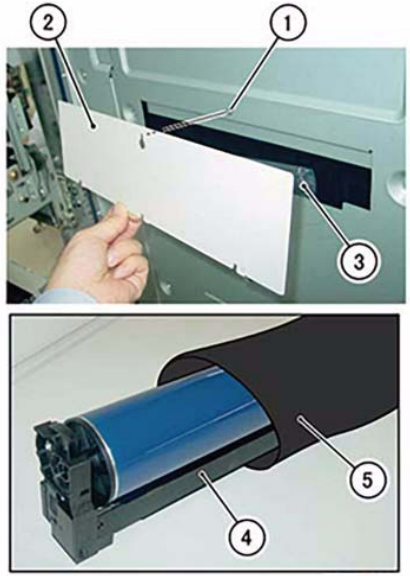


Figure 6 j0kol405009

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When returning the MM Assembly in the machine, push the stopper (x2) of the MM Rail at the same time, and push in the MM Assembly. (Figure 7)*

   (1) Push Left and Right Stopper (x2) at the same time.
   (2) Push in the MM Assembly.

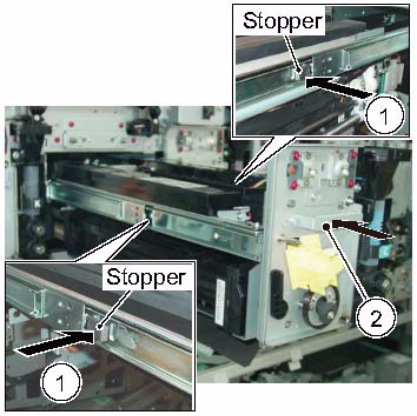


Figure 7 j0kol405005

2. After replacement of Drum Cartridge (Y (#2) / M (#3) / C (#4) / K (#5)), perform correction based on the SS direction (paper direction) of the DC972. (Within page density adjustment in SS direction (paper direction) for ADJ 20.1.6)

REP 5.2.3 CC Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for CC Assembly (K (#5)) are described here. The steps for other types of CC Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6) are the same as (K (#5)).*

NOTE: *After removing the CC Assembly together with the CRU Guide, do not remove the CC Assembly from the CRU Guide. This is because the CC Assembly is easily damaged*

1. Open the IOT-L Front Left Door. (PL 19.1)
2. Take out the CRU Guide from the Storage Box, set it to the Front Plate Assembly (K (#5)), and then remove the CC Assembly (K (#5)). (Figure 1)
   (1) Open the Left Dispenser Cover and take out the CRU Guide.
   (2) Set the CRU Guide to the pin (x2) of the Front Plate Assembly (K (#5)).
   (3) Lower the Lever and pull out the CC Assembly (K (#5)).
   (4) Remove the CC Assembly (K (#5)) together with the CRU Guide.

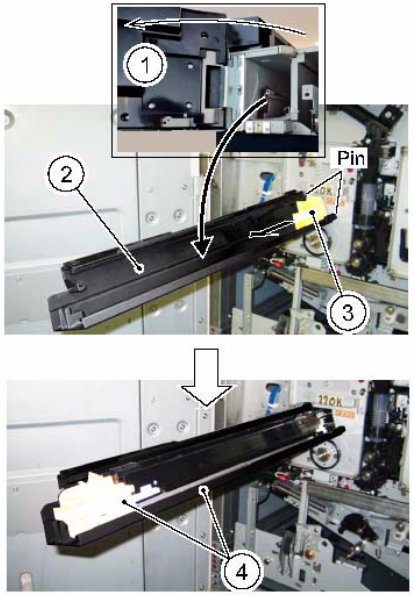


Figure 1 j0kol405006

Replacement

1. To install, carry out the removal steps in reverse order.

NOTE: *When installing the CC Assembly, confirm that it is a CC Assembly for Digital Full Color Production Printer (Label attached to the Cover).*

REP 5.2.4 CC Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6) Replacement

Parts List on PL 5.2

Replace

NOTE: *Replace the CC Assembly with the machine powered ON.*

NOTE: *The steps for replacement of CC Assembly (K (#5)) are described here. The steps for other types of CC Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6) are the same as (K (#5)).*

NOTE: *After removing the CC Assembly together with the CRU Guide, do not remove the CC Assembly from the CRU Guide. This is because the CC Assembly is easily damaged*

1. Open the IOT-L Front Left Door. (PL 19.1)
2. Take out the CRU Guide from the Storage Box, set it to the Front Plate Assembly (K (#5)), and then remove the CC Assembly (K (#5)). (Figure 1)
   (1) Open the Left Dispenser Cover and take out the CRU Guide.
   (2) Set the CRU Guide to the pin (x2) of the Front Plate Assembly (K (#5)).
   (3) Lower the Lever and pull out the CC Assembly (K (#5)).
   (4) Remove the CC Assembly (K (#5)) together with the CRU Guide.

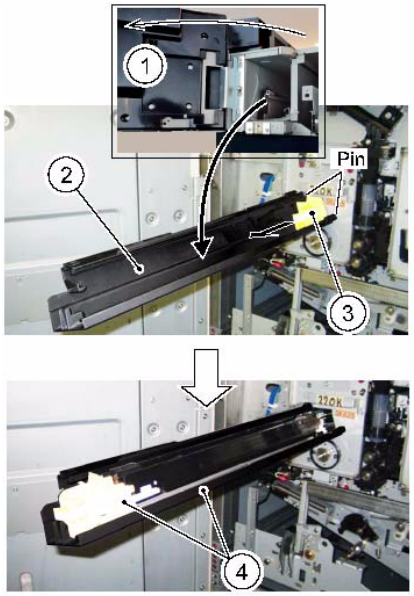


Figure 1 j0kol405006

3. Install the a new CC Assembly (K (#5)) by performing Step 2 in reverse. The new CRU Guide is stored in the location shown in the ECO Box Unit figure. (Figure 2)

NOTE: *When installing the CC Assembly, confirm that it is a CC Assembly for Digital Full Color Production Printer (Label attached to the Cover).*

Figure 2 j0kol405010

4. Close the IOT-L Front Left Door. (PL 19.1)
5. Select [Black Corotron] on the [An interaction ... screen] displayed on the PC-UI screen, and press the reset button. (Figure 3)

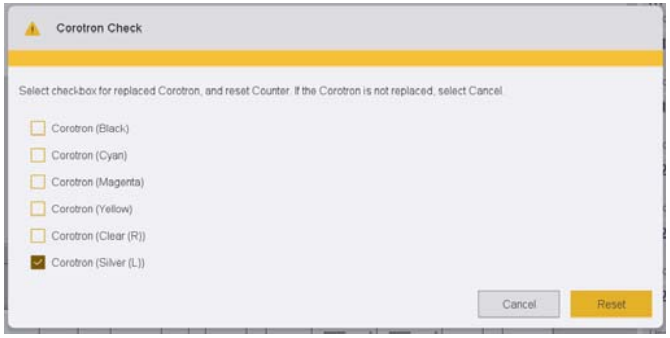


Figure 3 dar405001

REP 5.2.5 Developer (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6) Replacement

Parts List on PL 5.2

Removal

NOTE: *The steps for removing the Developer (K (#5)) are described here. The steps for other types of Developers (#1/Y (#2)/M (#3)/C (#4)/#6) are the same as (K (#5)).*

[Remove Developer]

1. Open the IOT-L Front Left/Right Door. (PL 19.1)
2. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

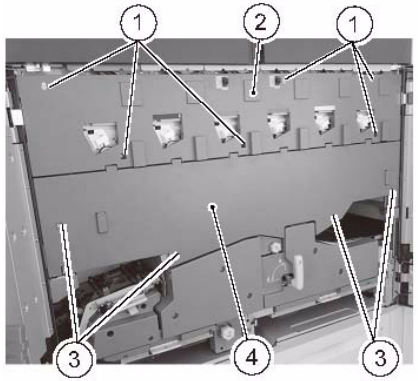


Figure 1 j0kol405001

3. Lower the IBT Lever to lower the IBT Belt. (Figure 2)
   (1) Bring down the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

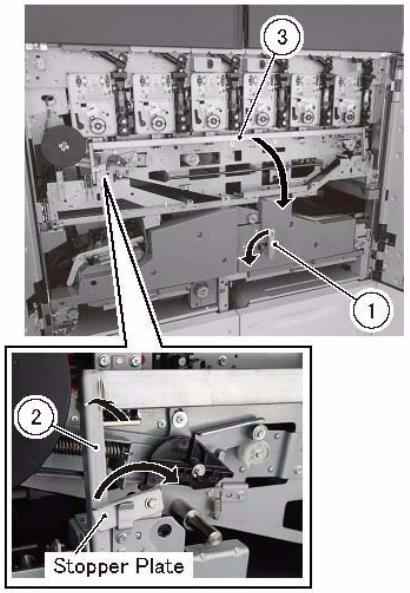


Figure 2 j0kol405002

4. Cover Front Sub Housing with a collection bag, and pull out the Shutter. (Figure 3)
   (1) Cover with the collection bag.
   (2) Pull out the Shutter.

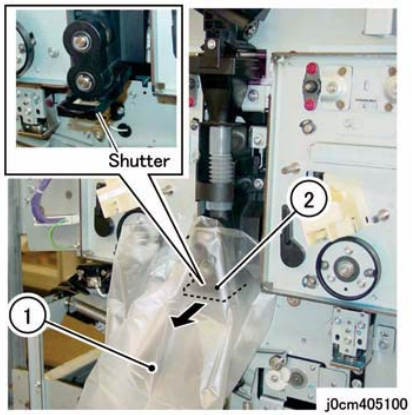


Figure 3 j0cm405100

5. Pull the Service Interlock toward you to turn it ON.
6. Launch PC-DIAG.
7. Select DC955 on the subsystem screen and execute it.
8. Select the color of the Developer to replace.
9. Select and execute the developer discharge feature.
10. After discharge, close the Shutter, and remove the collection bag.

[Supply of Developer]

1. Pull the guide of the supply port toward you and set the paper funnel on the Joint Pipe. (Figure 4)
   (1) Remove the Screw.
   (2) Bring down the Guide.
   (3) Set the bundled paper funnel on the Joint Pipe.

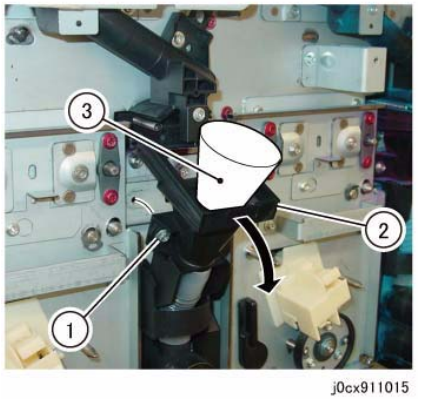


Figure 4 j0cx911015

2. Select and execute the developer supply feature.
3. Supply Developer. (Figure 5)
   (1) Supply Developer.

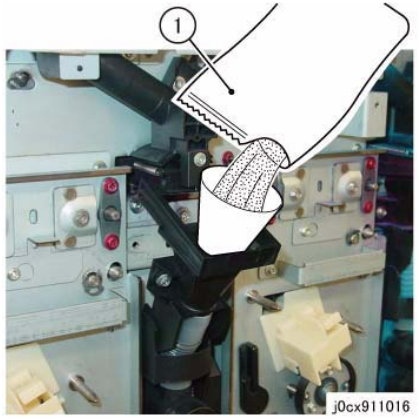


Figure 5 j0cx911016

4. Enter Diag Mode and clear the following replaced Developer counter of [DC135 HFSI].
   - Developer (CLR (#1)) : DC135[009-800]
   - Developer (GLD (#1)) : DC135[009-802]
   - Developer (SLV (#1)) : DC135[009-807]
   - Developer (WHT (#1)) : DC135[009-801]
   - Developer (TX (#1)) : DC135[009-824]
   - Developer (Y (#2)) : DC135[009-808]
   - Developer (M (#3)) : DC135[009-809]
   - Developer (C (#4)) : DC135[009-810]
   - Developer (K (#5)) : DC135[009-811]
   - Developer (GLD (#6)) : DC135[009-804]
   - Developer (SLV (#6)) : DC135[009-806]
   - Developer (WHT (#6)) : DC135[009-803]
   - Developer (P (#1)) : DC135[009-826]
   - Developer (P (#6)) : DC135[009-828]
   - Developer (WHT N (#1)) : DC135[011-800]
   - Developer (WHT N (#6)) : DC135[011-816]

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacement of Developer (Y (#2) / M (#3) / C (#4) / K (#5)), perform correction based on the SS direction (paper direction) of the DC972. (Within page density adjustment in SS direction (paper direction) for ADJ 20.1.6)

REP 5.6.1 Front Plate Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for removing the Front Plate Assembly (K (#5)) are described here. They are the same for other types of Plate Assemblies (#1/Y (#2)/M (#3)/C (#4)/#6).*

1. Open the IOT-L Front Left Door/Front Right Door. (PL 19.1)
2. Remove the CC Assembly (K (#5)). (REP 5.2.3)
3. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

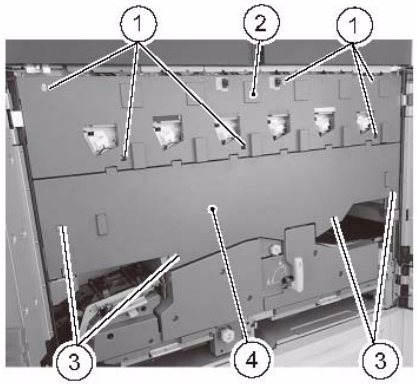


Figure 1 j0kol405001

4. Lower the IBT Lever to lower the IBT Belt Assembly. (Figure 2)
   (1) Bring down the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

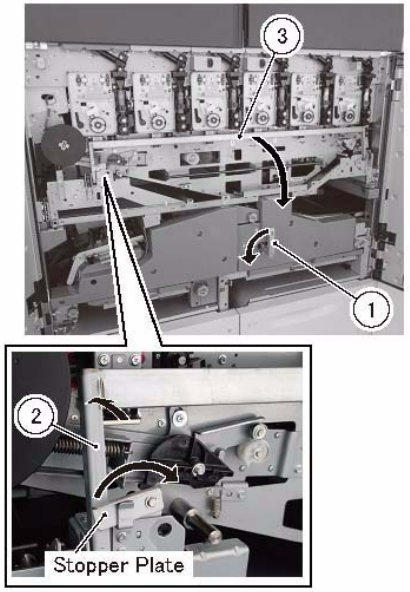


Figure 2 j0kol405002

5. Remove the Wheel Assembly only when pulling out the MM Assembly (#6). (Figure 3)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

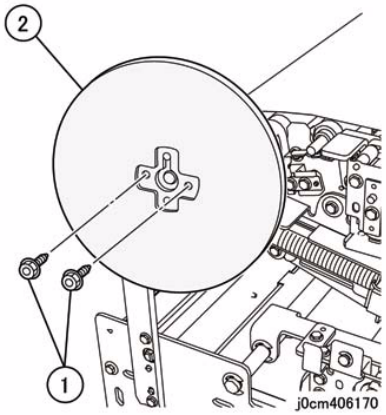


Figure 3 j0cm406170

6. Loosen the Screw (x3) securing the MM Assembly (K (#5)), and pull out the Front Plate Assembly. (Figure 4)
   (1) Loosen the Screw.
   (2) Loosen the Screw (x2).
   (3) Hold the Handle and pull out the MM Assembly (K (#5)) slightly.

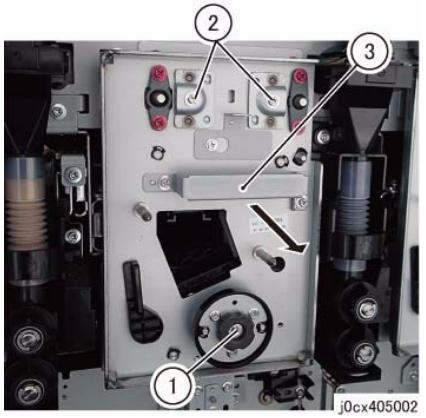


Figure 4 j0cx405002

7. Remove the Front Plate Assembly (K (#5)). (Figure 5)
   (1) Pull and rotate the Knob at the same time to secure it.
   (2) Remove the KL-Clip (x3).
   (3) Remove the Front Plate Assembly (K (#5)).

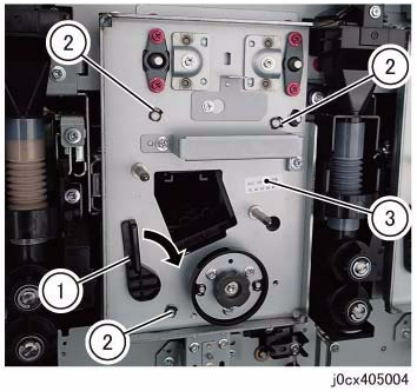


Figure 5 j0cx405004

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.7.1 Erase Lamp Bracket Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the MM Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (REP 5.2.1)
2. Remove the CC In Duct Assembly. (Figure 1)
   (1) Remove the CC In Duct Assembly in the direction of the arrow.

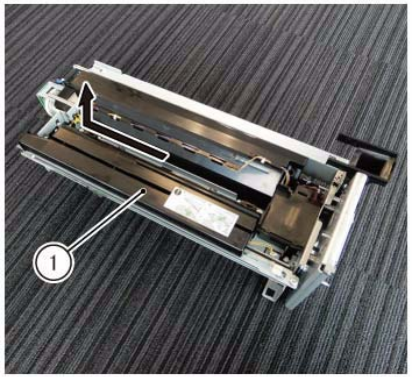


Figure 1 j0cx405037

3. Remove the CC Top Guide. (Figure 2)
   (1) Remove the wire harness from the tab of the CC Top Guide.
   (2) Remove the Screw (x4).
   (3) Remove the CC Top Guide.

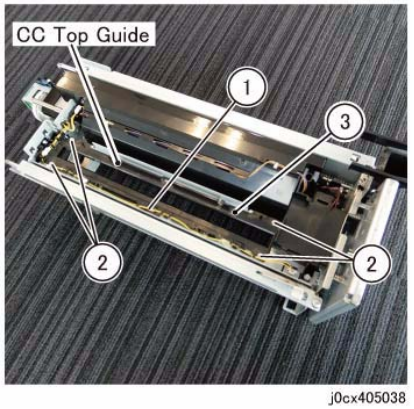


Figure 2 j0cx405038

4. Remove the Erase Lamp Bracket Assembly. (Figure 3)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the Erase Lamp Bracket Assembly.

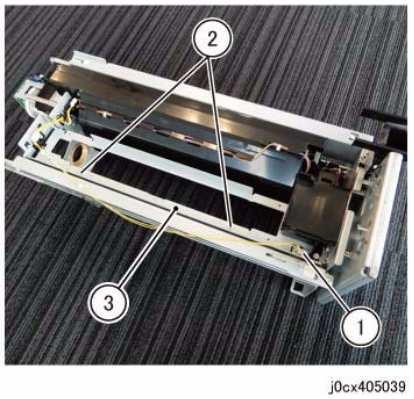


Figure 3 j0cx405039

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.8.1 Deve Motor (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the MM Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (REP 5.2.1)
2. Remove the Deve Motor from the MM Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (Figure 1)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x4).
   (3) Remove the Deve Motor (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6).

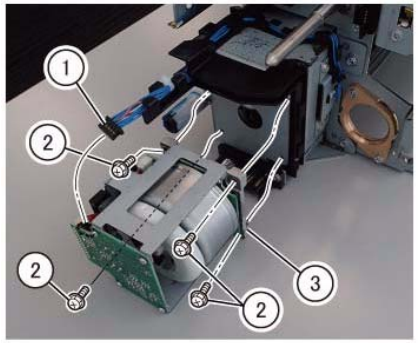


Figure 1 j0cx405005

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.8.2 Developer Housing Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

***NOTE:** When removing the Developer Housing Assembly, lay paper under the MM Assembly to prevent toner from dropping.*

1. Remove the MM Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (REP 5.2.1)
2. Remove the ESV Cover from the ESV Case. (Figure 1)
   (1) Release the tab and remove the ESV Cover.

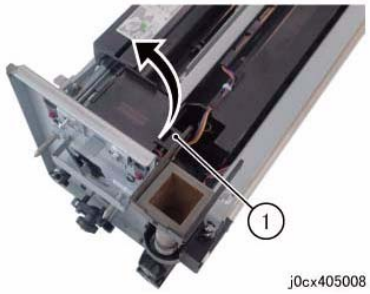


Figure 1 j0cx405008

3. Disconnect the Connector (x2) from the ESV Sensor. (Figure 2)

   ***NOTE:** When disconnecting the Connector (x2) of the ESV Sensor, be careful not to let toner adhere to the Connector Pin.*

   (1) Lift the ESV Sensor.
   (2) Disconnect the Connector (x2).

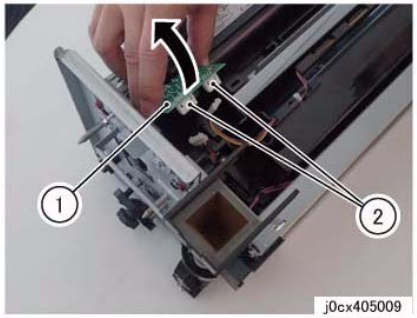


Figure 2 j0cx405009

4. Remove the ESV Case from the EPG Frame. (Figure 3)
   (1) Remove the Screw.
   (2) Slide in the direction of the arrow, and remove the ESV Case.

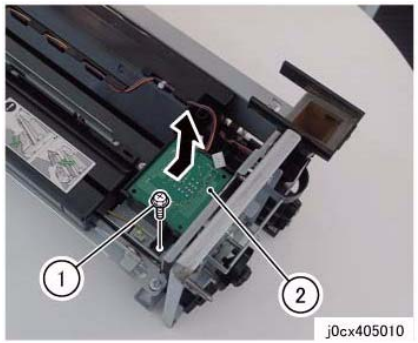


Figure 3 j0cx405010

5. Remove the CC Out Duct Assembly. (Figure 4)
   (1) Disconnect the Connector.
   (2) Remove the Tapping Screw (x2).
   (3) Remove the CC Out Duct Assembly.

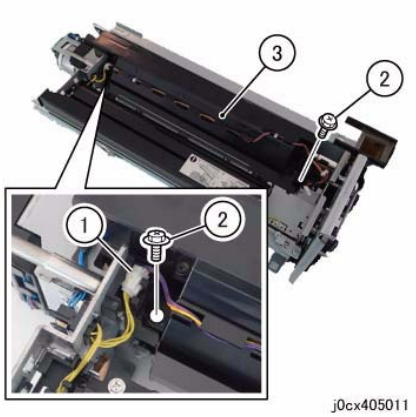


Figure 4 j0cx405011

6. Remove the Screw (x2) from the rear of the MM Assembly. (Figure 5)
   (1) Remove the Screw (x2).

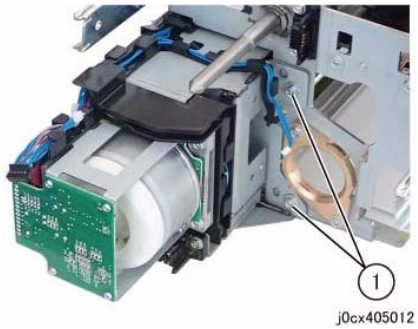


Figure 5 j0cx405012

7. Remove the Screw from front of the MM Assembly, and remove the Developer Housing Assembly. (Figure 6)
   (1) Remove the Screw.
   (2) Pull out the Joint Pipe downward (Lower Housing Assembly side).
   (3) Pull the frame section toward you, and remove it in the upward direction.

   NOTE: *If the Joint Pipe is stuck to the Toner Guide, destroy the Joint Pipe with a tool and remove it.*

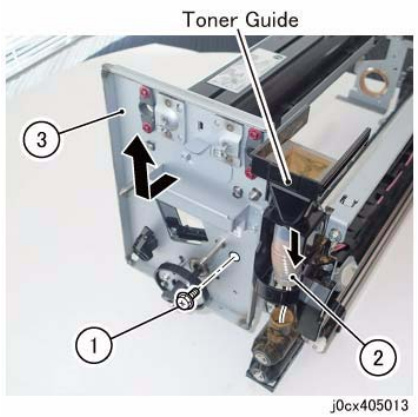


Figure 6 j0cx405013

8. Remove the Deve Motor Assembly. (Figure 7)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x4).
   (3) Remove the Deve Motor Assembly.

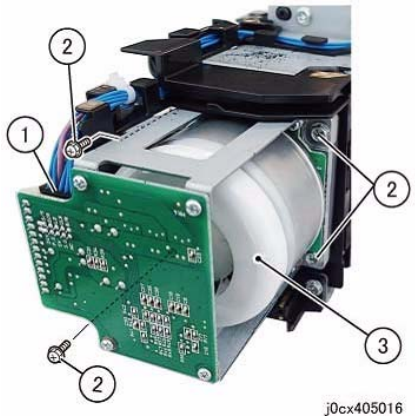


Figure 7 j0cx405016

REP 5.8.3 Deve Filter/Partition Plate (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Parts List on PL 5.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Drum Cartridge (#1/ Y (#2)/M (#3)/C (#4)/K (#5)/ #6). (REP 5.2.2)
2. Remove the ESV Cover/ESV Sensor/ESV Case.
   (1) Remove the screw.
   (2) Slide in the direction of the arrow, and remove the ESV Cover/ESV Sensor/ESV Case.

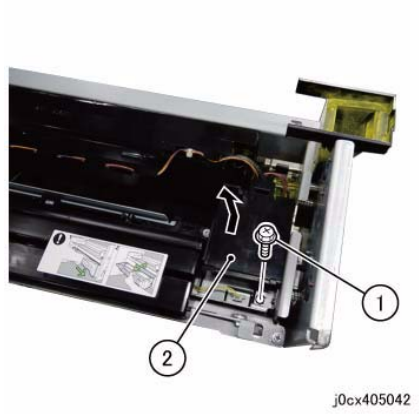


Figure 1 j0cx405042

3. Remove the CC Out Duct Assembly.
   (1) Disconnect the connector.
   (2) Remove the Tapping Screw (x2).
   (3) Remove the CC Out Duct Assembly at the same time as the ESV Cover/ESV Sensor/ESV Case removed in Step 2.

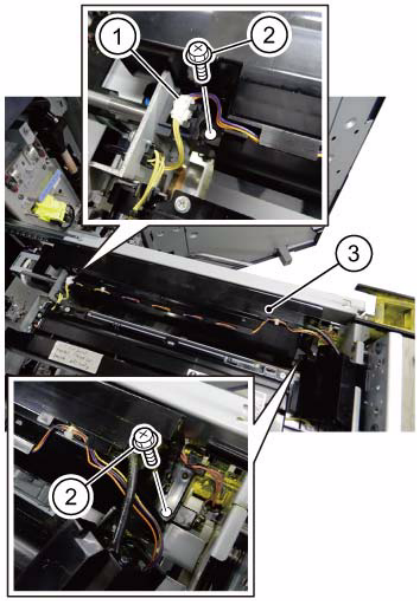


Figure 2 j0kol405007

4. Remove the Filter Cover.
   (1) Remove the Tapping Screw (x2).
   (2) Remove the Filter Cover.

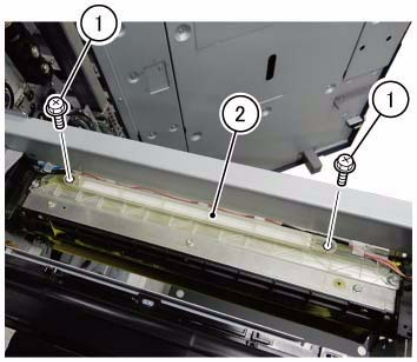


Figure 3 j0cx405044

5. Remove the Deve Filter.
   (1) Remove the Deve Filter.

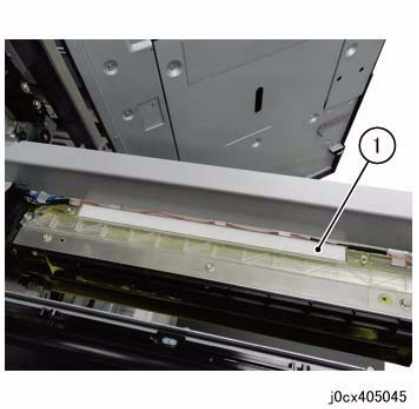


Figure 4 j0cx405045

6. Remove the Partition Plate.
   (1) Remove the Partition Plate.

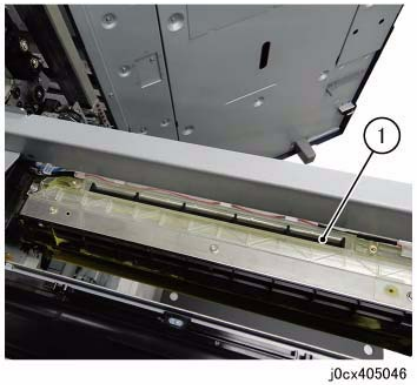


Figure 5 j0cx405046

Replacement

1. To install, carry out the removal steps in reverse order.

NOTE: *When installing the Partition Plate, align the slits at both ends of the Partition Plate with the protrusions of the Top Cover.*

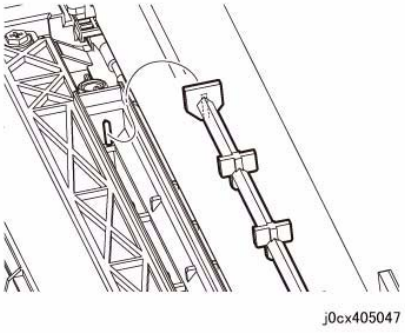


Figure 6 j0cx405047

NOTE: *When installing the Deve Filter, align the corners of Deve Filter to the four corners of Top Cover's depression and press lightly.*

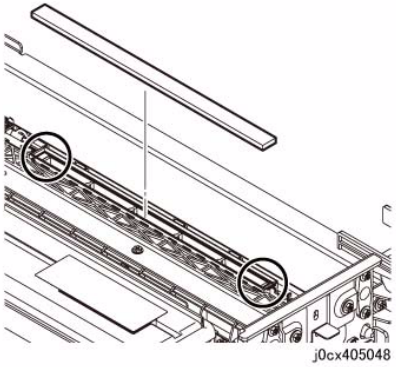


Figure 7 j0cx405048

2. After replacement, clear appropriate HFSI (DC135) counters from the following.
   - DEVE Filter CT #1: DC135[009-836]
   - DEVE Filter WHT #1: DC135[009-837]
   - DEVE Filter GLD #1: DC135[009-838]
   - DEVE Filter SLV #1: DC135[009-839]
   - DEVE Filter TX #1: DC135[009-893]
   - DEVE Filter WHT #6: DC135[009-869]
   - DEVE Filter GLD #6: DC135[009-891]
   - DEVE Filter SLV #6: DC135[009-892]
   - DEVE Filter #2 (Y): DC135[009-895]
   - DEVE Filter #3 (M): DC135[009-896]
   - DEVE Filter #4 (C): DC135[009-897]
   - DEVE Filter #5 (K): DC135[009-898]
   - DEVE Filter P #6: DC135[009-899]
   - DEVE Filter WHT N #1: DC135[011-864]
   - DEVE Filter WHT N #6: DC135[011-880]

REP 5.15.1 Gear Box Housing Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.15

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target Toner Dispenser Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (REP 5.1.1)
2. Remove the Rear Plate. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Rear Plate.

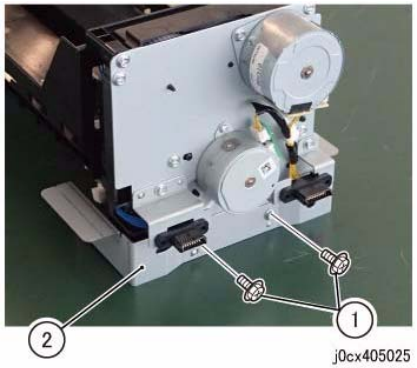


Figure 1 j0cx405025

3. Remove the Gear Housing Assembly. (Figure 2)
   (1) Disconnect the Connector.
   (2) Remove the Tapping Screw (x4).
   (3) Remove the Gear Housing Assembly.

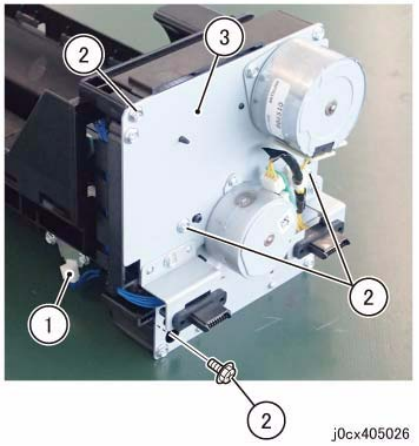


Figure 2 j0cx405026

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.16.1 Low Toner Sensor (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

Parts List on PL 5.16

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target Toner Dispenser Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (REP 5.1.1)
2. Remove the Rear Plate. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Rear Plate.

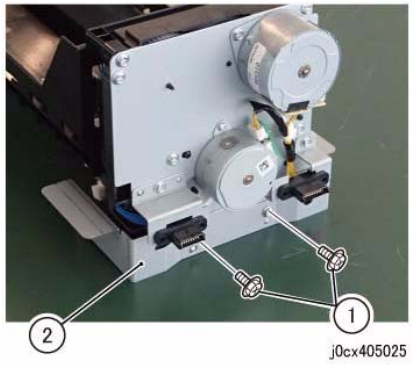


Figure 1 j0cx405025

3. Remove the Low Toner Sensor. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Disconnect the Connector.
   (3) Remove the Low Toner Sensor.

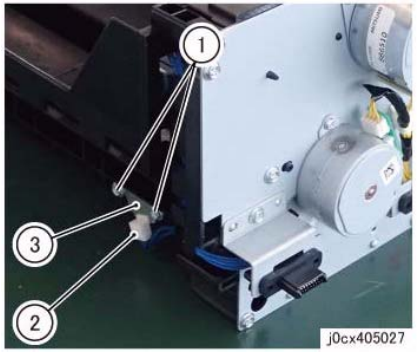


Figure 2 j0cx405027

Replacement

1. To install, carry out the removal steps in reverse order.

REP 5.18.1 Toner Cartridge Motor/Toner Dispense Motor (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6)

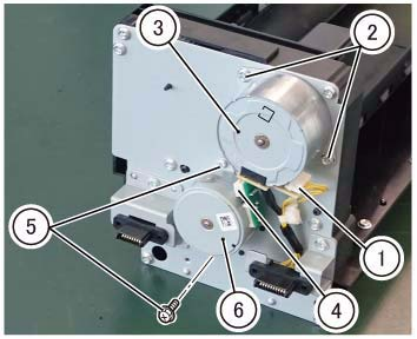
Parts List on PL 5.18

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target Toner Dispenser Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6). (REP 5.1.1)
2. Remove the Toner Cartridge Motor and the Toner Dispense Motor. (Figure 1)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the Toner Cartridge Motor.
   (4) Disconnect the Connector.
   (5) Remove the Screw (x2).
   (6) Remove the Toner Dispense Motor.



j0cx405028

Figure 1 j0cx405028

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.1.1 IBT Frame Assembly Service Position

Parts List on PL 6.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left Door/Front Right Door. (PL 19.1)
2. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

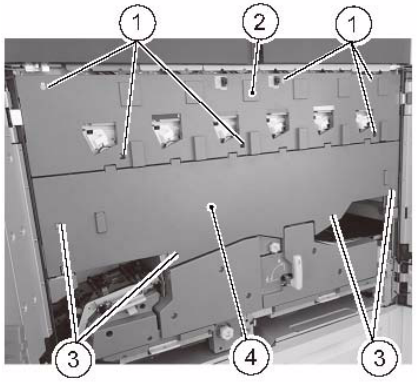


Figure 1 j0kol405001

3. Pull out the Big Module up to the Service Position. (REP 9.1.1)
4. Lower the handle of the IBT Lever, and lower the IBT Belt. (Figure 2)
   (1) Lightly push the IBT Lever to rotate the Stopper Plate.
   (2) Lower the IBT Lever.

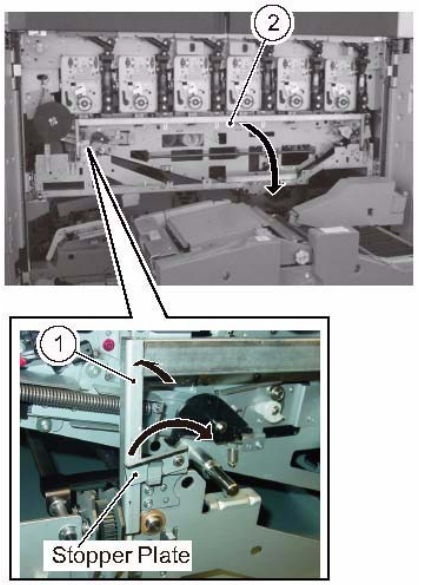


Figure 2 j0kol406001

5. Pull out IBT Frame Assembly up to the Service Position. (Figure 3)
   (1) Hold the IBT Handle and pull out the IBT Frame Assembly.

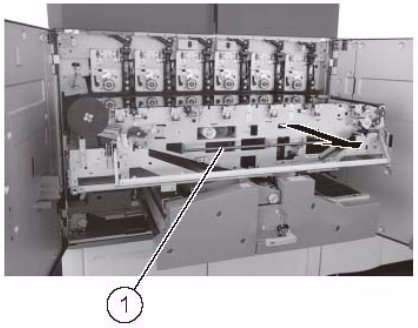


Figure 3 j0kol406002

6. When working with the IBT Frame Assembly at the Service Position, always attach Protect Sheet on the Developer Inner Cover to prevent light degradation of the Drum. (Figure 4)
   (1) Install the Developer Inner Cover.

(2) Open the Left Dispenser Cover, and take out the Protect Sheet.
(3) Attach the Magnet of Protect Sheet to the Developer Inner Cover.

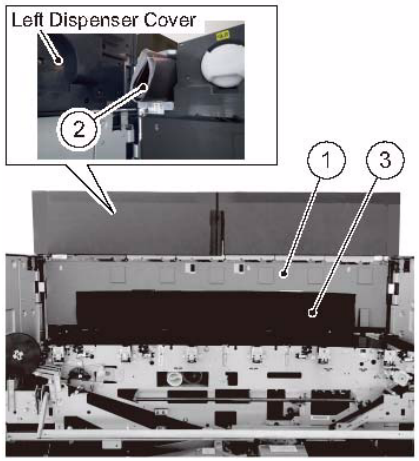


Figure 4 j0kol406003

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.1.2 IBT Belt Assembly Service Position

Parts List on PL 6.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When working with the IBT Frame Assembly pulled out, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

NOTE: *As the IBT Belt Assembly is very heavy, be careful about your posture when performing the task.*

1. Remove the IBT Belt Cleaner Assembly. (REP 6.2.1)
2. Remove the Wheel Assembly from the IBT Module. (Figure 1)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

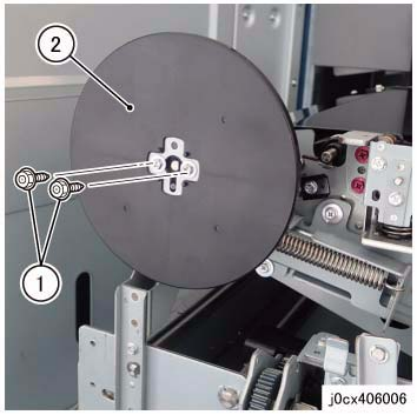


Figure 1 j0cx406006

3. Lift up the IBT Belt Assembly. (Figure 2)
   (1) Hold the Handle, and lift the IBT Belt Assembly, then lower it slowly, and release your hands when the IBT Belt Assembly stops.

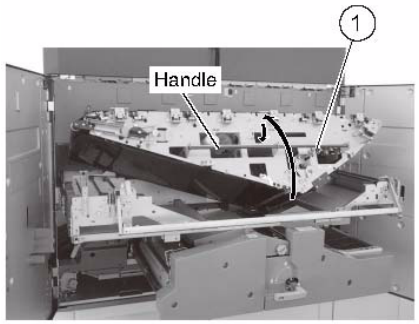


Figure 2 j0kol406004

4. When working for a long duration in this state, attach the Tilt Shaft to the IBT Belt Assembly and the IBT Frame. (Figure 3)
   (1) Release the Clamp (x4), and remove the Tilt Shaft.
   (2) Attach the Tilt Shaft to the IBT Belt Assembly and IBT Frame Assembly.

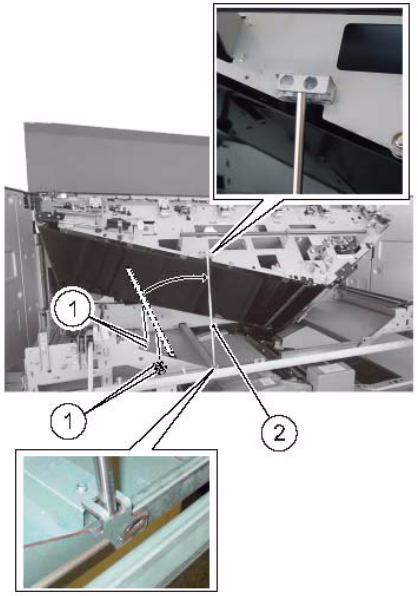


Figure 3 j0kol406005

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When unloading the IBT Belt Assembly to the IBT Frame Assembly, hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it. (Figure 4)*

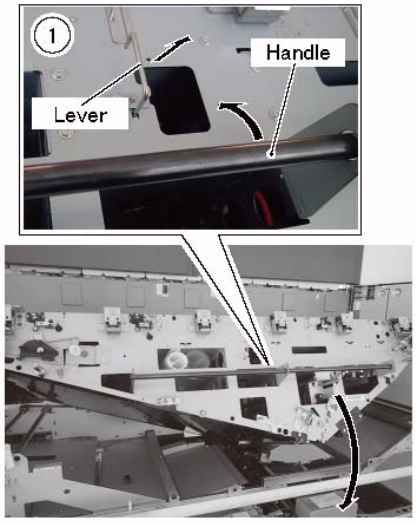


Figure 4 j0kol406034

REP 6.1.3 IBT Drawer Assembly

Parts List on PL 6.1

Replace

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

As the IBT Drawer Assembly is heavy, the work must be done by 4 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (With caution label) (IBT Drawer Assembly: 60 kg or less)

NOTE: *If countermeasure parts etc. are already attached to the IBT Frame Assembly or IBT Belt Assembly to be replaced, remove the parts and replace them to the new IBT Frame Assembly and IBT Belt Assembly.*

1. Open the IOT-L Front Left Door/Front Right Door. (PL 19.1)
2. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

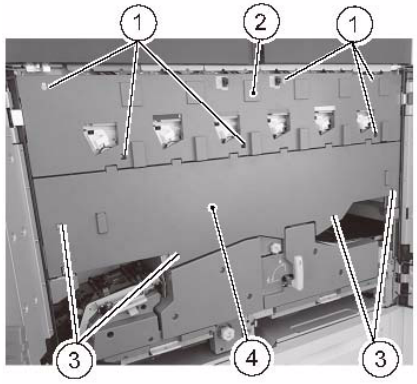


Figure 1 j0kol405001

3. Lower the IBT Lever to lower the IBT Belt Assembly. (Figure 2)
   (1) Bring down the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

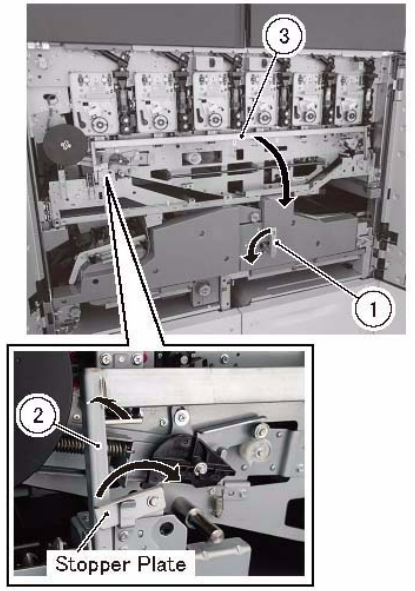


Figure 2 j0kol405002

4. Remove the Drawer Right Cover. (Figure 3)
   (1) Loosen the Screw (x3).
   (2) Remove the Drawer Right Cover.

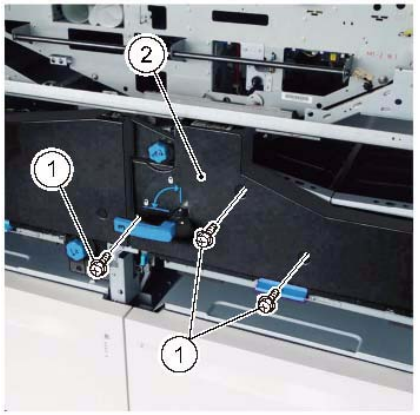


Figure 3 j0kol406006

5. Remove the Fly Wheel Plate. (Figure 4)
   (1) Remove the Hexalobular TP Screw (x2).

(2) Remove the Fly Wheel Plate.

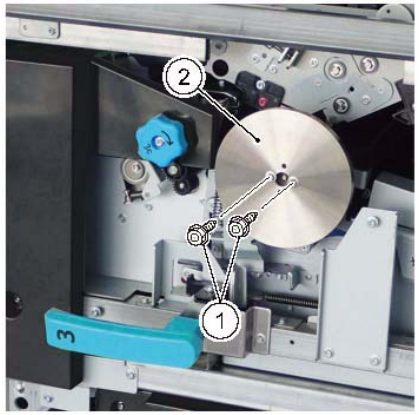


Figure 4 j0kol406007

6. Pull out IBT Frame Assembly up to the Service Position. (Figure 5)
   (1) Hold the IBT Handle and pull out the IBT Frame Assembly.

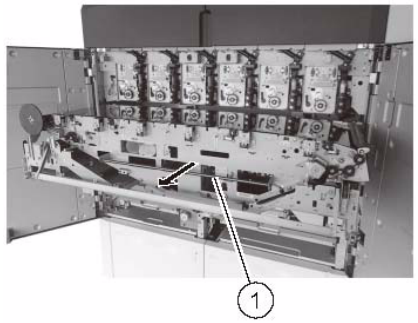


Figure 5 j0kol406008

7. When working with the IBT Frame Assembly at the Service Position, always attach Protect Sheet on the Developer Inner Cover to prevent light degradation of the Drum. (Figure 6)
   (1) Install the Developer Inner Cover.
   (2) Open the Left Dispenser Cover, and take out the Protect Sheet.
   (3) Attach the Magnet of Protect Sheet to the Developer Inner Cover.

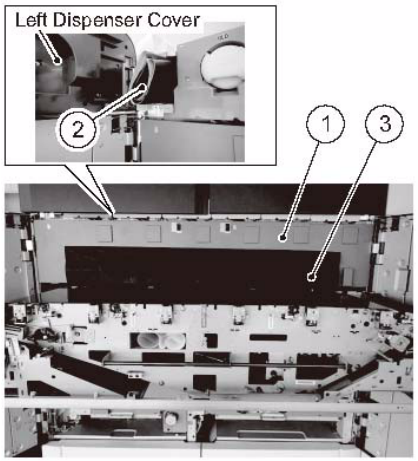


Figure 6 j0kol406009

8. Push the left/right Stopper (x2) of the IBT Rail (x2) at the same time, and pull out the IBT Drawer Assembly.
   (Figure 7)
   (1) Push in the stopper (x2) of the IBT Rail (x2) simultaneously.
   (2) Pull out the IBT Drawer Assembly, and secure the IBT Drawer Assembly with the Stopper (x2) at the rear.

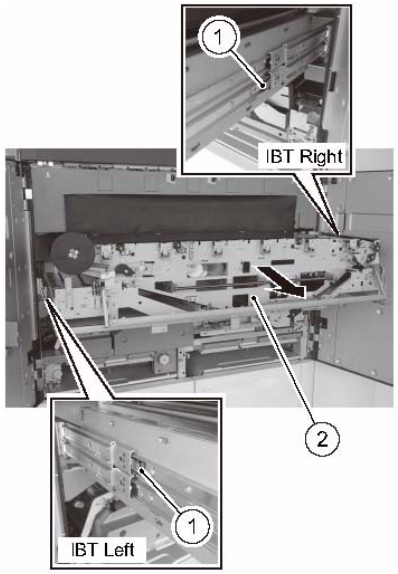


Figure 7 j0kol406010

9. Attach the Bracket (x4) included in the kit to the IBT Frame Assembly to be replaced. (Figure 8)
   (1) Install the bracket (x2) from the kit to the IBT Frame.
   (2) Tighten the Screw (x4) provided in the Kit.
   (3) Install the bracket (x2) from the kit to the IBT Frame.
   (4) Tighten the Screw (x4) provided in the Kit.

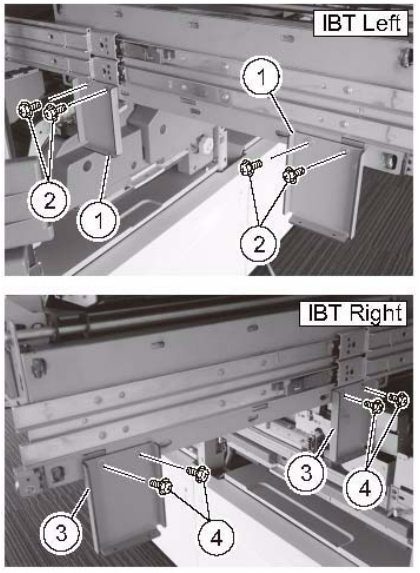


Figure 8 j0kol406011

10. Remove the IBT Drawer Assembly from the Main Unit. (Figure 9)

WARNING

As the IBT Drawer Assembly is heavy, the work must be done by 4 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (With caution label) (IBT Drawer Assembly: 60 kg or less)

NOTE: *When removing the IBT Drawer Assembly, as it requires a lot of space, prepare a place in advance for unloading.*

(1) Push the Stopper (x2) on the left/right rear of the IBT Rail (x2) simultaneously with a Plus Driver, etc.
(2) Pull out the IBT Drawer Assembly forward slowly to remove it.

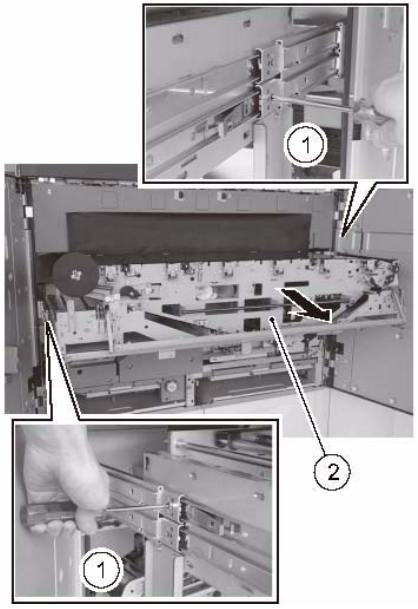


Figure 9 j0kol406012

11. Place the removed IBT Drawer Assembly in the prepared location in the orientation shown. (Figure 10)

Figure 10 j0cx406077

12. Remove the new IBT Frame Assembly from the packing box, and install it in the Main Unit. (Figure 11)

WARNING

As the IBT Drawer Assembly is heavy, the work must be done by 4 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (With caution label) (IBT Drawer Assembly: 60 kg or less)

CAUTION

After putting the IBT Rail (x2) in the Rail (x2) of the Main Unit, secure the IBT Drawer Assembly with the Stopper (x2) at the left/right rear. Also, never push the Stopper (x2) at the left/right near you into the machine. As the IBT Belt Assembly is in a raised state, there is a risk of damaging the Drum Cartridge.

(1) Insert the Rail (x2) at the IBT Drawer Assembly side into the Rail (x2) at the Main Unit side, and slowly push it to the position where the IBT Drawer Assembly is secured to the Stopper (x2) at the left and right rear. However, never push it further inside the machine.

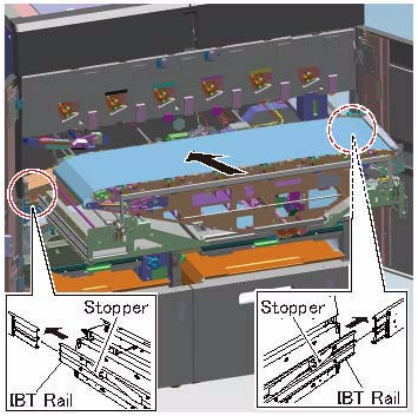
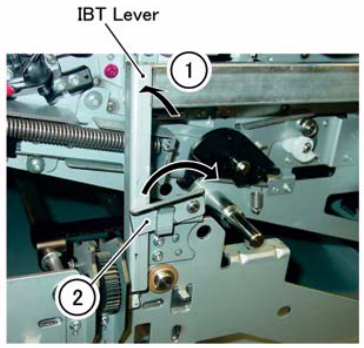


Figure 11 j0kol406035

13. Rotate the Stopper Plate securing the IBT Lever to release it. However, IBT Lever should not be lowered yet. (Figure 12)
    (1) Press the IBT Lever lightly.
    (2) Rotate the Stopper Plate.



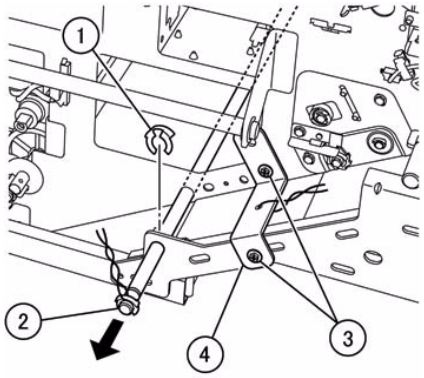
j0cm415115

Figure 12 j0cm415115

14. Remove the Shipping Shaft and Shipping Bracket from the right side of the IBT Drawer Assembly. (Figure 13)

    NOTE: *If the Shipping Shaft is difficult to remove, lower the IBT Lever slightly.*

    (1) Remove the KL-Clip.
    (2) Remove the Shipping Shaft.
    (3) Remove the Screw (x2).
    (4) Remove the Shipping Bracket.



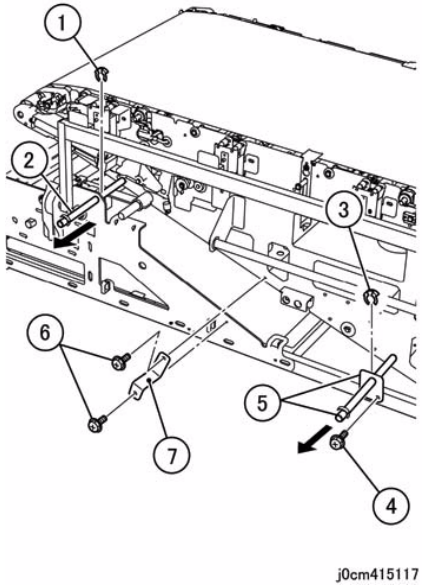
j0cm90056

Figure 13 j0cm90056

15. Remove the Shipping Shaft (x2) and Shipping Bracket from the left side of the IBT Drawer Assembly. (Figure 14)

    NOTE: *If the Shipping Shaft (x2) is difficult to remove, lower the IBT Lever slightly.*

    (1) Remove the KL-Clip.
    (2) Remove the Shipping Shaft.
    (3) Remove the KL-Clip.
    (4) Remove the Screw.
    (5) Remove the Plate and Shipping Shaft at the same time.
    (6) Remove the Screw (x2).
    (7) Remove the Shipping Bracket.



j0cm415117

Figure 14 j0cm415117

16. Hold both ends of the IBT Lever firmly, and lower it slowly. (Figure 15)
    (1) Lower the IBT Lever slowly.

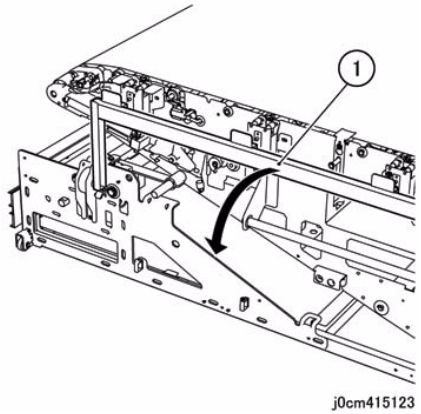


Figure 15 j0cm415123

17. Remove the Cushion on the IBT Belt. (Figure 16)

    NOTE: *When removing the Cushion, be careful not to touch IBT Belt with bare hands.*

    (1) Peel off the tape (6 locations).
    (2) Remove the Cushion.

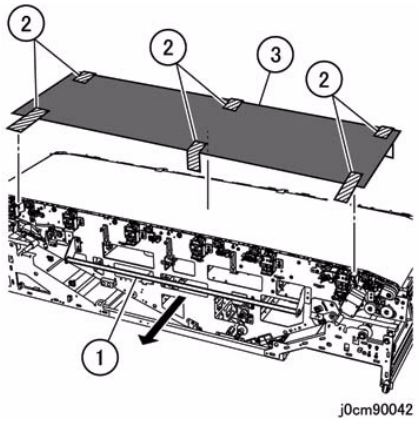


Figure 16 j0cm90042

18. Turn the Belt Guard (x3) over, and secure it with the Screw (x3). (Figure 17)
    (1) Remove the Screw (x3), and affix the Screw temporarily in the hole at the top.
    (2) Bring the Belt Guard (x3) forward, and turn it over.
    (3) Position the Belt Guard (x3), and tighten the Screw (x3).

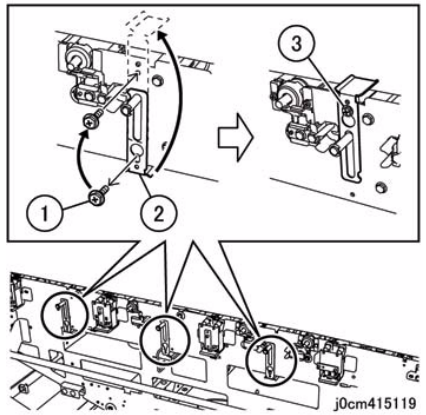


Figure 17 j0cm415119

19. Install the bundled Wheel Assembly to the IBT Module. (Figure 18)
    (1) Install the Wheel Assembly.
    (2) Tighten the Hexalobular TP Screw (x2).

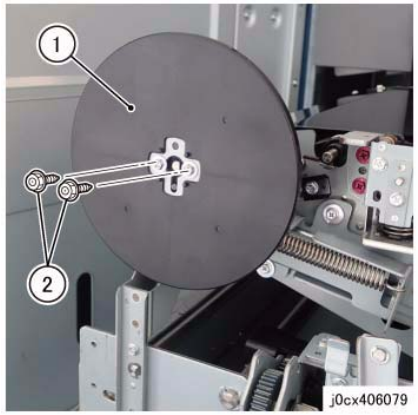


Figure 18 j0cx406079

20. Return the machine to its original state by performing the steps of IBT Frame Assembly Service Position (REP 6.1.1) in the reverse order.
21. Perform Steps 22 to 27, and perform the removal work for the removed IBT Drawer Assembly.
22. Turn the Belt Guard (x3) rotated in Step 18 over by performing the steps in the reverse order.
23. Install the Cushion removed in Step 17 on the IBT Belt, and fasten it with tape.
24. Lift the IBT Lever, and install the Shipping Shaft (x3) and Shipping Bracket (x2) removed in Step 15 and Step 14. (Figure 19)

NOTE: *If the Shipping Shaft (x3) is difficult to install, lower the IBT Lever slightly.*

(1) Lift the IBT Lever.
(2) Install the Shipping Shaft (x2).
(3) Install the KL-Clip (x2).
(4) Install the Shipping Shaft and Plate.
(5) Tighten the Screw.
(6) Install the KL-Clip.
(7) Install the Shipping Bracket (x2).
(8) Tighten the Screw (x4).

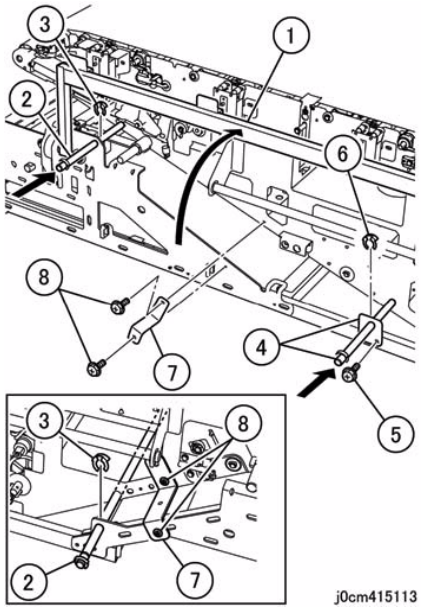


Figure 19 j0cm415113

25. Rotate the Stopper Plate while lightly pushing the IBT Lever, and secure the IBT Lever. (Figure 20)
    (1) Press the IBT Lever lightly.
    (2) Rotate the Stopper Plate, and secure the IBT Lever.

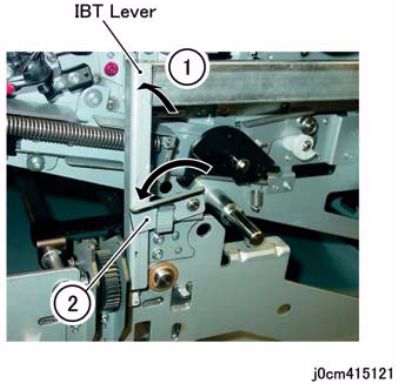


Figure 20 j0cm415121

26. Place the IBT Drawer Assembly in the shipping container and remove the Bracket (x4) that you have installed in Step 9.
27. Place the removed Bracket (x4) in the packing box.
28. Turn on the power of the Main Unit, and check the operation of the IBT Drawer Assembly.
29. Clear the following HFSI (DC135) counters from the UI. However, if the option (#1, #6) is not installed, there is no need to clear 1st Roll Assembly (#1, #6) and Front BTR Holder Assembly (#1, #6).
    - IBT Cleaner Assembly "Chain Link: 009-872"
    - IBT Cleaner Assembly "Chain Link: 009-873"
    - 1st Roll Assembly (Y (#2) - C (#4)) "Chain Link: 009-876"
    - 1st Roll Assembly (K (#5)) "Chain Link: 009-877"
    - 1st Roll Assembly (#1) "Chain Link: 009-874"
    - 1st Roll Assembly (#6) "Chain Link: 009-875"
    - Backup Roll Assembly "Chain Link: 009-886"
    - Backup Roll Assembly for Media Expansion Kit "Chain Link: 009-886"
    - IBT Belt "Chain Link: 009-878"
    - IBT Belt "Chain Link: 009-879"
    - Front BTR Holder Assembly (Y (#2) - C (#4)) "Chain Link: 009-884"
    - Front BTR Holder Assembly (K (#5)) "Chain Link: 009-885"
    - Front BTR Holder Assembly (#1) "Chain Link: 009-882"
    - Front BTR Holder Assembly (#6) "Chain Link: 009-883"
    - Inner Cleaner Brush Assembly "Chain Link: 009-880"
    - IBT Drive Gear (56T) "Chain Link: 004-804"
    - IBT Cleaner Motor "Chain Link: 009-889"

REP 6.1.4 IBT Left/Right Drawer Rail Assembly

Parts List on PL 6.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

As the IBT Drawer Assembly is heavy, the work must be done by 4 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (With caution label) (IBT Drawer Assembly: 60 kg or less)

NOTE: *Be sure to prepare the Base Bracket (x4) when removing the IBT Drawer Assembly.*

NOTE: *When working with the IBT Drawer Assembly removed, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Drawer Assembly. (Perform up to Step 11 of REP 6.1.3)
2. Remove the IBT Left Drawer Rail Assembly and IBT Right Drawer Rail Assembly. However, because the procedures of Left Rail and Right Rail are different, follow the applicable procedure below.

   [Removing IBT Left Drawer Rail Assembly]

   - Perform Steps 3 and 4.

   [Removing IBT Right Drawer Rail Assembly]

   - Perform Steps 5 and 6.
3. Remove the IOT-L Left Cover Assembly. (PL 19.5)
4. Remove the IBT Left Drawer Rail Assembly. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the IBT Left Drawer Rail Assembly.

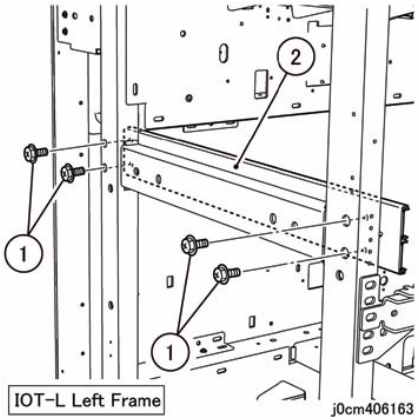


Figure 1 j0cm406163

5. Separate the IOT-R Frame from the IOT-L Frame.
6. Remove the IBT Right Drawer Rail Assembly. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the IBT Right Drawer Rail Assembly.

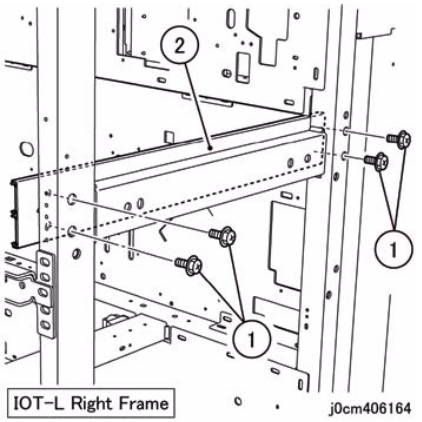


Figure 2 j0cm406164

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.2.1 IBT Belt Cleaner Assembly

Parts List on PL 6.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out IBT Frame Assembly up to the Service Position. (REP 6.1.1)
2. In order to prevent light deterioration of the Drum, attach the Protect Sheet to the Developer Inner Cover. (Figure 1)
   (1) Install the Developer Inner Cover.
   (2) Open the Left Dispenser Cover, and take out the Protect Sheet.
   (3) Attach the Magnet of Protect Sheet to the Developer Inner Cover.

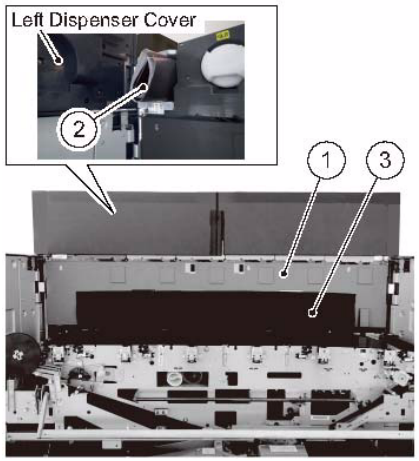


Figure 1 j0kol406003

3. Remove the IBT Belt Cleaner Assembly. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the IBT Belt Cleaner Assembly.

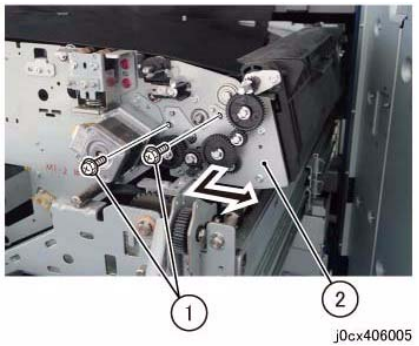


Figure 2 j0cx406005

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacement, clear the following HFSI (DC135) counters.
   - IBT Cleaner Assembly "Chain Link: 009-872"
   - IBT Cleaner Assembly "Chain Link: 009-873"

REP 6.2.2 IBT Handle Assembly

Parts List on PL 6.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When working with the IBT Frame Assembly pulled out, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Pull out the IBT Frame Assembly up to the Service Position. (REP 6.1.1)
2. Lift up the IBT Belt Assembly.
   (1) Hold the Handle, and lift the IBT Belt Assembly, then lower it slowly, and release your hands when the IBT Belt Assembly stops. (Figure 1)

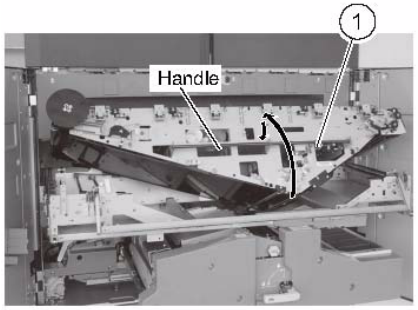


Figure 1 j0kol406013

3. Attach the Tilt Shaft to the IBT Belt Assembly and the IBT Frame. (Figure 2)
   (1) Release the Clamp (x4), and remove the Tilt Shaft.
   (2) Attach the Tilt Shaft to the IBT Belt Assembly and IBT Frame Assembly.

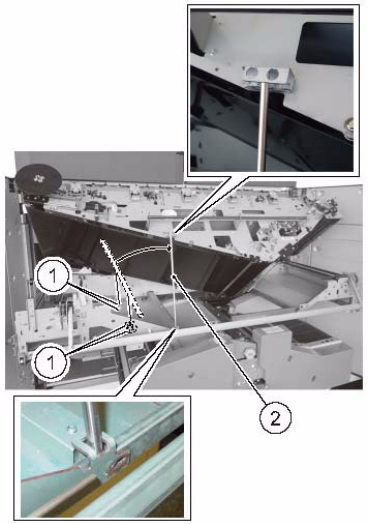


Figure 2 j0kol406014

4. Remove the Bracket (x2) from the IBT Handle Assembly. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Bracket.
   (3) Remove the Screw (x2).
   (4) Remove the Bracket.

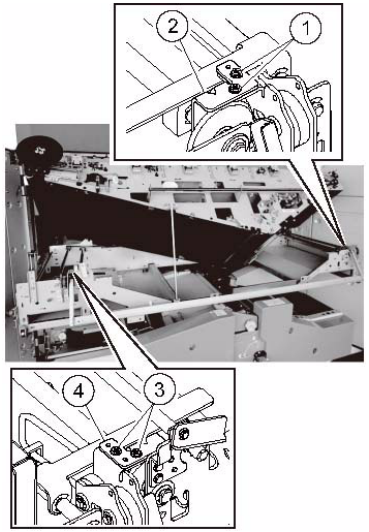


Figure 3 j0kol406015

5. Remove the IBT Handle Assembly. (Figure 4)
   (1) Remove the Screw (x4) from the left side.
   (2) Remove the Screw (x4) from the right side.
   (3) Remove the IBT Handle Assembly.

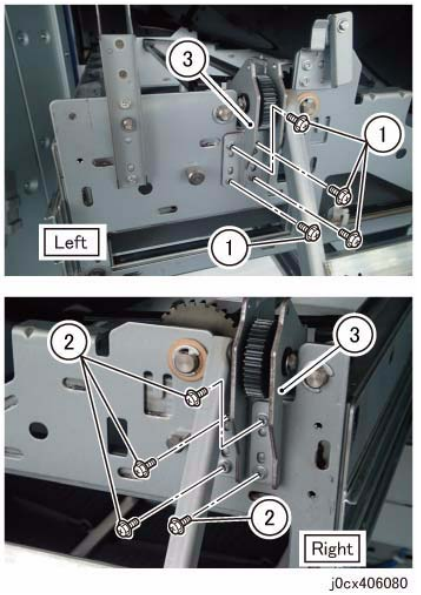


Figure 4 j0cx406080

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When installing the IBT Handle Assembly, with the IBT Handle raised, align the marking position of the Gear of the IBT Handle Assembly and the Gear of the IBT Frame Assembly, and then attach the IBT Handle Assembly. At that time, check that the Left/Right Block Assembly is in the orientation shown. (Figure 5)*

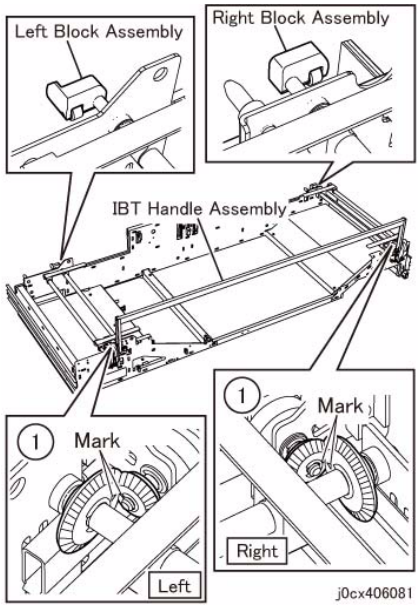


Figure 5 j0cx406081

NOTE: *When unloading the IBT Belt Assembly to the IBT Frame Assembly, hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it. (Figure 6)*

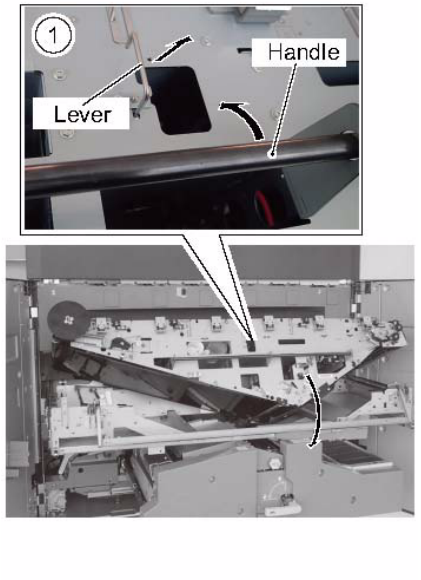


Figure 6 j0kol406016

REP 6.3.1 IBT Belt

Parts List on PL 6.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

NOTE: *Never touch the IBT Belt with bare hands. Use the gloves that are stored in the IBT Frame for removing. Also, place the removed IBT Belt hanging at the specified location without folding it.*

1. Remove the IBT Belt Cleaner Assembly. (REP 6.2.1)
2. Remove the Wheel Assembly from the IBT Module. (Figure 1)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

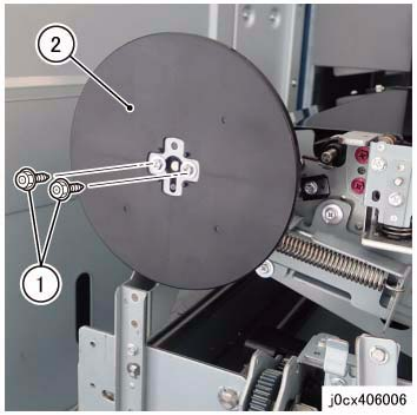


Figure 1 j0cx406006

3. Lift up the IBT Belt Assembly, and rotate the Belt Guard (x4). (Figure 2)
   (1) Hold the Handle, and lift the IBT Belt Assembly, then lower it slowly, and release your hands when the IBT Belt Assembly stops.
   (2) Loosen the Screw (x4).
   (3) Bring the Belt Guard (x4) forward, and rotate it 180 degrees.

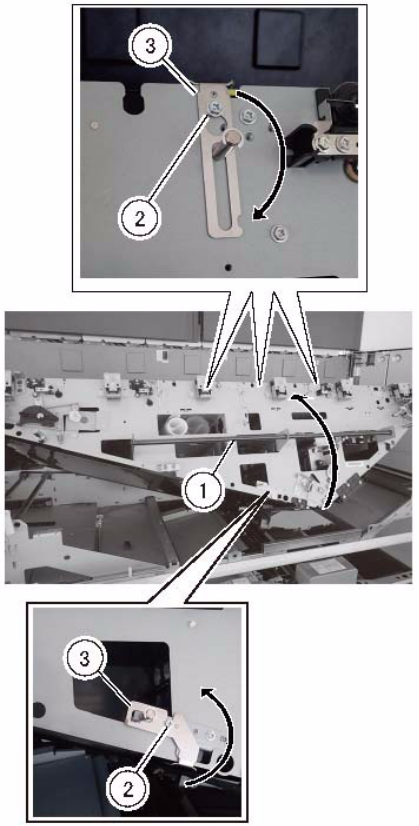


Figure 2 j0kol406036

4. Remove the Inlet Upper Chute. (Figure 3)
   (1) Loosen the Screw.
   (2) Remove the Inlet Upper Chute.

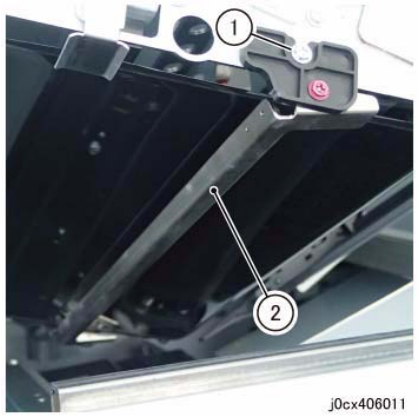


Figure 3 j0cx406011

5. Remove the Guard Plate. (Figure 4)
   (1) Loosen the Screw.
   (2) Remove the Guard Plate.

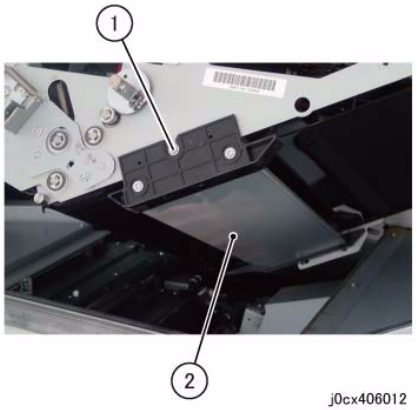


Figure 4 j0cx406012

6. Relax the tension of the IBT Belt. (Figure 5)

   NOTE: *When relaxing the tension of the IBT Belt, as the belt tension is strong, rotate the Front Tension Cam slowly.*

   (1) Rotate the Front Tension Cam slowly in the direction of the arrow.

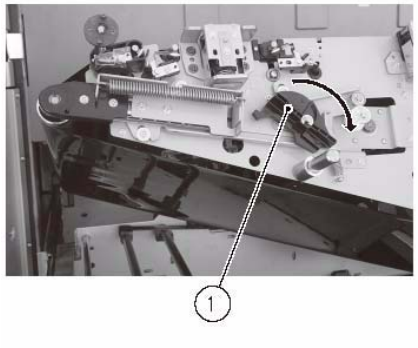


Figure 5 j0kol406037

7. Set the Belt Holder Shaft at the IOT-L Front Left Door. (Figure 6)
   (1) Release the Clamp (x3).
   (2) Remove the Belt Holder Shaft.
   (3) Set it at the IOT-L Front Door Pocket.

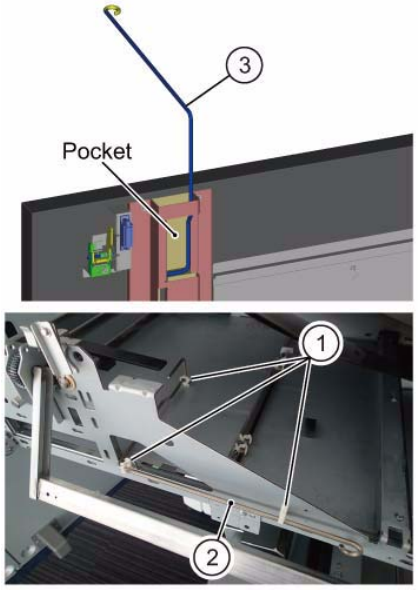


Figure 6 j0kol406032

8. Remove the Protect Tube (white), Jig Tube (transparent) and gloves from the inside of the IBT Frame. (Figure 7)
   (1) Remove the Protect Tube, Jig Tube, and gloves.
   (2) Wear the removed gloves.

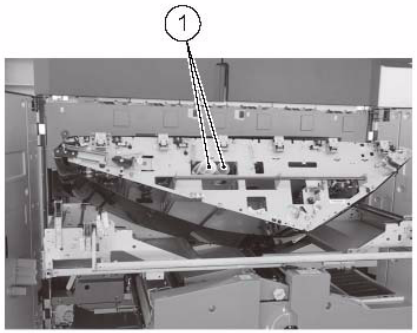


Figure 7 j0kol406017

9. Remove the IBT Belt. (Figure 8)
   (1) Hold the left and right ends of the IBT Belt, and alternately remove it slowly.

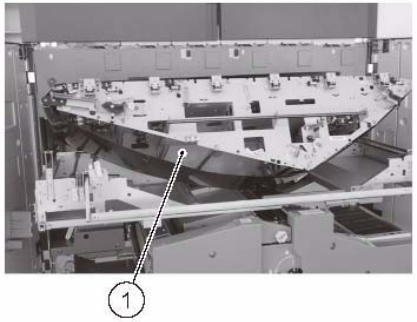


Figure 8 j0kol406018

10. Place the IBT Belt overlapping the Protect Tube (white). (Figure 9)
    (1) Place the IBT Belt overlapping the Protect Tube.

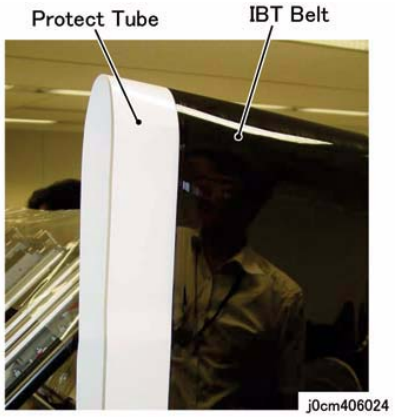


Figure 9 j0cm406024

11. Set the IBT Belt and Protect Tube in the Belt Holder Shaft. (Figure 10)
    (1) Set the IBT Belt and Protect Tube in the Belt Holder Shaft.

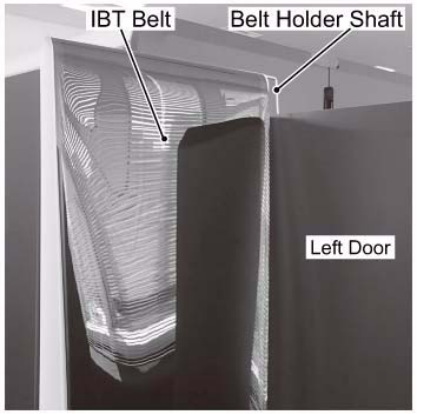


Figure 10 j0kol406019

Replacement

1. Install the Jig Tube (transparent) removed in Step 7 to the IBT Frame Assembly. (Figure 11)
   (1) Install the Jig Tube with reference to the orientation of the figure.

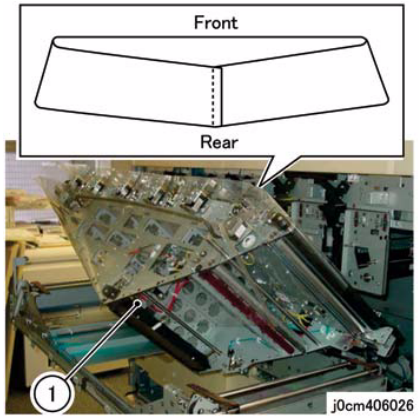


Figure 11 j0cm406026

2. Overlay the Protect Tube inside the IBT Belt. (Figure 12)

   NOTE: *The Front is the side with the Mark inside the IBT Belt.*

   NOTE: *Do not touch the IBT Belt directly with your hand. Make sure to use the gloves.*

   (1) Check the Mark inside the IBT Belt.
   (2) Overlay the Protect Tube inside the IBT Belt. In that case, place the tip of the inner Protect Tube slightly to the Rear.

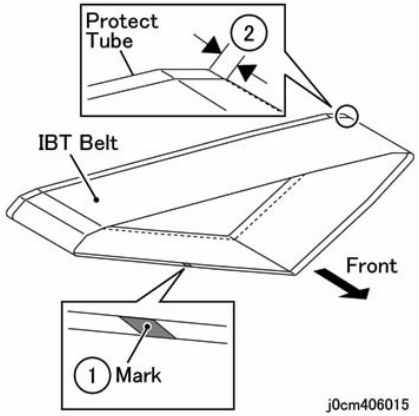


Figure 12 j0cm406015

3. Install the IBT Belt and Protect Tube to IBT Frame Assembly. (Figure 13)
   (1) Install slowly and evenly the IBT Belt and Protect Tube to IBT Frame Assembly.

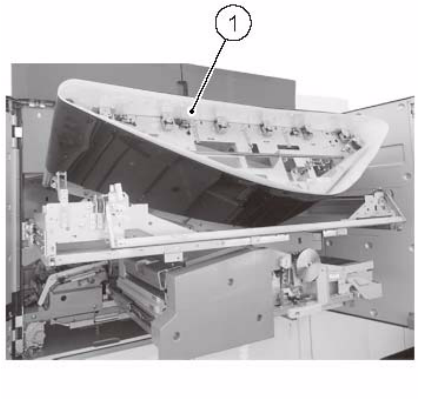


Figure 13 j0kol406020

4. Remove the Protect Tube and Jig Tube. (Figure 14)
   (1) Leave the IBT Belt, and take out the Protect Tube.
   (2) Take out the Jig Tube.

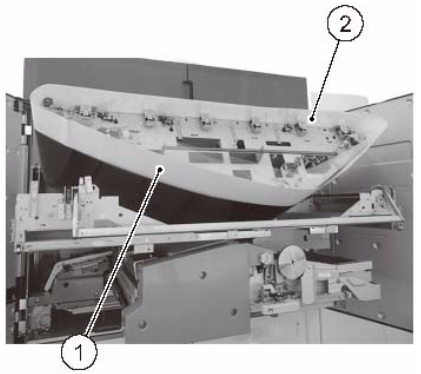


Figure 14 j0kol406021

5. To lower the IBT Belt Assembly to the IBT Frame Assembly, tighten the tension of the IBT Belt. (Figure 15)
   (1) Move the IBT Belt to the center position of the Tension Roll.
   (2) Rotate the Front Tension Cam slowly to tighten the IBT Belt tension.

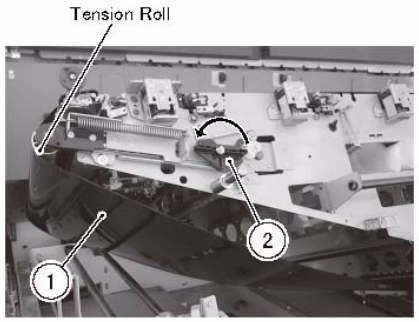


Figure 15 j0kol406038

6. Lower the IBT Belt Assembly to the IBT Frame Assembly. (Figure 16)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

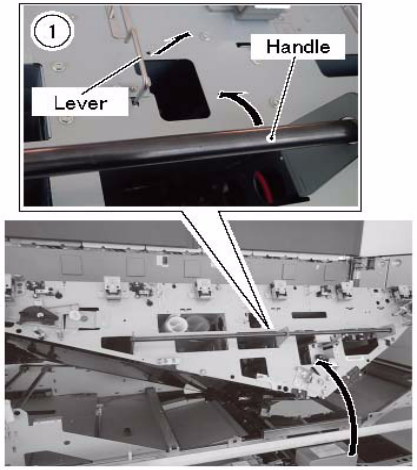


Figure 16 j0kol406039

7. Loosen the tension of the IBT Belt, and move the IBT Belt to the appropriate position, and tighten the tension. (Figure 17)

NOTE: *When relaxing the tension of the IBT Belt, as the belt tension is strong, rotate the Front Tension Cam slowly.*

(1) Rotate the Front Tension Cam slowly to loosen the IBT Belt tension.
(2) Move the IBT Belt to the position shown.
(3) Rotate the Front Tension Cam slowly to tighten the tension.

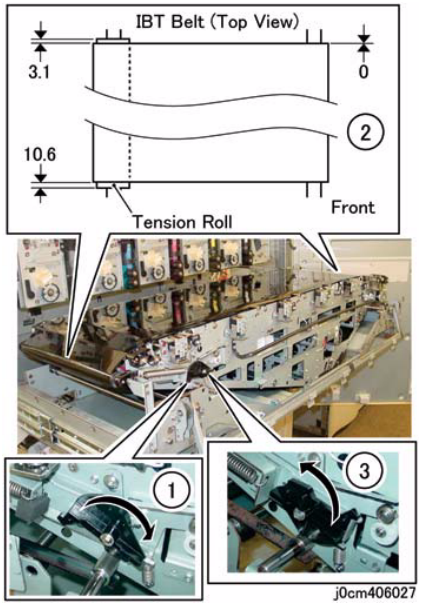


Figure 17 j0cm406027

8. Return the Belt Holder Shaft set in Step 7.
9. Store the Protect Tube, Jig Tube, and gloves removed in Step 8 in the IBT Frame Assembly.
10. Reinstall the Inlet Upper Chute and Guard Plate of Step 4 and 5.
11. Reinstall the Belt Guard (x4) rotated in Step 3.
12. Reinstall the Wheel Assembly that was removed in Step 2.
13. Reinstall the IBT Belt Cleaner Assembly.
14. Reinstall the Protect Sheet attached to the Developer Inner Cover.
15. Push in the IBT Belt Assembly by pushing Stopper (x2) on the left and right Rail of the IBT Frame.
16. Lift the IBT Handle, and restore the Stopper.
17. Return the lever of the Big Module to its original position.
18. Install the IBT Front Cover.
19. Close the left and right IOT-L Front Door.

Replace

1. After replacing the IBT Belt, clear the following HFSI (DC135) counters.
   - IBT Belt "Chain Link: 009-878"
   - IBT Belt "Chain Link: 009-879"

REP 6.4.1 Front Tension Support Assembly

Parts List on PL 6.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

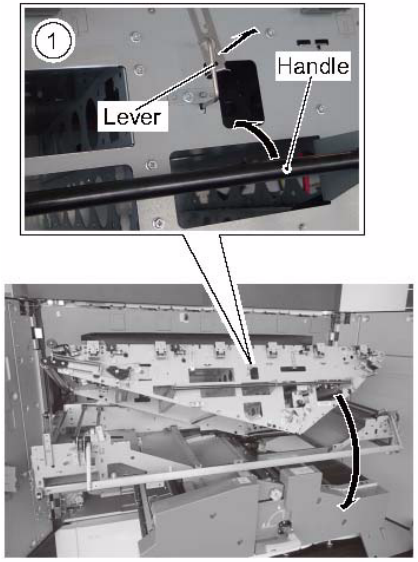


Figure 1 j0kol406022

3. Remove the Bracket Assembly from the IBT Frame. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Bracket Assembly.

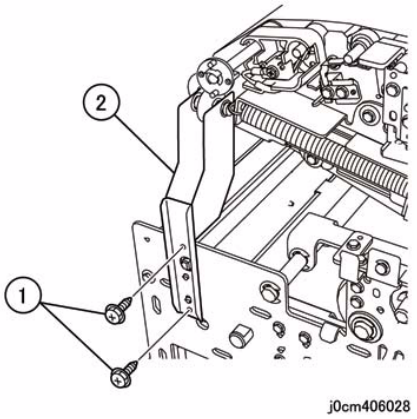


Figure 2 j0cm406028

4. Rotate the Front Tension Cam in the direction of the arrow. (Figure 3)
   (1) Rotate the Front Tension Cam slowly.

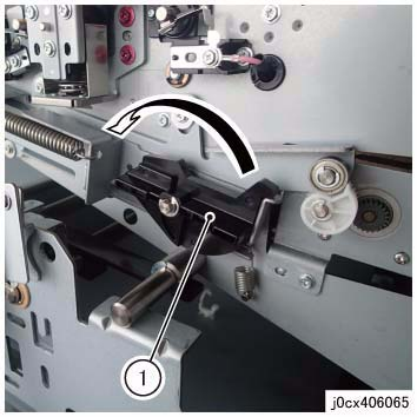


Figure 3 j0cx406065

5. Remove the Front Tension Cam. (Figure 4)
   (1) Remove the Tension Spring.
   (2) Remove the Absorber.
   (3) Remove the E-Clip.
   (4) Remove the Front Tension Cam.

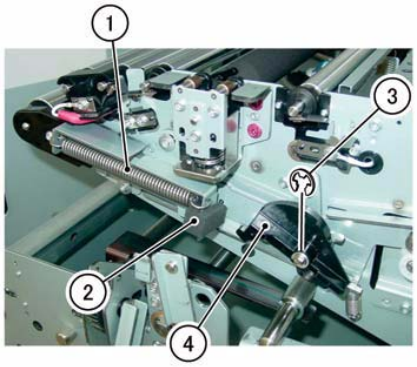


Figure 4 j0cm406030

6. Remove the Tension Roll and Front Tension Housing. (Figure 5)
   (1) Remove the Screw (x2).
   (2) Remove the Tension Roll and Front Tension Housing.

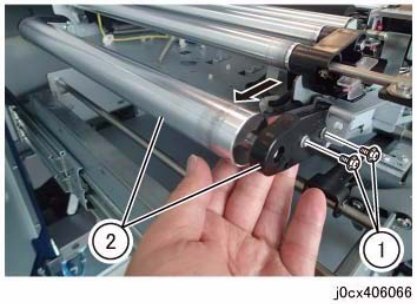


Figure 5 j0cx406066

7. Remove the Front Tension Support. (Figure 6)

   NOTE: *When removing the Front Tension Support, be careful of the Bearing at the back of the Front Tension Support falling.*

   (1) Remove the Spring.
   (2) Remove the Screw (x3) and Washer (x3).
   (3) Remove the Bearing.
   (4) Remove the Front Tension Support.

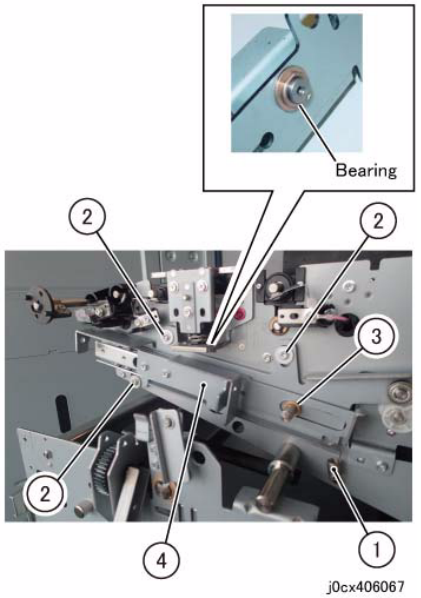


Figure 6 j0cx406067

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.4.2 Tension Roll

Parts List on PL 6.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

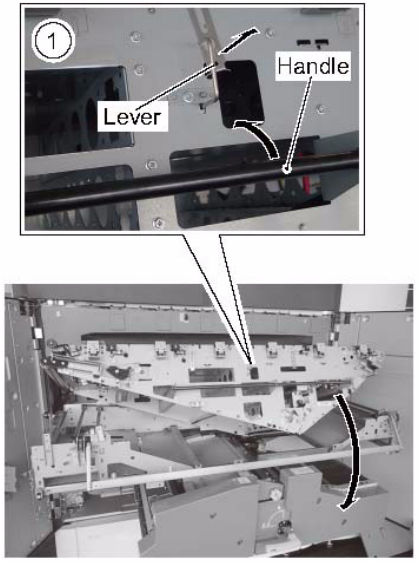


Figure 1 j0kol406022

3. Remove the Screw (x2) that secures the Front Tension Support. (Figure 2)
   (1) Remove the Screw (x2).

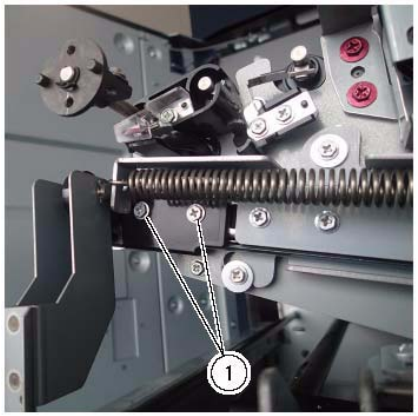


Figure 2 j0kol406040

4. Remove the Tension Roll from the Front Tension Support. (Figure 3)
   (1) Remove the Front Tension Support.
   (2) Remove the Tension Roll.

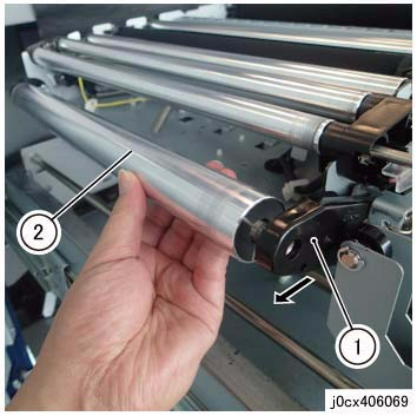


Figure 3 j0cx406069

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.5.1 Belt Drive Roll

Parts List on PL 6.5

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

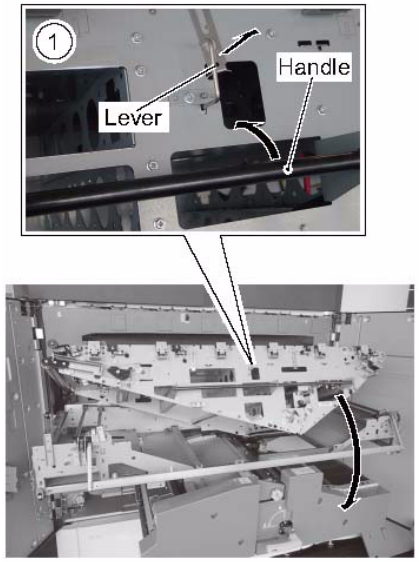


Figure 1 j0kol406022

3. Pull out the IBT Frame Assembly up to the position of the Stopper (x2) on the left and right rear. (Figure 2)
   (1) Push the left/right Stopper (x2) of the IBT Rail (x2) at the same time, and pull out the IBT Frame Assembly.

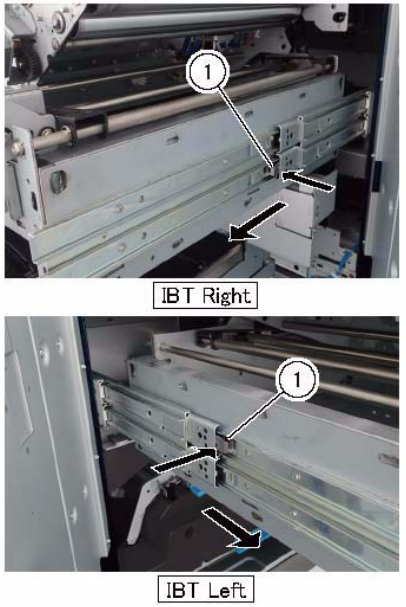


Figure 2 j0kol406041

4. Remove the IOT-L Front Right Door Assembly. (REP 19.1.2)
5. Remove the IBT Drive Cover from the rear. (Figure 3)
   (1) Remove the Screw.
   (2) Remove the IBT Drive Cover.

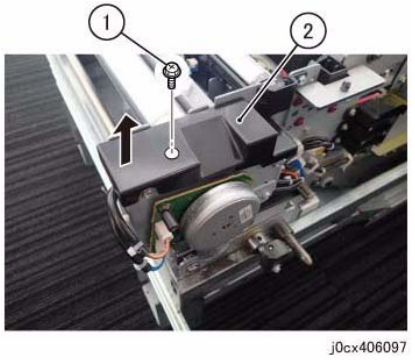


Figure 3 j0cx406097

6. Remove the IBT Drive Assembly. (Figure 4)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x5).

(3) Remove the IBT Drive Assembly.

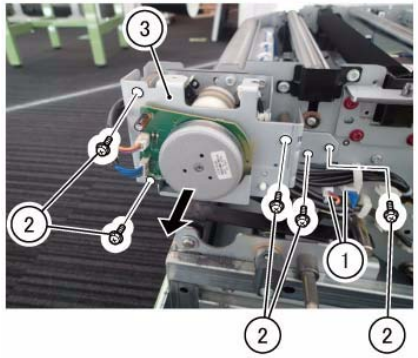


Figure 4 j0cx406098

7. Rotate the Drive Roll so that the Tab section of the Gear is on top. (Figure 5)

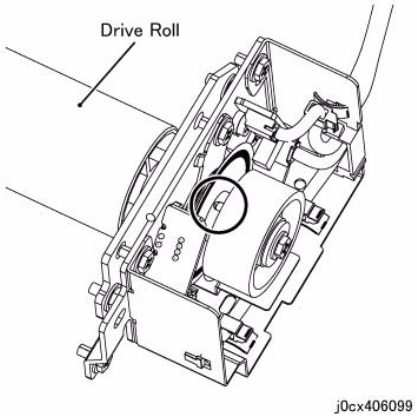


Figure 5 j0cx406099

8. Secure the Drive Roll with a hex wrench, and remove the Screw, Washer, and Gear. (Figure 7)
   (1) Secure the Drive Roll with a hex wrench.
   (2) Remove the Screw, Washer, and Gear.

NOTE: *If it is difficult to remove the Gear with grease, put a cloth on the Gear, place your thumb on the edge, and pull out the Gear such that you are pushing the opposite frame with your nail. (Figure 6)*

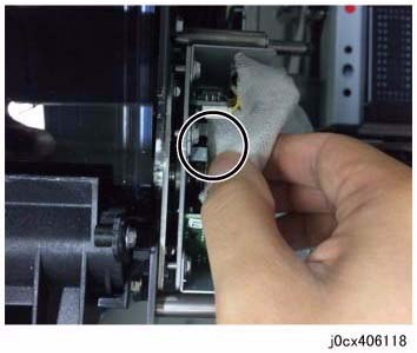


Figure 6 j0cx406118

(3) Check that the Pin is horizontal. (Figure 7)

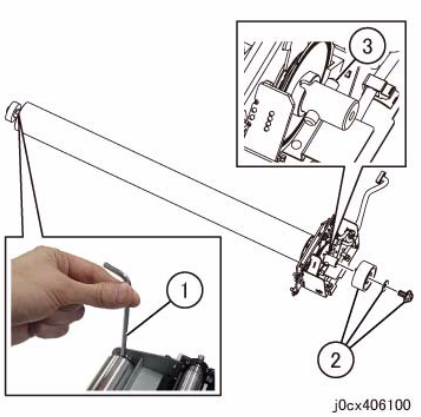


Figure 7 j0cx406100

NOTE: *When replacing the Gear, after assembling it on the Drive Roll, apply Mori coat grease (EM-50L) to the top of the Gear over 8 or more consecutive teeth. (Figure 8)*

Figure 8 j0cx406117

9. Remove the Pin. (Figure 9)
   (1) Secure the Drive Roll with a hex wrench.
   (2) Loosen the Set Screw (M3) with a hex wrench.
   (3) Remove the Pin.

   NOTE: *Keep the Set Screw (M3) in the shaft.*

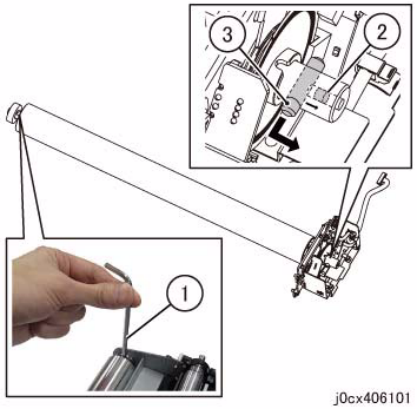


Figure 9 j0cx406101

10. Remove the Encoder Assembly. (Figure 10)
    (1) Remove the Clamp.
    (2) Disconnect the Connector.
    (3) Remove the Screw.
    (4) Remove the Encoder Assembly.

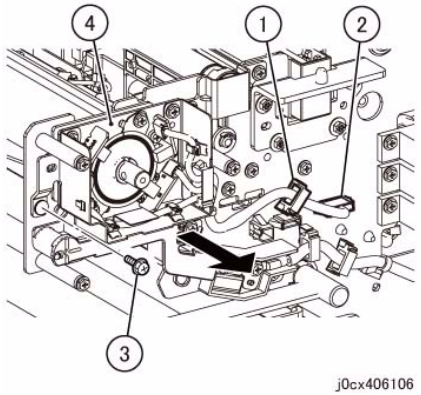


Figure 10 j0cx406106

11. Remove the Drive Roll Plate. (Figure 11)
    (1) Remove the Screw (x4).
    (2) Remove the Drive Roll Plate.

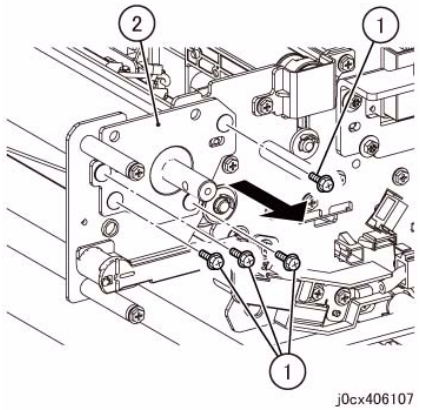


Figure 11 j0cx406107

12. Remove the Drive Roll. (Figure 12)
    (1) Pull the Drive Roll towards the Rear, and lift it in the direction of the arrow.

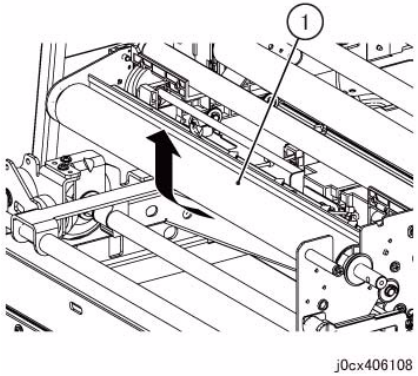


Figure 12 j0cx406108

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *Make sure that the amount of protrusion of the Pin is about the same on the left and right (difference approximately within 1 mm), and tighten Set Screw. (Figure 13)*

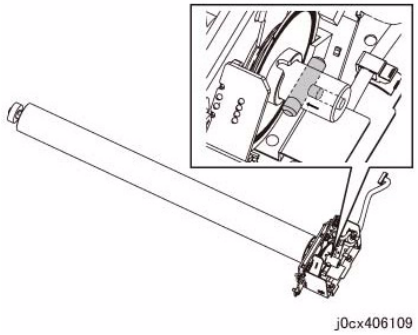


Figure 13 j0cx406109

NOTE: *Insert the Gear according to the Pin, and fit the groove of the encoder hub with the Tab of the Gear. (Figure 14)*

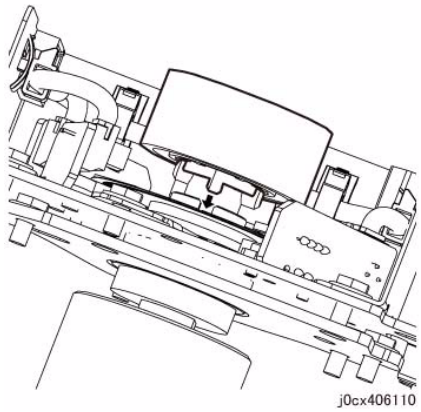


Figure 14 j0cx406110

REP 6.6.1 Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit

Parts List on PL 6.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. As a safety measure, set the Tilt Shaft at the IBT Belt Frame. (Figure 1)
   (1) Release the Clamp (x2) from the IBT Frame Assembly, and remove the Tilt Shaft.
   (2) Set the Tilt Shaft while lifting the IBT Belt Frame.

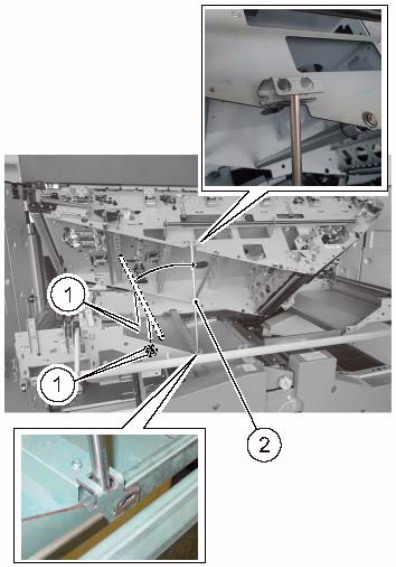


Figure 1 j0kol406023

3. Remove the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit. (Figure 2)

   NOTE: *When removing the Plate Assembly, as there is a danger that the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit may fall, remove the Plate Assembly while holding the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit by hand.*

   (1) Disconnect the Connector.
   (2) Remove the Spring.
   (3) Remove the Screw (x2), and remove the Plate Assembly.
   (4) Remove the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit.

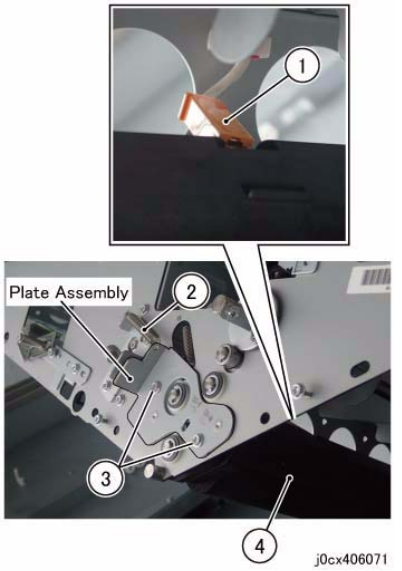


Figure 2 j0cx406071

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.
   When installing the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit, make sure to insert the Pin (x2) of the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit into the hole of the IBT Belt Frame. (Figure 3)
   (1) Insert the Pin (x2) of the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit into the hole of the IBT Belt Frame.

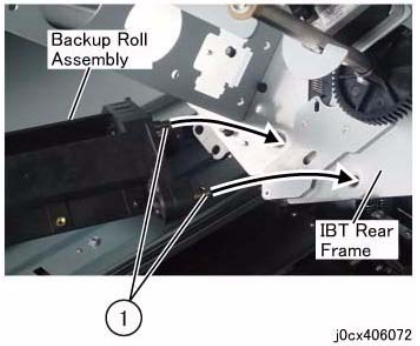


Figure 3 j0cx406072

2. After replacing the Backup Roll Assembly/Backup Roll Assembly for Media Expansion Kit, clear the following HFSI (DC135) counters.
   - Backup Roll Assembly "Chain Link: 009-886"
   - Backup Roll Assembly for Media Expansion Kit "Chain Link: 009-886"

   NOTE: *Transfer voltage setting should be performed after installation of Backup Roll Assembly for Media Expansion Kit. (Refer to 9.1.8.4)*

REP 6.7.1 1st Roll Assembly (Y (#2)/M (#3)/C (#4)/K (#5))

Parts List on PL 6.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

The steps for removing the 1st Roll Assembly (K (#5)) are described here. The steps for other 1st Roll Assemblies (Y (#2)/M (#3)/C (#4)) are the same as (K (#5)).

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Assembly to the IBT Frame. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

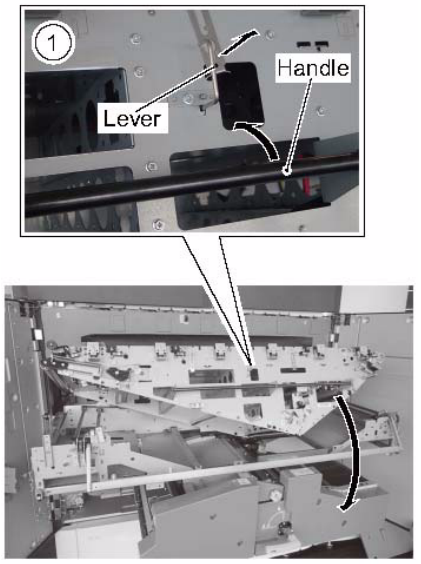


Figure 1 j0kol406022

3. Remove the 1st Roll Assembly. (Figure 2)

   NOTE: *Do not touch the Roll (sponge part) of the 1st Roll Assembly with bare hands. Hold both ends of the Shaft when removing the 1st Roll Assembly.*

   (1) Release the Tab (2 locations) of the Bracket Assembly.

(2) Simultaneously lift the 1st Roll Assembly and Front Retract Slide Block, and remove the 1st Roll Assembly from the Rear Retract Slide Block.

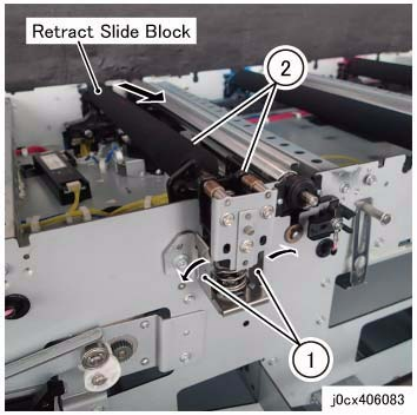


Figure 2 j0cx406083

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the 1st Roll Assembly, install the Shaft with the Mark (groove) to the Front BTR Holder Assembly. (Figure 3)*

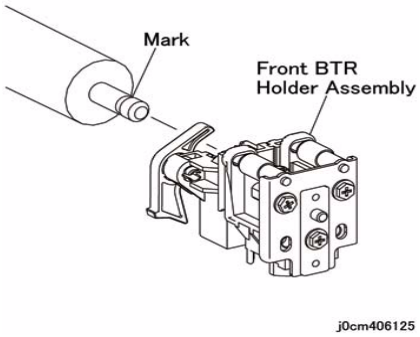


Figure 3 j0cm406125

2. After replacing the 1st Roll Assembly (Y (#2)/M (#3)/C (#4)/K (#5)), clear the counter of the part you replaced from the following of HFSI (DC135).
   - 1st Roll Assembly (Y (#2)) "Chain Link: 009-876"
   - 1st Roll Assembly (M (#3)) "Chain Link: 009-876"
   - 1st Roll Assembly (C (#4)) "Chain Link: 009-876"
   - 1st Roll Assembly (K (#5)) "Chain Link: 009-877"

REP 6.7.2 1st Roll Assembly (#1/#6)

Parts List on PL 6.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

The steps for removing the 1st Roll Assembly (#6) are described here. The steps for the other 1st Roll Assembly (#1) are the same as (#6).

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Move the Bearing of the Rear Cam downwards. (Figure 1)
   (1) Turn Motor Shaft in the direction of the arrow, and move the Bearing of Rear Cam downwards.

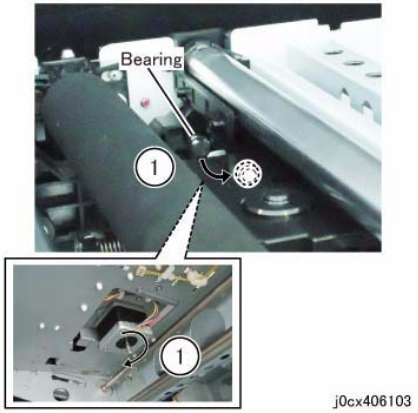


Figure 1 j0cx406103

3. Lower the IBT Belt Assembly to the IBT Frame. (Figure 2)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

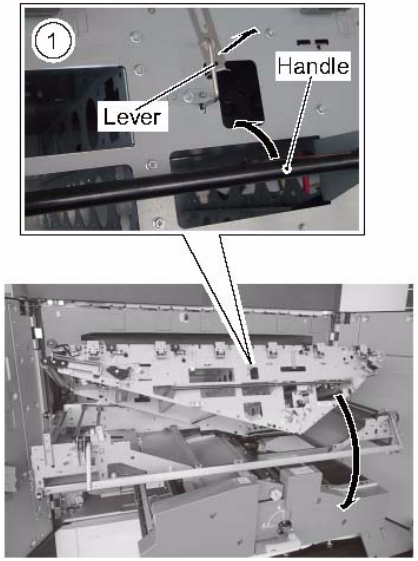


Figure 2 j0kol406022

4. Remove the 1st Roll Assembly. (Figure 3)

   NOTE: *Do not touch the Roll (sponge part) of the 1st Roll Assembly with bare hands. Hold both ends of the Shaft when removing the 1st Roll Assembly.*

   (1) Release the Tab (2 locations) of the Bracket Assembly.

   (2) Slide the Retract Slide Block to the right, simultaneously lift the 1st Roll Assembly and Front Retract Slide Block, and remove the 1st Roll Assembly from the Rear Retract Slide Block.

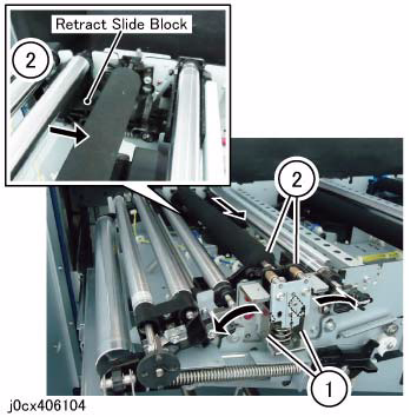


Figure 3 j0cx406104

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the 1st Roll Assembly, Install the Shaft with the Mark (groove) to the Front BTR Holder Assembly. (Figure 4)*

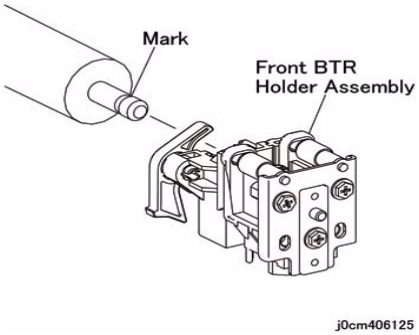


Figure 4 j0cm406125

2. After replacing the 1st Roll Assembly (#1/#6), clear the counter of the part you replaced from the following of HFSI (DC135).
   - 1st Roll Assembly (#1) "Chain Link: 009-874"
   - 1st Roll Assembly (#6) "Chain Link: 009-875"

REP 6.8.1 Eliminator Roll

Parts List on PL 6.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

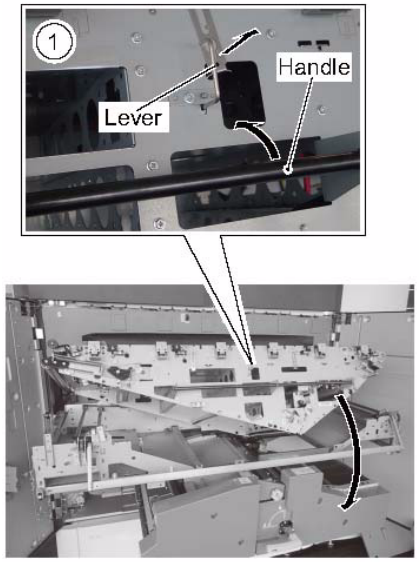


Figure 1 j0kol406022

3. As the removal method differs depending on the installed position, refer to the figure below, and perform procedures corresponding to 'A' or 'B'. (Figure 2)
   [When removing the Eliminator Roll of 'A']
   - Perform Steps 4 and 5.

   [When removing the Eliminator Roll of 'B']
   - Perform Steps 4 and 6.

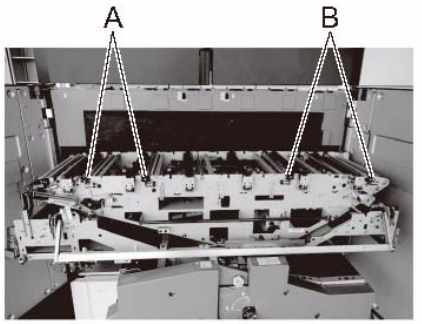


Figure 2 j0kol406024

4. Remove the Eliminator Roll Assembly. (Figure 3)
   (1) Remove the Spring.
   (2) Remove the Eliminator Roll Assembly.

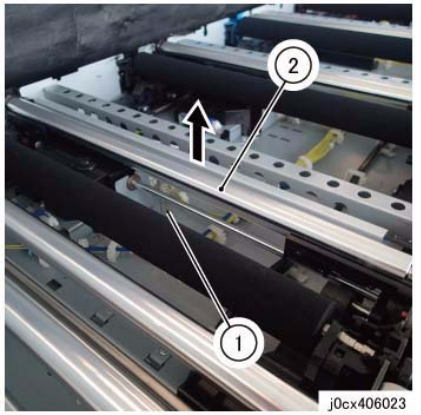


Figure 3 j0cx406023

5. Remove the Eliminator Roll. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the Eliminator.
   (3) Remove the Front Bearing Holder.
   (4) Remove the Rear Bearing Holder.
   (5) Remove the Eliminator Roll.

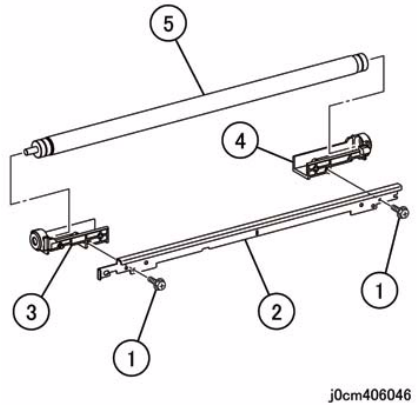


Figure 4 j0cm406046

6. Remove the Eliminator Roll. (Figure 5)
   (1) Remove the Screw (x2).
   (2) Remove the Eliminator.
   (3) Remove the Front Bearing Holder.
   (4) Remove the Rear Bearing Holder.
   (5) Remove the Eliminator Roll.

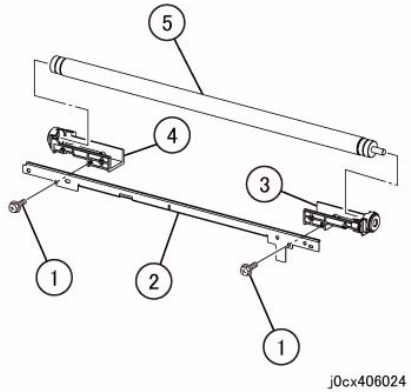


Figure 5 j0cx406024

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.
2. When installing the Eliminator Roll to the Front Bearing Holder, install the Shaft so that the longer end is in front. (Figure 6)

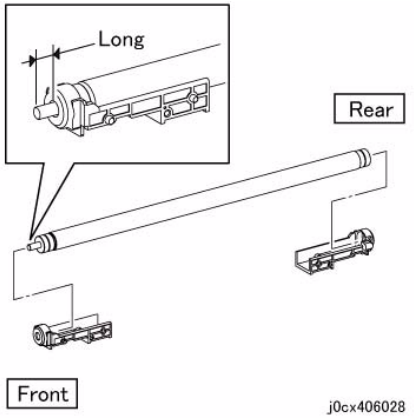


Figure 6 j0cx406028

REP 6.8.2 Idle Roll Assembly

Parts List on PL 6.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

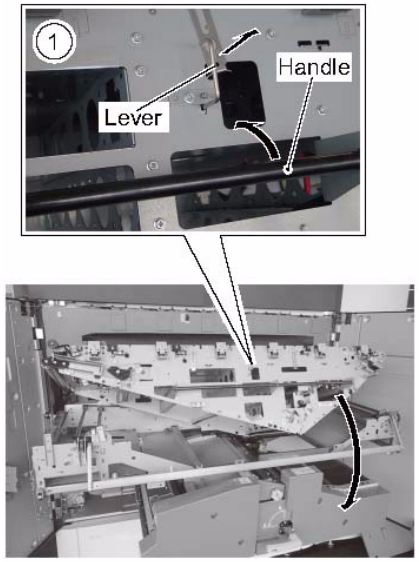


Figure 1 j0kol406022

3. Remove the Idle Roll Assembly. (Figure 2)
   (1) Remove the E-Ring.
   (2) Remove the Washer.
   (3) Remove the Bearing.
   (4) Remove the Idle Roll Assembly.

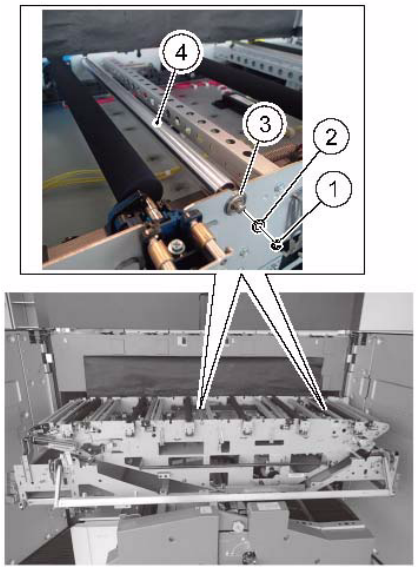


Figure 2 j0kol406025

4. Remove each part from the Rear of the Idle Roll Assembly. (Figure 3)
   (1) Remove the E-Ring.
   (2) Remove the Washer.
   (3) Remove the Bearing.

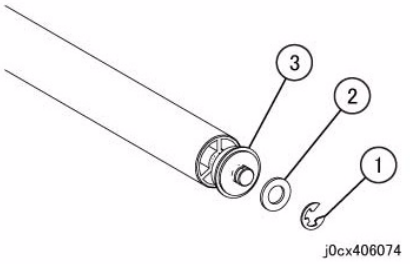


Figure 3 j0cx406074

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.9.1 Single Roll 2

Parts List on PL 6.9

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

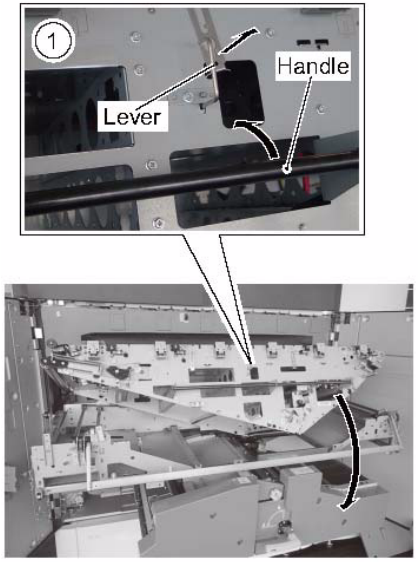


Figure 1 j0kol406022

3. Remove the Single Roll 1/FW Single Roll Assembly. (Figure 2)
   (1) Remove the Shoulder Screw.
   (2) Remove the Harness Guide.
   (3) Remove the Wire.
   (4) Remove the Screw (x2).
   (5) Remove the Single Roll 1/FW Single Roll Assembly.

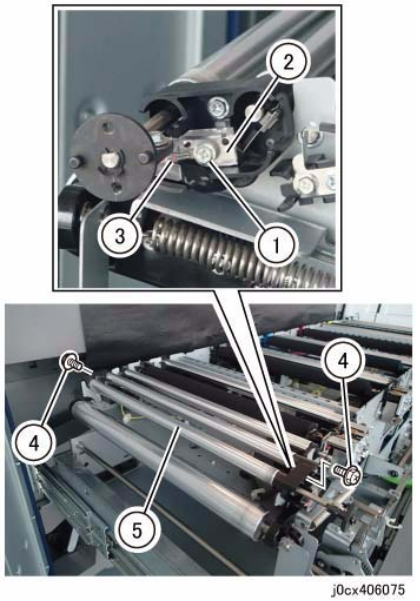


Figure 2 j0cx406075

4. Remove the Retract Arm Assembly. (Figure 3)
   (1) Remove the Spring (x2).
   (2) Remove the Spring.
   (3) Remove the E-Clip from the front.
   (4) Pull out the shaft towards the rear.
   (5) Remove the Retract Arm Assembly.

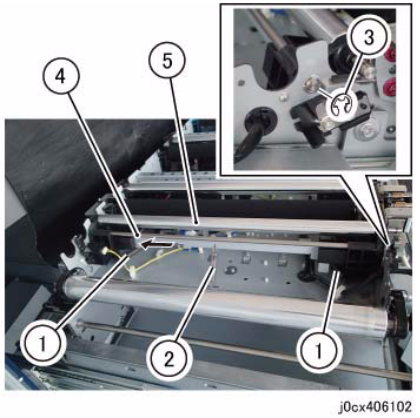


Figure 3 j0cx406102

5. Remove the Single Roll 2. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the Plate.
   (3) Remove the Rear Arm.
   (4) Remove the Single Roll 2.

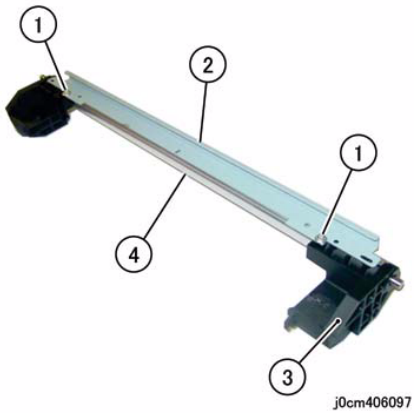


Figure 4 j0cm406097

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.
2. When installing the Single Roll 2, install the Shaft so that the longer end is in front. (Figure 5)

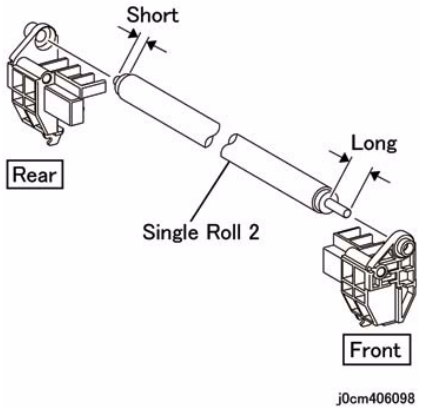


Figure 5 j0cm406098

REP 6.9.2 Single Roll 1/FW Single Roll

Parts List on PL 6.9

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Position the IBT Frame Assembly in the service position. (REP 6.1.1)
2. Remove the Wheel Assembly from the IBT Module. (Figure 1)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

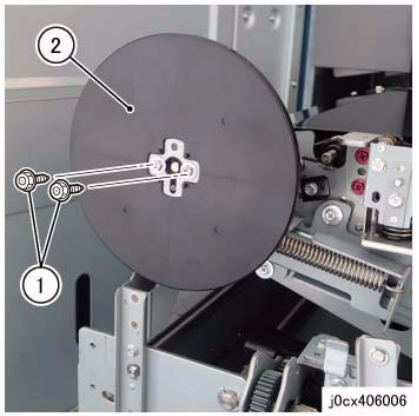


Figure 1 j0cx406006

3. Remove the Flange from the FW Single Roll. (Figure 2)
   (1) Loosen the Screw (x2).
   (2) Remove the KL-Clip.
   (3) Remove the Flange.

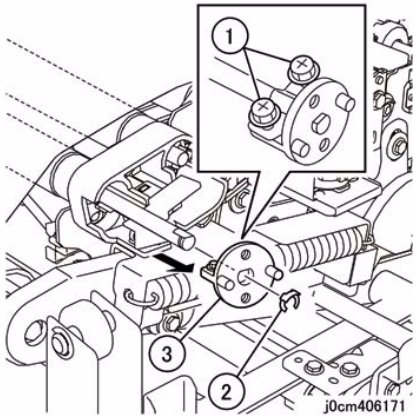


Figure 2 j0cm406171

4. Rotate the Front Tension Cam slowly to loosen the IBT Belt tension. (Figure 3)
   (1) Rotate the Front Tension Cam slowly in the direction of the arrow.

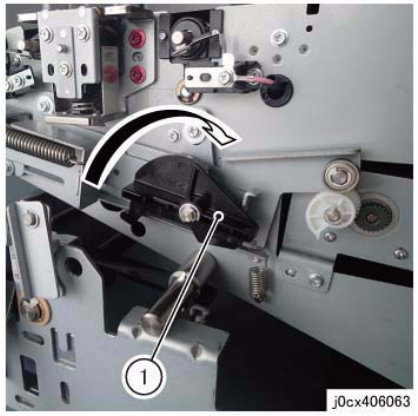


Figure 3 j0cx406063

5. Remove the Harness Guide and Wire from the Out ReC Holder. (Figure 4)
   (1) Remove the Shoulder Screw.
   (2) Remove the Harness Guide.
   (3) Remove the Wire.

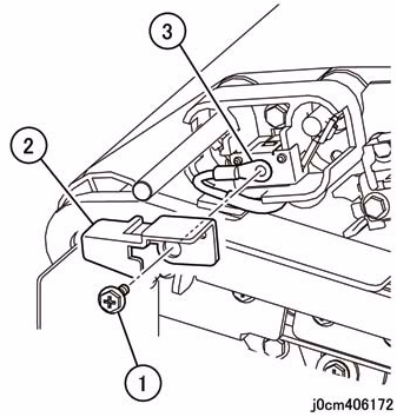


Figure 4 j0cm406172

6. Remove the Out ReC Holder and Single Roll 1/FW Single Roll from the IBT Frame. (Figure 5)
   (1) Remove the Screw.
   (2) Remove the Out ReC Holder.
   (3) Remove the FW Single Roll.
   (4) Remove the Single Roll 1.

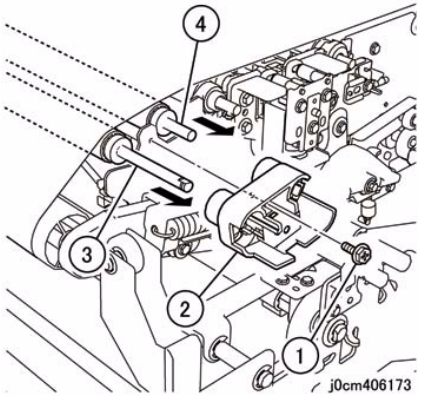


Figure 5 j0cm406173

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following point during installation.

NOTE: *When installing the Single Roll 1/FW Single Roll, make sure to insert the Bearing (x2) at the rear of the Single Roll 1/FW Single Roll into the Bearing Holder (x2) of the In ReC Holder. (Figure 6)*

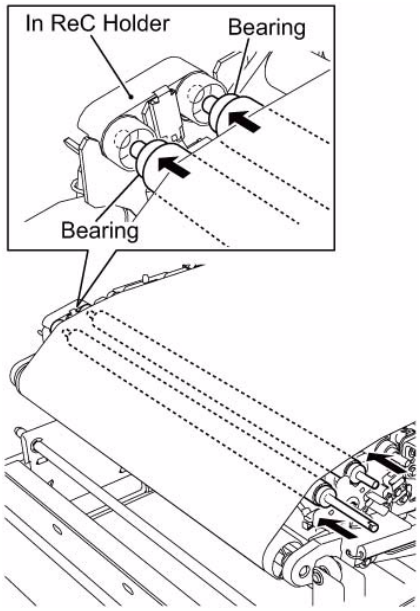


Figure 6 j0kol406033

REP 6.10.1 Retract Shaft Assembly (R3)

Parts List on PL 6.10

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

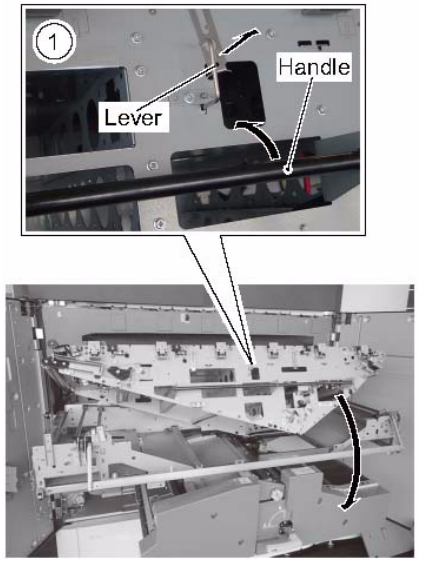


Figure 1 j0kol406022

3. Remove the 1st Roll Assembly. (Figure 2)

   NOTE: *Do not touch the Roll (sponge part) of the 1st Roll Assembly with bare hands. Hold both ends of the Shaft when removing the 1st Roll Assembly.*

   (1) Release the Tab (2 locations) of the Bracket Assembly in Front, and lift the 1st Roll Assembly and Retract Slide Block at the same time.
   (2) Remove the 1st Roll Assembly from the Rear Retract Slide Block.

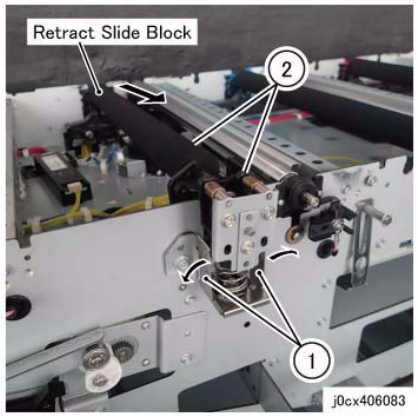


Figure 2 j0cx406083

4. Remove the Eliminator Roll Assembly. (Figure 3)
   (1) Remove the Spring.
   (2) Remove the Eliminator Roll Assembly.

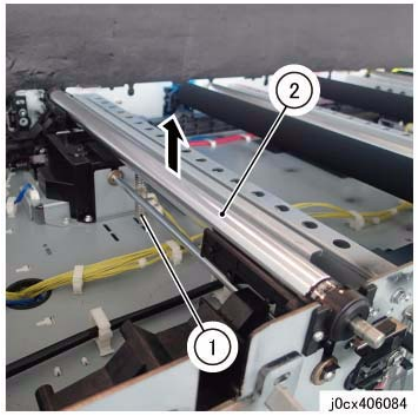


Figure 3 j0cx406084

5. Remove the Retract Cover. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the Retract Cover.

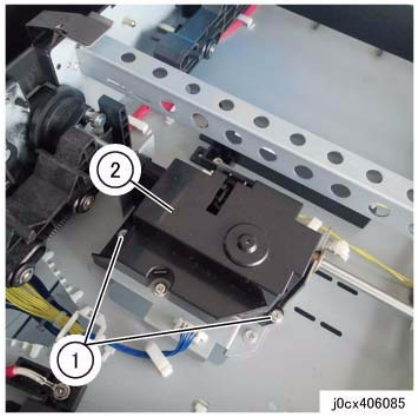


Figure 4 j0cx406085

6. Disconnect the Connector (x2) from the Retract Shaft Assembly (R3). (Figure 5)
   (1) Disconnect the Connector.
   (2) Disconnect the Connector.
   (3) Release the harness from the Clamp.

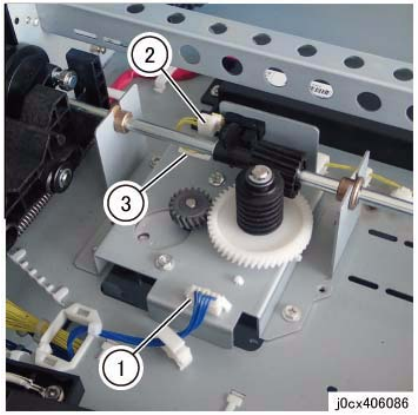


Figure 5 j0cx406086

7. Turn the Gear, and move the Bearing of the Rear Cam downwards. (Figure 6)
   (1) Turn the Gear in the direction of the arrow, and move the Bearing.

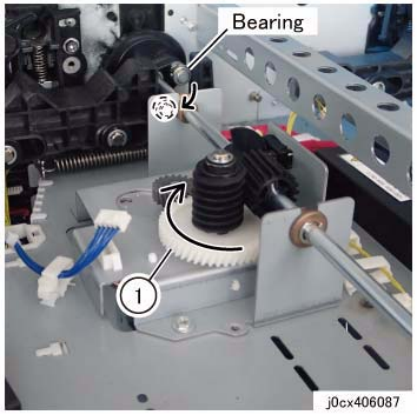


Figure 6 j0cx406087

8. Remove the KL-Clip from the front, and remove the Bearing. (Figure 7)
   (1) Remove the KL-Clip.
   (2) Remove the Bearing.

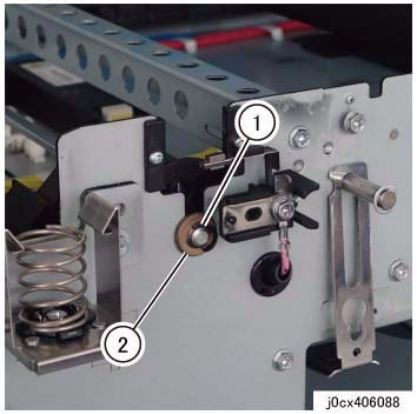


Figure 7 j0cx406088

9. Remove the Retract Shaft Assembly (R3). (Figure 8)
   (1) Remove the KL-Clip from the rear, and remove the Bearing.
   (2) Remove the Screw (x2).
   (3) Remove the Retract Shaft Assembly (R3).

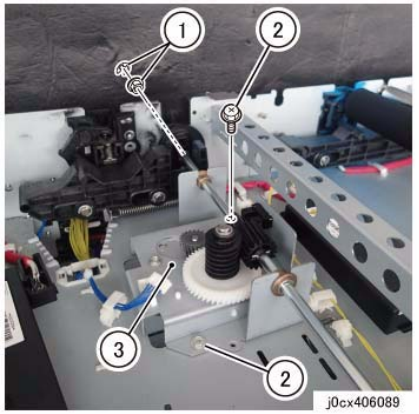


Figure 8 j0cx406089

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.10.2 Retract Shaft Assembly (R2)

Parts List on PL 6.10

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the IBT Belt. (REP 6.3.1)
2. Lower the IBT Belt Frame to the IBT Frame Assembly. (Figure 1)
   (1) Hold the Handle firmly with both hands, and while lifting the Handle slightly, pull the Lever forward with your index finger, and slowly lower it.

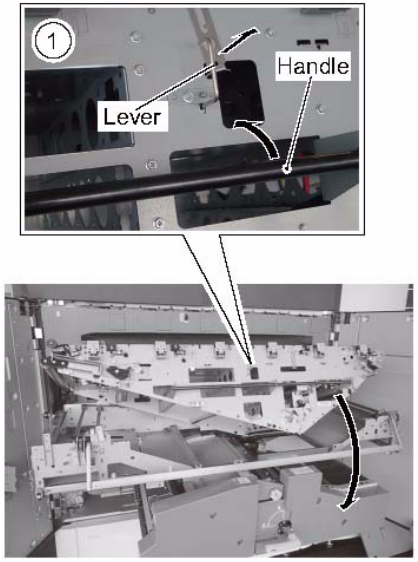


Figure 1 j0kol406022

3. Remove the Eliminator Roll Assembly. (Figure 2)
   (1) Remove the Spring.
   (2) Remove the Eliminator Roll Assembly.

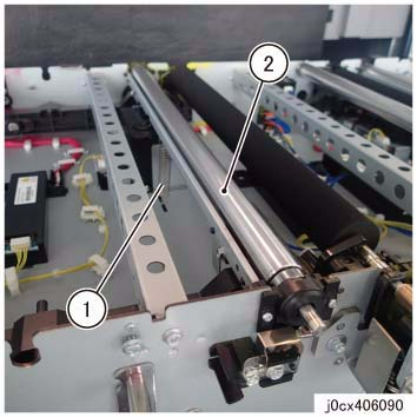


Figure 2 j0cx406090

4. Remove the Tie Plate. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Tie Plate.

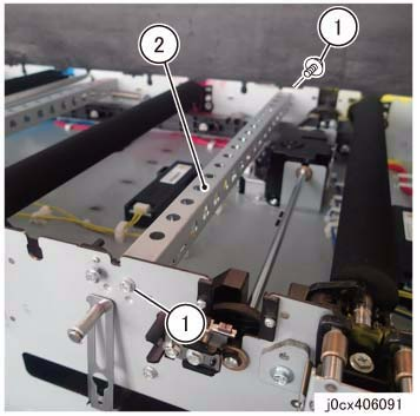


Figure 3 j0cx406091

5. Remove the Retract Cover. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the Retract Cover.

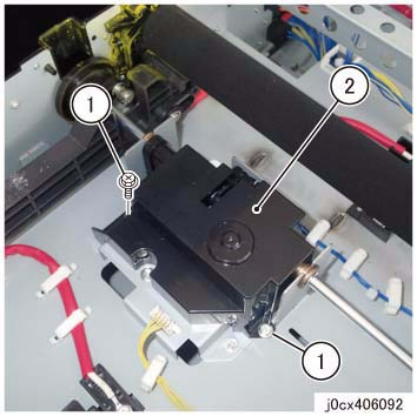


Figure 4 j0cx406092

6. Disconnect the Connector (x2) from the Retract Shaft Assembly (R2). (Figure 5)
   (1) Disconnect the Connector.
   (2) Disconnect the Connector.
   (3) Release the harness from the Clamp.

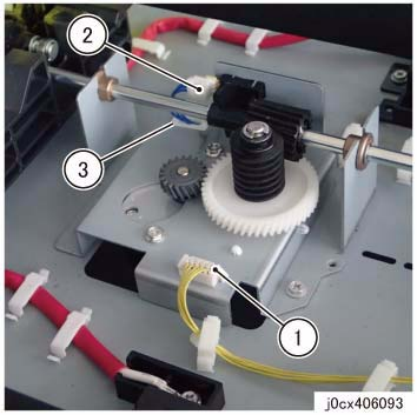


Figure 5 j0cx406093

7. Turn the Gear, and move the Bearing of the Rear Cam downwards. (Figure 6)
   (1) Turn the Gear in the direction of the arrow, and move the Bearing.

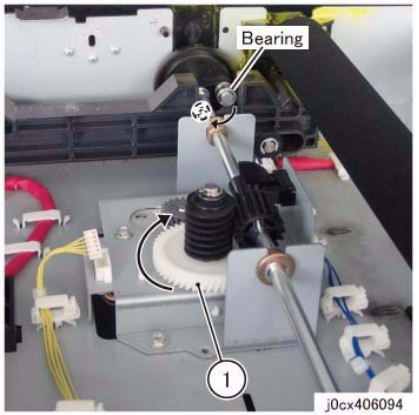


Figure 6 j0cx406094

8. Remove the Retract Shaft Assembly (R2). (Figure 7)
   (1) Remove the KL-Clip and Bearing.
   (2) Remove the KL-Clip and Bearing.
   (3) Remove the Screw (x2).
   (4) Remove the Retract Shaft Assembly (R2).

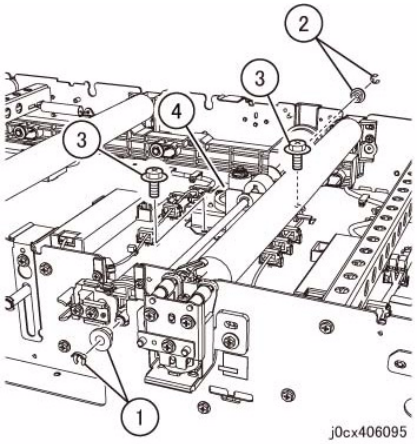


Figure 7 j0cx406095

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.10.3 Retract Shaft Assembly (R1, R4)

Parts List on PL 6.10

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for removing the Retract Shaft Assembly (R4) are described here. Remove The Retract Shaft Assembly (R1) in the same way as (R4).*

NOTE: *When removing the IBT Belt, always attach Protect Sheet on the Developer Inner Cover to prevent light deterioration of the Drum by cutting off the light.*

1. Remove the 1st Roll Assembly (#6). (REP 6.7.2)
2. Remove the Eliminator Roll Assembly. (Figure 1)
   (1) Remove the Spring.
   (2) Remove the Eliminator Roll Assembly.

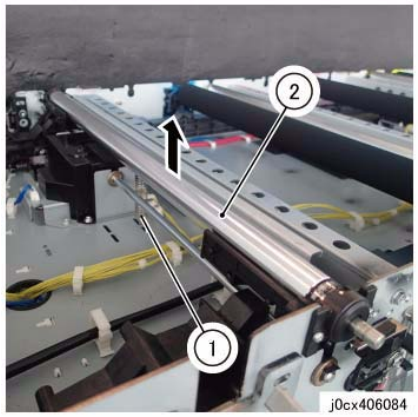


Figure 1 j0cx406084

3. Remove the Retract Cover. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Retract Cover.

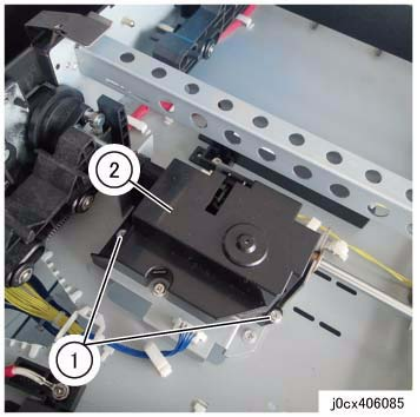


Figure 2 j0cx406085

4. Disconnect the Connector (x2) from the Retract Shaft Assembly (R4). (Figure 3)
   (1) Disconnect the Connector.
   (2) Disconnect the Connector.
   (3) Release the harness from the Clamp.

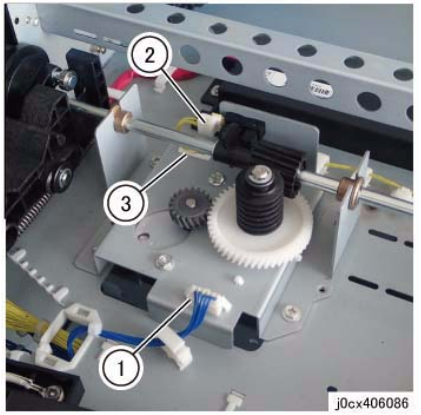


Figure 3 j0cx406086

5. Remove the KL-Clip from the front, and remove the Bearing. (Figure 4)
   (1) Remove the KL-Clip.
   (2) Remove the Bearing.

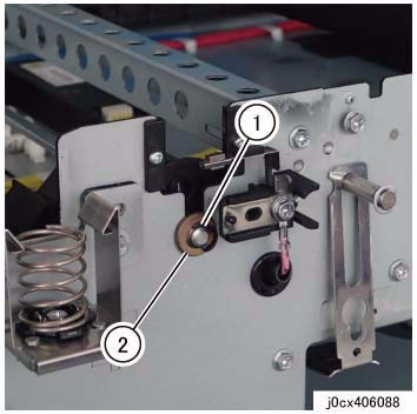


Figure 4 j0cx406088

6. Remove the Retract Shaft Assembly (R4). (Figure 5)
   (1) Remove the E-Clip from the rear, and remove the Bearing.
   (2) Remove the Screw (x2).
   (3) Remove the Retract Shaft Assembly (R4).

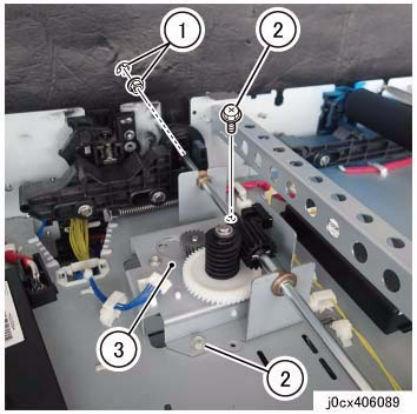


Figure 5 j0cx406089

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.14.1 (SCC) 1st BTR Contact/Retract Motor (R1, R2, R3, R4)

Parts List on PL 6.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Follow the applicable procedure below and remove the Retract Shaft Assembly.
   - Remove the Retract Shaft Assembly (R2). (REP 6.10.2)
   - Remove the Retract Shaft Assembly (R3). (REP 6.10.1)
   - Remove the Retract Shaft Assembly (R1, R4). (REP 6.10.3)
2. Remove the 1st BTR Contact/Retract Motor. (Figure 1)
   (1) Remove the E-Clip (x2).
   (2) Slide the Bearing (x2).
   (3) Remove the Retract Shaft.
   (4) Disconnect the Connector.
   (5) Remove the Screw (x2).
   (6) Remove the 1st BTR Contact/Retract Motor.

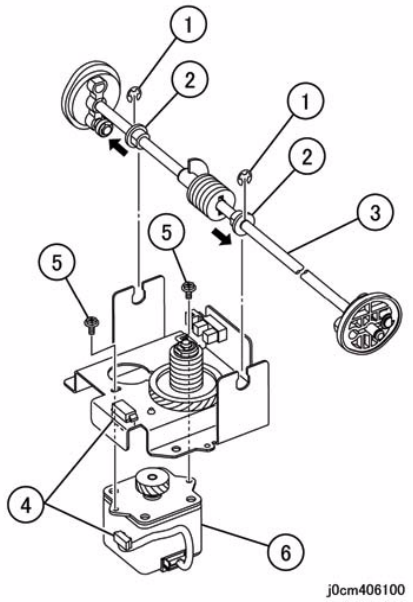


Figure 1 j0cm406100

Replacement

1. To install, carry out the removal steps in reverse order.

REP 6.20.1 2nd Belt Assembly

Parts List on PL 6.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the V-Transport Assembly 1. (Perform up to Step 5 of REP 6.20.2)
2. Remove the Fly Wheel Plate. (Figure 1)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Fly Wheel Plate.

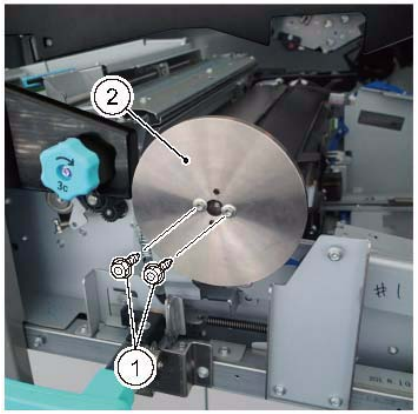


Figure 1 j0kol406026

3. Rotate the BTB Stopper (x2) in the direction of the arrow, and remove the 2nd Belt Assembly. (Figure 2)
   (1) Loosen the Screw.
   (2) Rotate the BTB Stopper.
   (3) Loosen the Screw.
   (4) Rotate the BTB Stopper.
   (5) Hold the handle (2 locations), and remove the 2nd Belt Assembly.

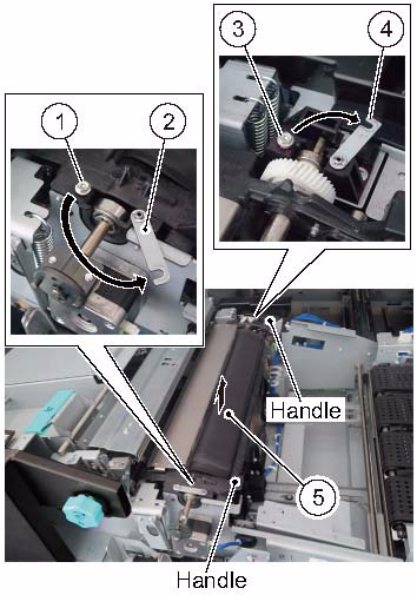


Figure 2 j0kol406027

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 3)*

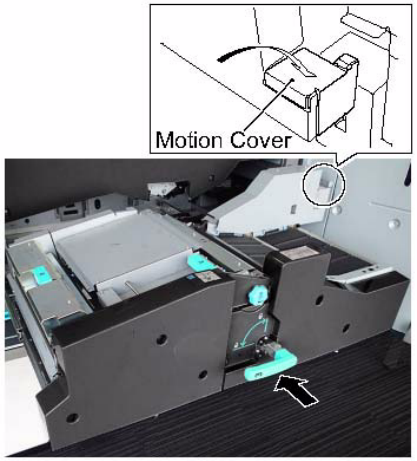


Figure 3 j0kol406028

2. After replacing the 2nd Belt Assembly, clear the following HFSI (DC135) counters.
   - 2nd Belt Assembly "Chain Link: 009-870"
   - 2nd Belt Assembly "Chain Link: 009-871"

REP 6.20.2 (SCC) V-Transport Assembly 1

Parts List on PL 6.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out the Big Module up to the Service Position. (REP 9.1.1)
2. Remove the Drawer Right Cover. (Figure 1)
   (1) Loosen the Screw (x3).
   (2) Remove the Drawer Right Cover.

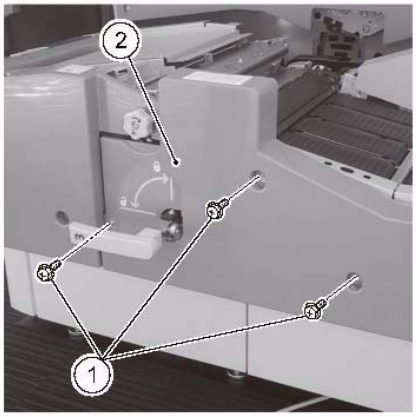


Figure 1 j0kol406029

3. Remove the V-Transport Rear Cover Assembly. (Figure 2)
   (1) Remove the Screw (x3).
   (2) Remove the V-Transport Rear Cover Assembly.

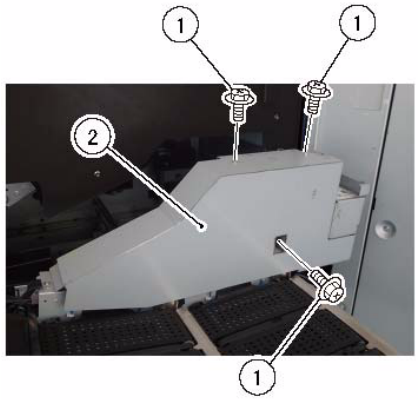


Figure 2 j0kol406042

4. Remove the V-Transport Front Cover. (Figure 3)
   (1) Remove the Screw.
   (2) Remove the V-Transport Front Cover.

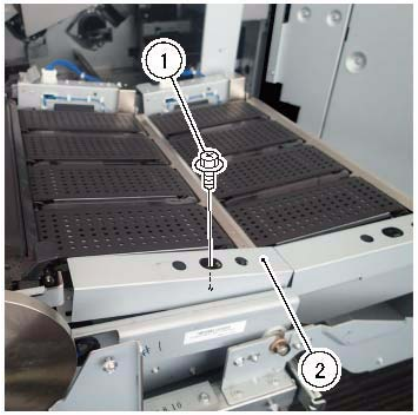


Figure 3 j0kol406043

5. Remove the V-Transport Assembly 1. (Figure 4)

   NOTE: *When removing the V-Transport Assembly 1, as the Brush is easy to break, be careful when removing it.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x4).
   (3) Remove the V-Transport Assembly 1.

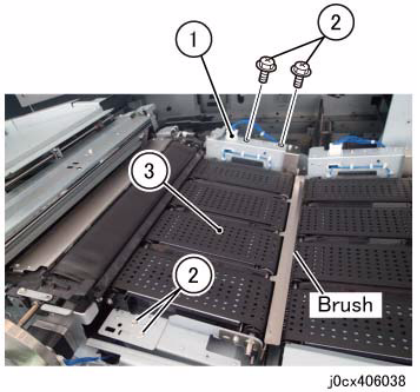


Figure 4 j0cx406038

6. Remove the Connector Cover from the V-Transport Assembly 1. (Figure 5)
   (1) Remove the Screw.
   (2) Remove the Connector Cover.

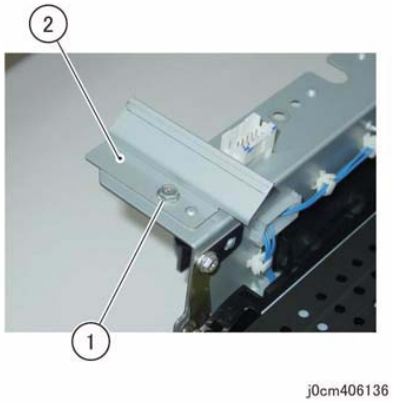


Figure 5 j0cm406136

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 6)*

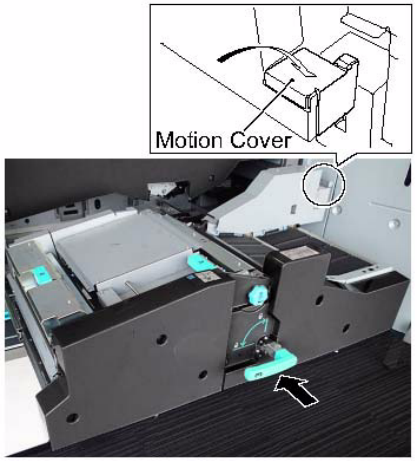


Figure 6 j0kol406028

2. After replacing the V-Transport Assembly 1, clear the following HFSI (DC135) counters.
   - V-Transport 1 Belt "Chain Link: 008-840"
   - V-Transport Brush "Chain Link: 008-843"

REP 6.20.3 (SCC) V-Transport Assembly 2

Parts List on PL 6.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Position the Big Module in the service position. (REP 9.1.1)
2. Remove the Drawer Right Cover. (Figure 1)
   (1) Loosen the Screw (x3).
   (2) Remove the Drawer Right Cover.

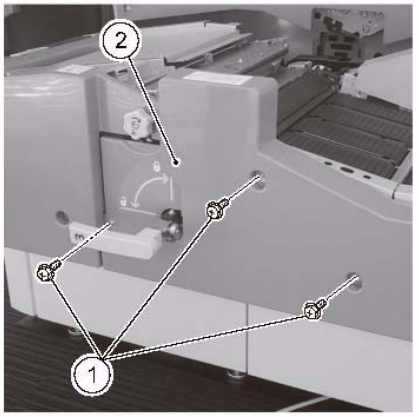


Figure 1 j0kol406029

3. Remove the V-Transport Rear Cover Assembly. (Figure 2)
   (1) Remove the Screw (x3).
   (2) Remove the V-Transport Rear Cover Assembly.

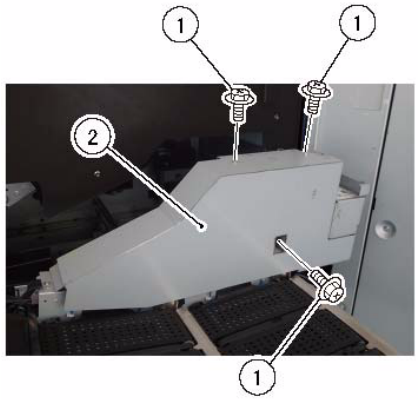


Figure 2 j0kol406042

4. Remove the V-Transport Front Cover. (Figure 3)
   (1) Remove the Screw.
   (2) Remove the V-Transport Front Cover.

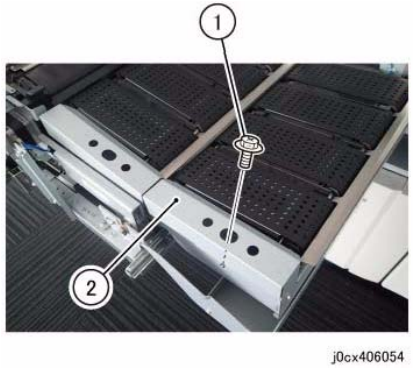


Figure 3 j0cx406054

5. Remove the V-Transport Assembly 2. (Figure 4)

   NOTE: *When removing the V-Transport Assembly 2, as the Brush is easy to break, be careful when removing it.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x4).
   (3) Remove the V-Transport Assembly 2.

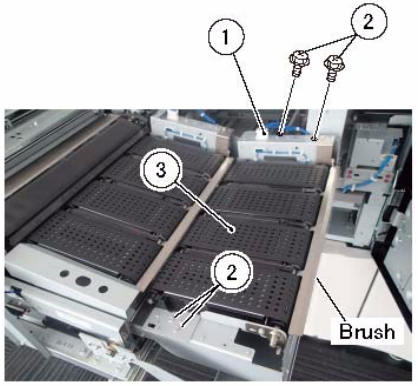


Figure 4 j0kol406044

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 5)*

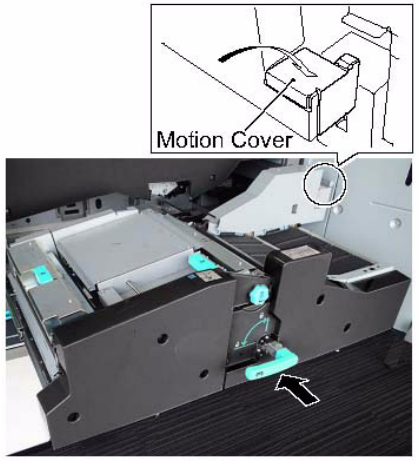


Figure 5 j0kol406028

2. After replacing the V-Transport Assembly 2, clear the following HFSI (DC135) counters.
   - V-Transport 2 Belt "Chain Link: 008-841"
   - V-Transport Brush "Chain Link: 008-843"

REP 6.20.4 BTB Frame Assembly

Parts List on PL 6.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the 2nd Belt Assembly. (REP 6.20.1)
2. Remove V-Transport 2 Assembly. (REP 6.20.3)
3. Disconnect the Connector (x2) that is connected to the BTB Arm Assembly. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the BTB Rear Cover.
   (3) Release the harness from the Clamp.
   (4) Disconnect the Connector (x2).

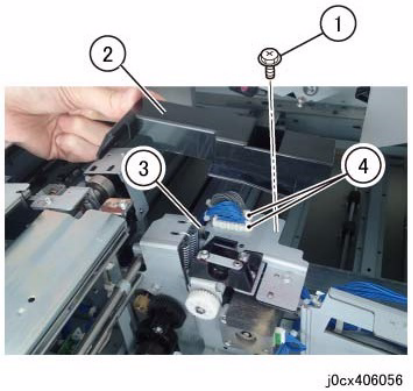


Figure 1 j0cx406056

4. Remove each part from the Shaft of the BTB Frame Assembly. (Figure 2)
   (1) Remove the KL-Clip.
   (2) Remove the Bearing.
   (3) Remove the KL-Clip.
   (4) Remove the Bearing.

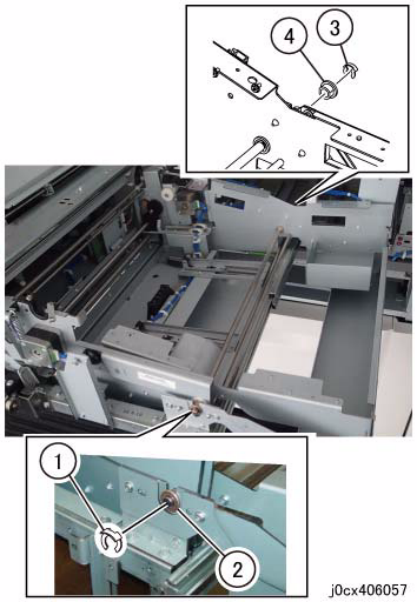


Figure 2 j0cx406057

5. Remove the BTB Frame Assembly. (Figure 3)

   NOTE: *When removing the BTB Frame Assembly, take note of the Spring (x2) at the bottom of the BTB Frame Assembly.*

   (1) Lift up the BTB Frame Assembly slightly and remove it towards the right.

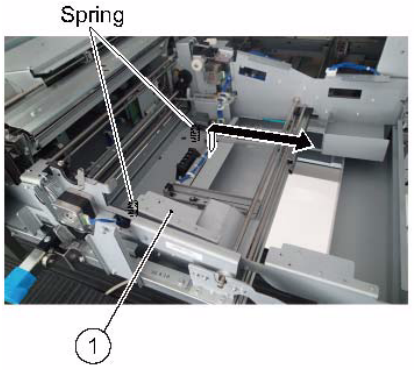


Figure 3 j0kol406030

6. Remove the Lower Cover from the removed BTB Frame Assembly. (Figure 4)

(1) Remove the Screw (x2).
(2) Remove the Lower Cover.

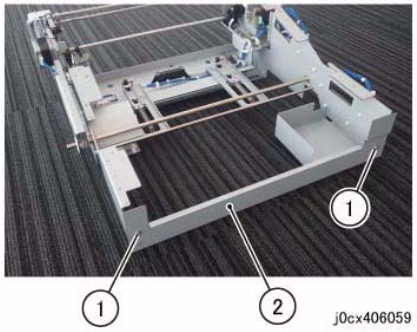


Figure 4 j0cx406059

7. Similarly, remove the 2nd BTB DTR/ESB HVPS from the BTB Frame Assembly. (Figure 5)
(1) Remove the Screw.
(2) Remove the HVPS Cover.
(3) Disconnect the Connector (x3).
(4) Remove the Screw.
(5) Remove the 2nd BTB DTR/ESB HVPS from the PWB Support (x3).

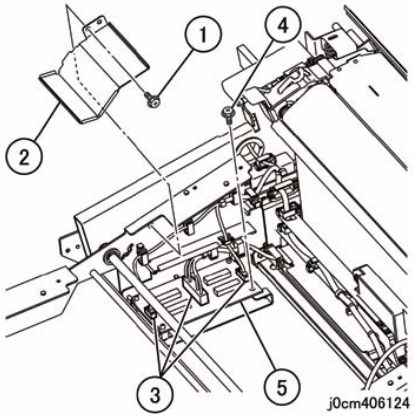


Figure 5 j0cm406124

8. Similarly, remove the Slider Plate Assembly (x2) from the BTB Frame Assembly. (Figure 6)
(1) Remove the Screw (x2).
(2) Remove the Slider Plate Assembly.
(3) Remove the Screw (x2).
(4) Remove the Slider Plate Assembly.

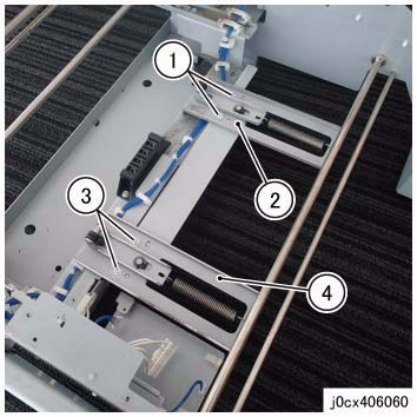


Figure 6 j0cx406060

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 7)*

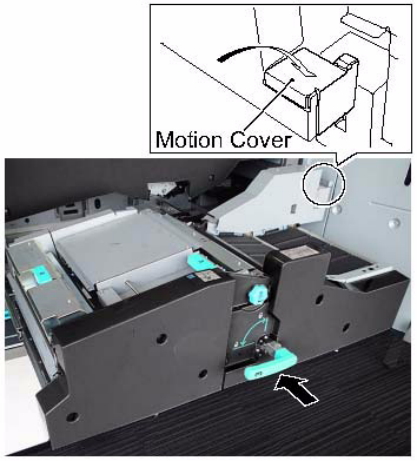


Figure 7 j0kol406028

2. After replacing the BTB Frame Assembly, clear the following HFSI (DC135) counters.
- Torque Bracket Assembly "Chain Link: 009-887"

REP 6.21.1 (SCC) V-Transport Assembly 3

Parts List on PL 6.21

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out the Big Module up to the Service Position. (REP 9.1.1)
2. Remove the V-Transport Assembly 2. (REP 6.20.3)
3. Remove the Lower Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Lower Cover.

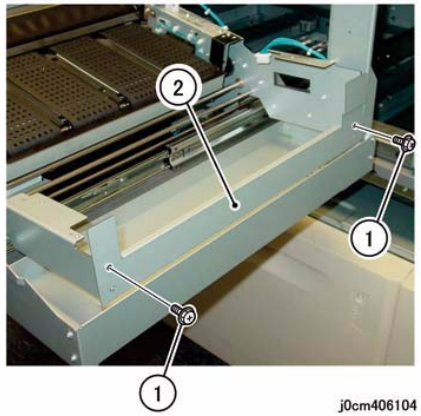


Figure 1 j0cm406104

4. Release the Service Position of the Big Module, and push the Big Module inside the machine. (Figure 2)
   (1) Simultaneously release the left and right Stopper (x2), and push the Big Module inside the machine.
   (2) Rotate the Handle of the Big Module to lock it.

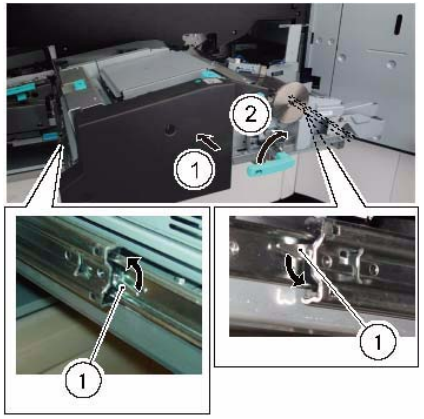


Figure 2 j0kol406031

5. Remove the V-Transport 3 Front Cover. (Figure 3)
   (1) Loosen the Screw (x2).
   (2) Remove the V-Transport 3 Front Cover.

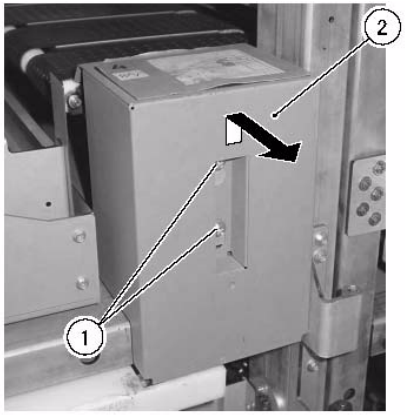


Figure 3 j0kol406045

6. Lift the V-Transport 3 Rear Cover. (Figure 4)
   (1) Loosen the Screw.
   (2) Lift the V-Transport 3 Rear Cover, and secure it.

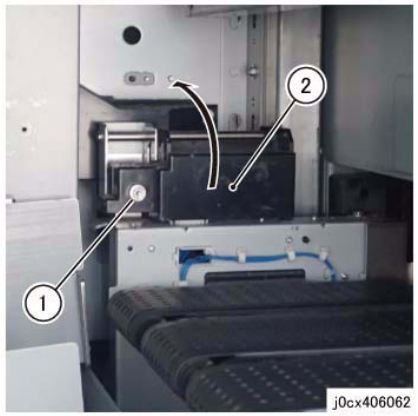


Figure 4 j0cx406062

7. Disconnect the Connector of the V-Transport Assembly 3. (Figure 5)
   (1) Disconnect the Connector.

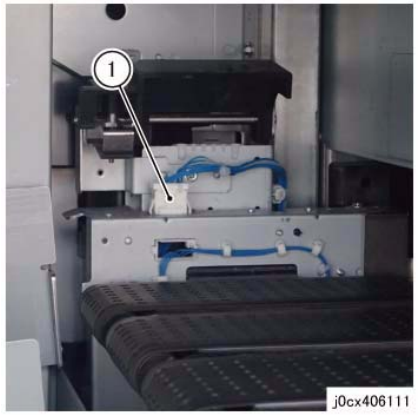


Figure 5 j0cx406111

8. Remove the V-Transport Assembly 3. (Figure 6)

   NOTE: *When removing the V-Transport Assembly 3, as the Brush is easy to break, be careful when removing it.*

   (1) Remove the Screw.
   (2) Remove the V-Transport Assembly 3.

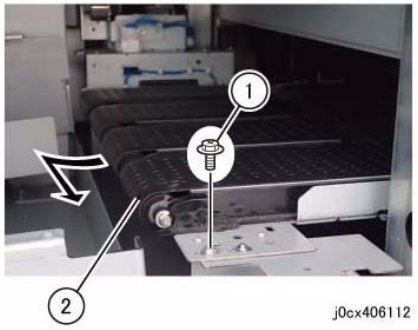


Figure 6 j0cx406112

9. Remove the Bearing (x2) from the V-Transport Assembly 3. (Figure 7)
   (1) Remove the E-Clip (x2).
   (2) Remove the Bearing (x2).

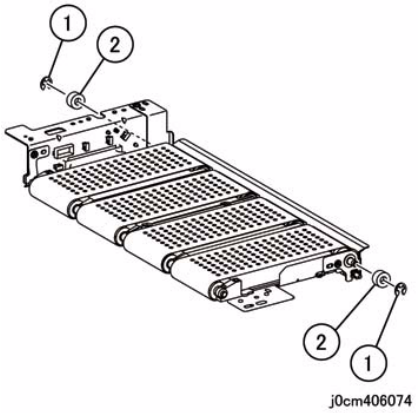


Figure 7 j0cm406074

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the V-Transport Assembly 3, put the Bearing (x2) in the U groove (2 locations) of the Bearing Holder as shown. (Figure 8)*

   (1) Bring the Bearing (x2) of the V-Transport Assembly 3 into contact with the Bearing Holder (x2).
   (2) Push the V-Transport Assembly 3 towards the Rear.

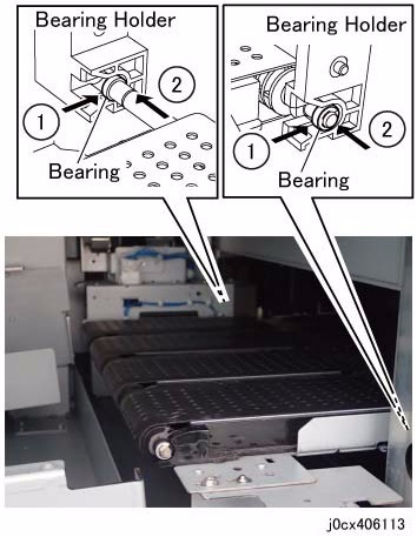


Figure 8 j0cx406113

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 9)*

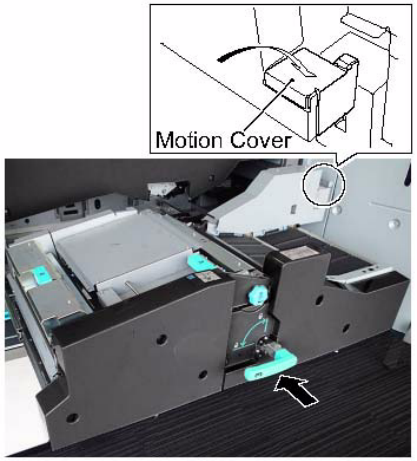


Figure 9 j0kol406028

2. After replacing the V-Transport Assembly 3, clear the following HFSI (DC135) counters.
   - V-Transport 3 Belt "Chain Link: 008-842"
   - V-Transport Brush "Chain Link: 008-843"

REP 6.22.1 V-Tra Sensor 1/2/3/4/5/6

Parts List on PL 6.22

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target V-Transport Assembly from the following V-Transport Assembly 1, 2, 3.
   - Remove the V-Transport Assembly 1. (REP 6.20.2)
   - Remove the V-Transport Assembly 2. (REP 6.20.3)
   - Remove the V-Transport Assembly 3. (REP 6.21.1)
2. Remove the V-Transport Belt. (REP 6.22.2)
3. Remove the V-Tra Motor 1/2/3 Assembly. (REP 6.22.4)
4. Remove the Tapping Screw (x8), and remove the V-Transport Frame. (Figure 1)
   (1) Invert the V-Transport Frame.
   (2) Remove the Tapping Screw (x8).
   (3) Return the V-Transport Frame to its original orientation.

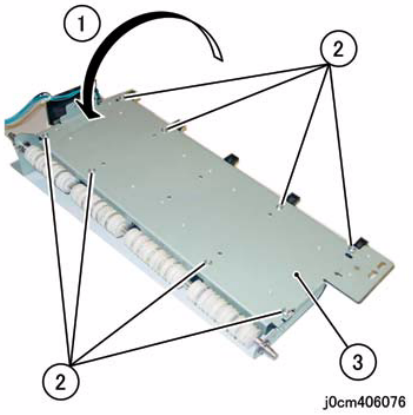


Figure 1 j0cm406076

5. Remove the V-Transport Chute. (Figure 2)
   (1) Remove the V-Transport Chute.

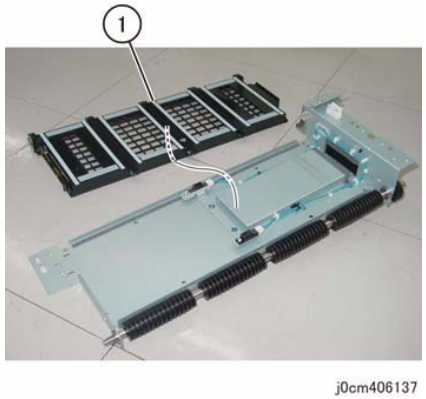


Figure 2 j0cm406137

6. Remove the V-Tra Sensor. (Figure 3)
   (1) Disconnect the Connector.
   (2) Remove the Screw.
   (3) Remove the V-Tra Sensor 2/4/6.
   (4) Disconnect the Connector.
   (5) Remove the Screw.
   (6) Remove the V-Tra Sensor 1/3/5.

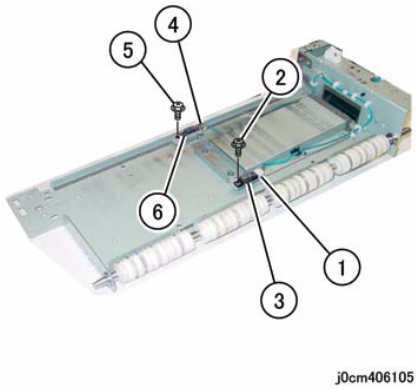


Figure 3 j0cm406105

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 4)*

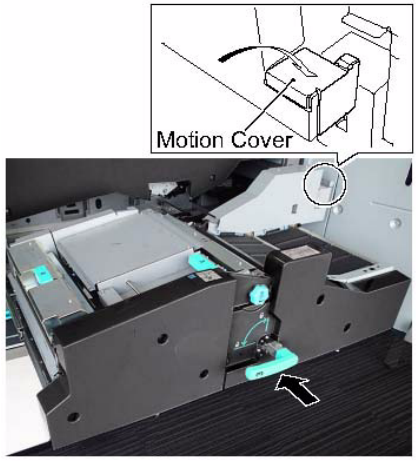


Figure 4 j0kol406028

REP 6.22.2 V-Transport Belt

Parts List on PL 6.22

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target V-Transport Assembly from the following V-Transport Assembly 1, 2, 3.
   - Remove the V-Transport Assembly 1. (REP 6.20.2)
   - Remove the V-Transport Assembly 2. (REP 6.20.3)
   - Remove the V-Transport Assembly 3. (REP 6.21.1)
2. Remove the Brush Chute Assembly. (Figure 1)

   NOTE: *When removing the Brush Chute Assembly, remove it so that it does not touch the Brush section.*

   (1) Remove the Screw (x2).
   (2) Remove the Brush Chute Assembly.

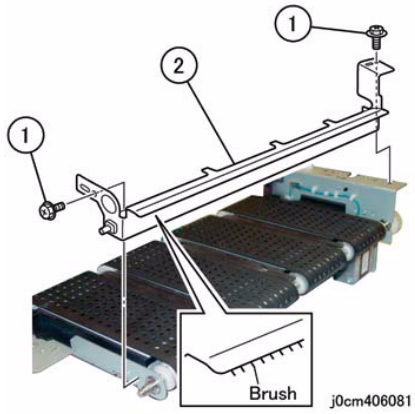


Figure 1 j0cm406081

3. Remove the V-Transport Belt from the V-Transport Assembly. (Figure 2)
   (1) Remove the V-Transport Belt (x4).

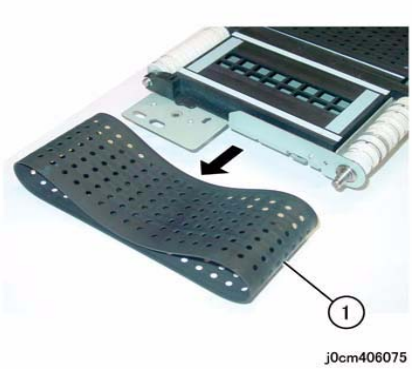


Figure 2 j0cm406075

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 3)*

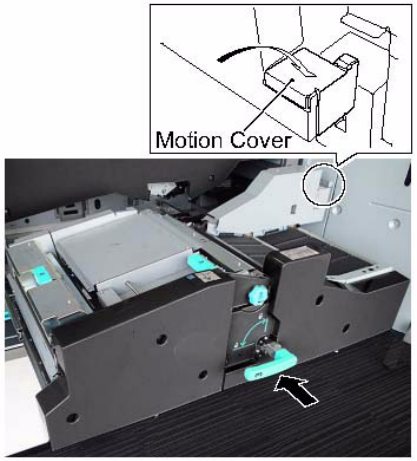


Figure 3 j0kol406028

2. After replacing the V-Transport 1,2,3 Belt, clear the counter of the part you replaced from the following of HFSI (DC135).
   - V-Transport 1 Belt "Chain Link: 008-840"
   - V-Transport 2 Belt "Chain Link: 008-841"
   - V-Transport 3 Belt "Chain Link: 008-842"

REP 6.22.3 Brush Assembly

Parts List on PL 6.22

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target V-Transport Assembly from the following V-Transport Assembly 1, 2, 3.
   - Remove the V-Transport Assembly 1. (REP 6.20.2)
   - Remove the V-Transport Assembly 2. (REP 6.20.3)
   - Remove the V-Transport Assembly 3. (REP 6.21.1)
2. Remove the Brush Chute Assembly. (Figure 1)

   NOTE: *When removing the Brush Chute Assembly, remove it so that it does not touch the Brush section.*

   (1) Remove the Screw (x2).
   (2) Remove the Brush Chute Assembly.

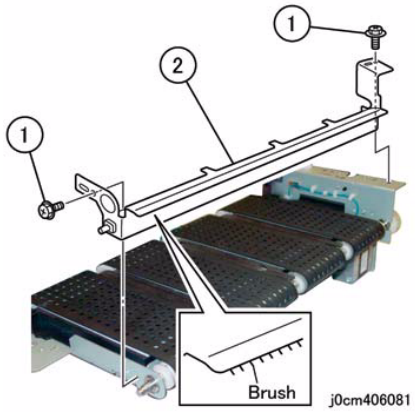


Figure 1 j0cm406081

3. Remove the Brush Assembly from the Brush Chute Assembly. (Figure 2)
   (1) Remove the KL-Clip, Washer, and Bearing.
   (2) Remove the KL-Clip, Washer, and Bearing.
   (3) Remove the Brush Assembly.

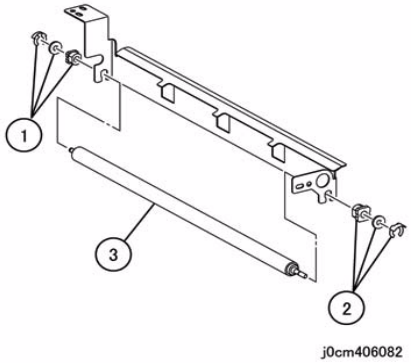


Figure 2 j0cm406082

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 3)*

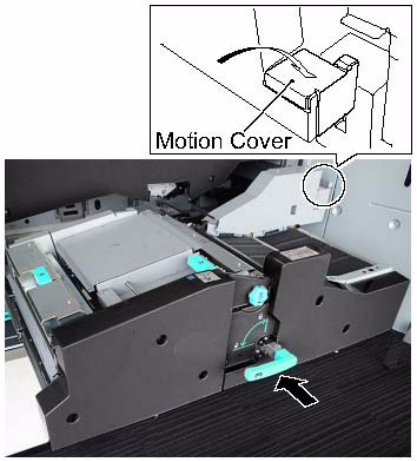


Figure 3 j0kol406028

2. After replacing Brush Assembly, clear the counter of the part you replaced from the following of HFSI (DC135).
   - V-Transport 1 Brush "Chain Link: 008-843"
   - V-Transport 2 Brush "Chain Link: 008-843"
   - V-Transport 3 Brush "Chain Link: 008-843"

REP 6.22.4 V-Tra Motor 1/2/3 Assembly

Parts List on PL 6.22

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target V-Transport Assembly from the following V-Transport Assembly 1, 2, 3.
   - Remove the V-Transport Assembly 1. (REP 6.20.2)
   - Remove the V-Transport Assembly 2. (REP 6.20.3)
   - Remove the V-Transport Assembly 3. (REP 6.21.1)
2. Release the Connector and Clamp from the V-Tra Motor. (Figure 1)
   (1) Disconnect the Connector.
   (2) Release the harness from the Clamp.
   (3) Release the Push Tie.

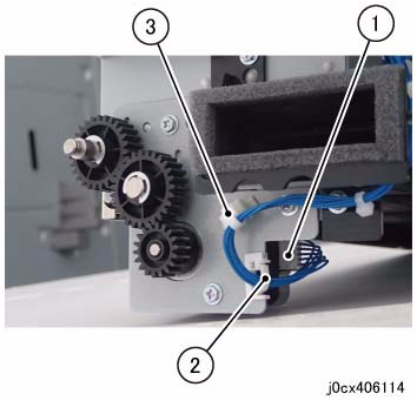


Figure 1 j0cx406114

3. Remove the gear. (Figure 2)
   (1) Remove the E-Ring.
   (2) Remove the gear.

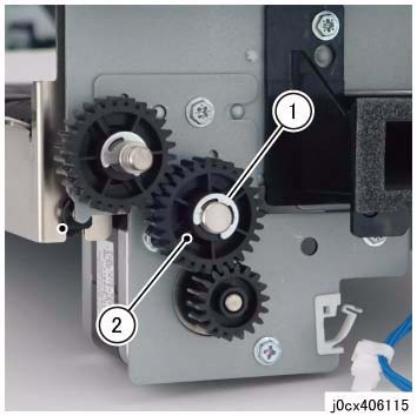


Figure 2 j0cx406115

4. Remove the V-Tra Motor Assembly. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the V-Tra Motor Assembly.

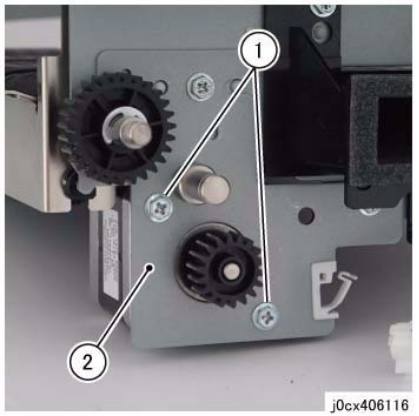


Figure 3 j0cx406116

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 4)*

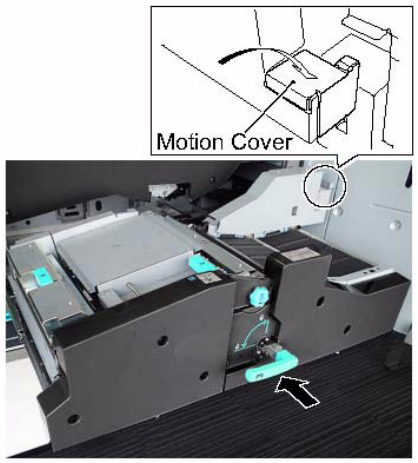


Figure 4 j0kol406028

REP 6.22.5 Drive Roll Assembly

Parts List on PL 6.22

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the target V-Transport Assembly from the following V-Transport Assembly 1, 2, 3.
   - Remove the V-Transport Assembly 1. (REP 6.20.2)
   - Remove the V-Transport Assembly 2. (REP 6.20.3)
   - Remove the V-Transport Assembly 3. (REP 6.21.1)
2. Remove the V-Transport Belt. (REP 6.22.2)
3. Remove the V-Tra Motor 1/2/3 Assembly. (REP 6.22.4)
4. Remove the Tapping Screw (x8), and remove the V-Transport Frame. (Figure 1)
   (1) Invert the V-Transport Frame.
   (2) Remove the Tapping Screw (x8).
   (3) Return the V-Transport Frame to its original orientation.

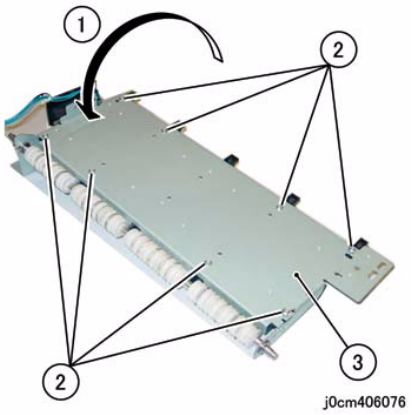


Figure 1 j0cm406076

5. Remove the V-Transport Chute. (Figure 2)
   (1) Remove the V-Transport Chute.

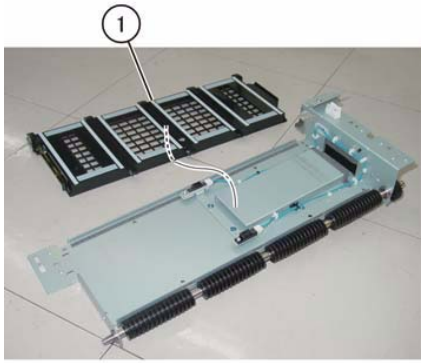


Figure 2 j0cm406137

6. Remove the Gear and Pin from the V-Transport Frame. (Figure 3)
   (1) Remove the E-Clip.
   (2) Remove the gear.
   (3) Remove the Pin.

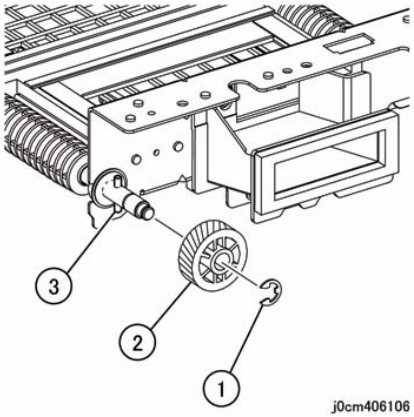


Figure 3 j0cm406106

7. Remove the Drive Roll Assembly from the V-Transport Frame. (Figure 4)
   (1) Slide the Bearing.
   (2) Remove the Drive Roll Assembly.

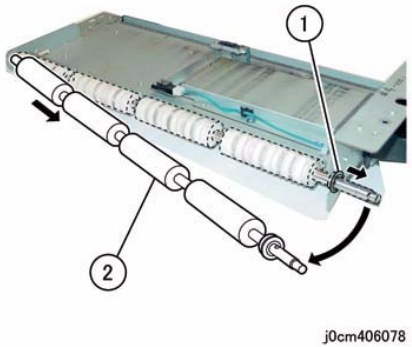


Figure 4 j0cm406078

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 5)*

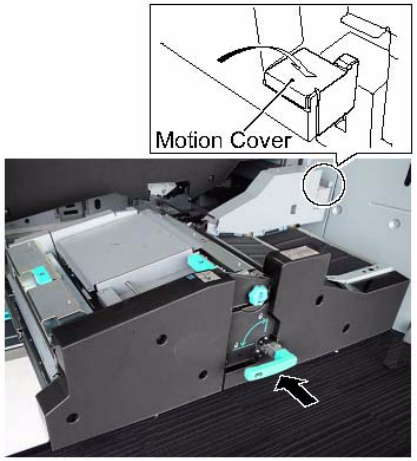


Figure 5 j0kol406028

REP 6.26.1 2nd Belt Assembly

Parts List on PL 6.26

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the 2nd Belt Assembly. (REP 6.20.1)
2. Remove the BTB In Cover. (Figure 1)
   (1) Remove the Tapping Screw (x2).
   (2) Remove the BTB In Cover.

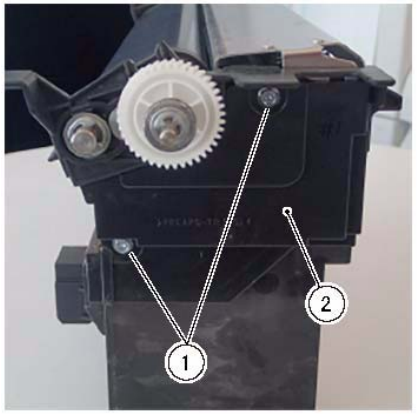


Figure 1 j0kol406046

3. Remove the Tapping Screw (x6), and remove the 2nd Belt Assembly. (Figure 2)
   (1) Remove the Tapping Screw (x6).
   (2) Remove the 2nd Belt Assembly.

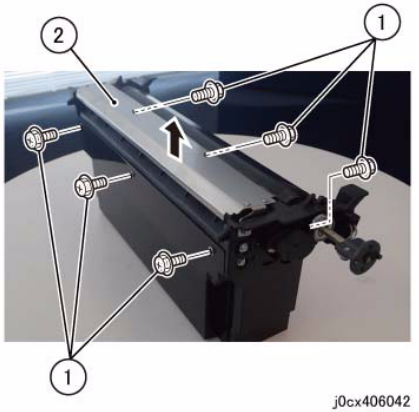


Figure 2 j0cx406042

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 3)*

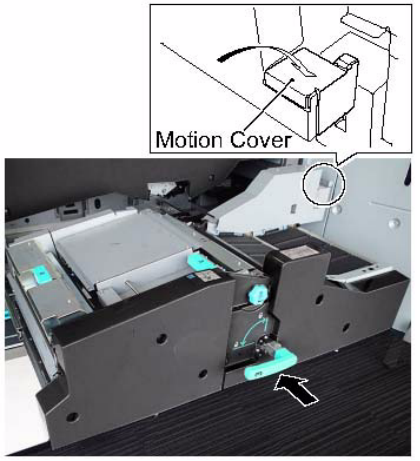


Figure 3 j0kol406028

NOTE: *Check for 2nd Belt Assembly's Data Matrix Label (PL 6.26) when replacing the 2nd Belt Assembly.*

- *Data Matrix Label present: New Drive Roll Unit (002V)*
- *Data Matrix Label absent: Other than the above*

2. After replacing the 2nd Belt Assembly, clear the following HFSI (DC135) counters.
   - 2nd Belt Assembly "Chain Link: 009-870"
   - 2nd Belt Assembly "Chain Link: 009-871"
3. When installing 2nd Belt Assembly (with 002V) to a machine with 2nd Belt Assembly (w/o 002V) installed, update the software to Ver. 5 or later.

REP 7.1.1 Fusing Unit

Parts List on PL 7.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

As the Fusing Unit is heavy, be careful about your posture, and position your hip lower to perform the work. (Fusing Unit: 53 kg or less)

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

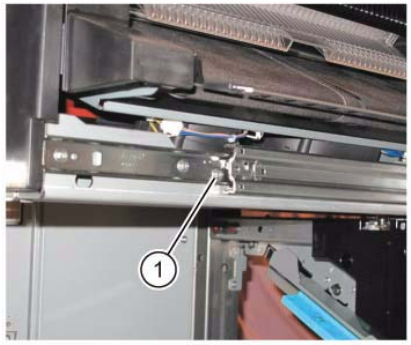


Figure 1 j0kol407001

4. Remove the Fusing WEB. (PL 7.2)
5. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

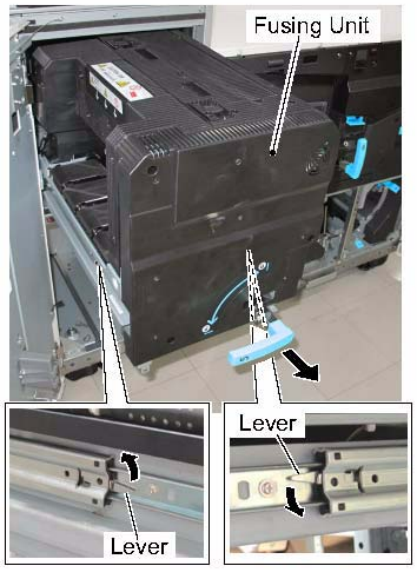


Figure 2 j0kol407002

6. As the Fusing Unit is heavy, remove the following parts to reduce the weight.
   - (SCC) V-Tra 4 Assembly (REP 7.3.1)
   - Fusing Belt Unit (REP 7.3.2)
   - Press Roll (REP 7.3.3)
   - Press Lever Assembly (REP 7.3.4)
7. Close the Fusing Right Assembly, and install the Stopper (x2).
8. Remove the Fusing Unit. (Figure 3)
   (1) Remove the 2nd of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

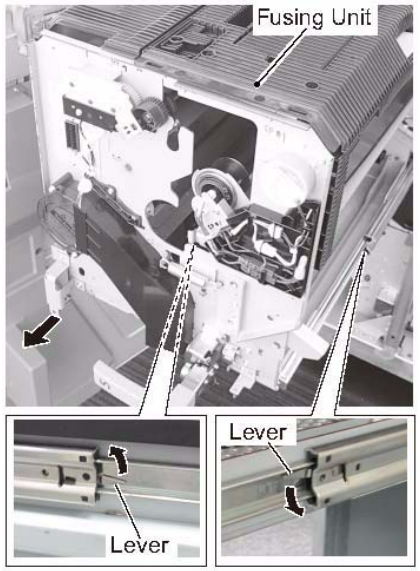


Figure 3 j0kol407003

Replacement

1. To install, carry out the removal steps in reverse order. During replacement, perform the following procedures.

   NOTE: *As the Fusing Rail of the Left/Right Fusing Rail Assembly remaining in the machine body cannot be removed, reuse it.*

2. Push in the Fusing Unit slowly.
   [When pushed in]
   Proceed to Step 6.
   [When not pushed in]
   Perform from Steps 3 to 5, but for the Red Screw, do not loosen it if possible.
3. Pull out the Fusing Unit.
4. Loosen the Red Screw (x2) that secures the Locate Bearing. (Figure 4)

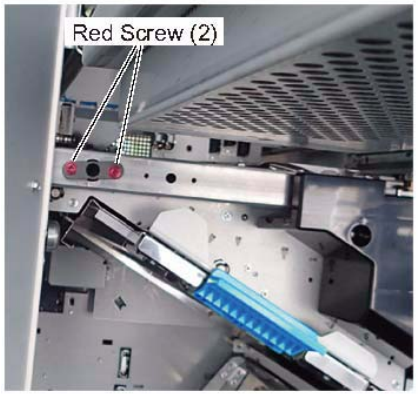


Figure 4 j0kol407004

5. Push in the Fusing Unit, tighten the Red Screw (x2) that was loosened in Step 4.
6. Clear the following HFSI (DC135) counters.
   "Chain Link: 010-800"
   "Chain Link: 010-801"
   "Chain Link: 010-802"
   "Chain Link: 010-803"
   "Chain Link: 010-804"
   "Chain Link: 010-805"
   "Chain Link: 010-806"
   "Chain Link: 010-807"
   "Chain Link: 010-808"
   "Chain Link: 010-809"
   "Chain Link: 010-810"
   "Chain Link: 010-811"

REP 7.3.1 (SCC) V-Tra 4 Assembly

Parts List on PL 7.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

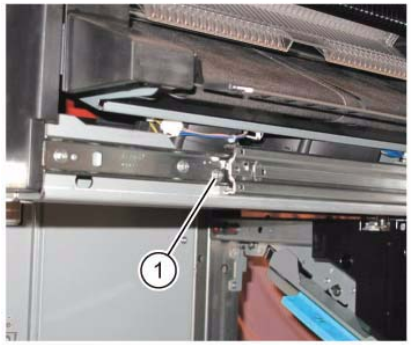


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

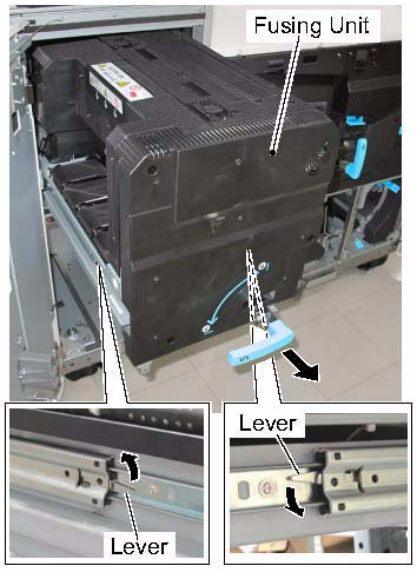


Figure 2 j0kol407002

5. Remove the Fusing Front Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

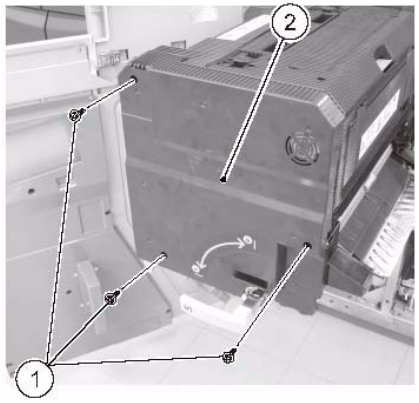


Figure 3 j0kol407005

6. Remove the Fusing Left Upper Cover. (Figure 4)
   (1) Remove the Screw (x4).

(2) Remove the Fusing Left Upper Cover.

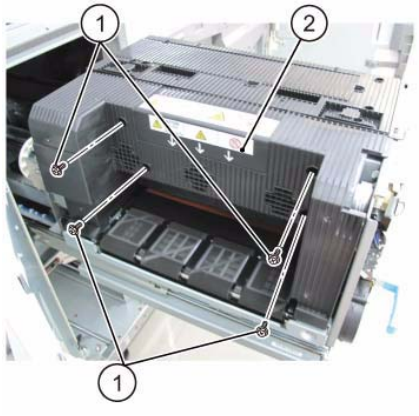


Figure 4 j0kol407006

7. Remove the Fusing Left Lower Cover. (Figure 5)
   (1) Remove the Screw.
   (2) Remove the Fusing Left Lower Cover.

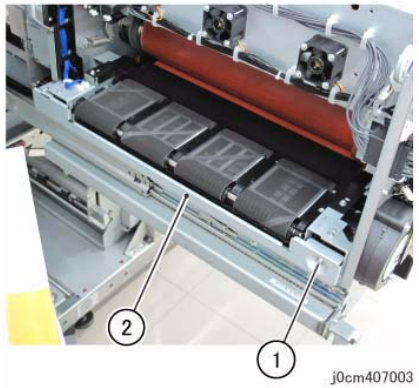


Figure 5 j0cm407003

8. Remove the Chute Assembly. (Figure 6)
   (1) Remove the Screw (x2).
   (2) Remove the Chute Assembly.

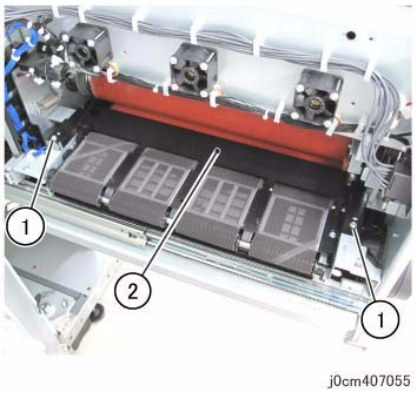


Figure 6 j0cm407055

9. Remove the V-Tra 4 Assembly. (Figure 7)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x2).
   (3) Remove the Screw (x2).
   (4) Remove the V-Tra 4 Assembly.

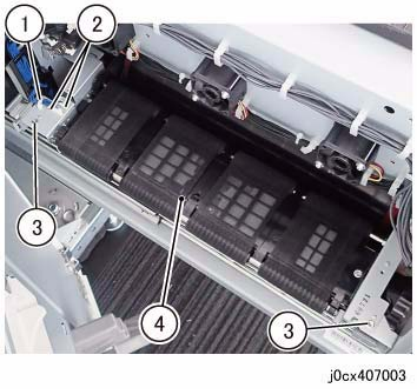


Figure 7 j0cx407003

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacement, clear the following HFSI (DC135) counter.
   "Chain Link: 010-811"

REP 7.3.2 Fusing Belt Unit

Parts List on PL 7.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

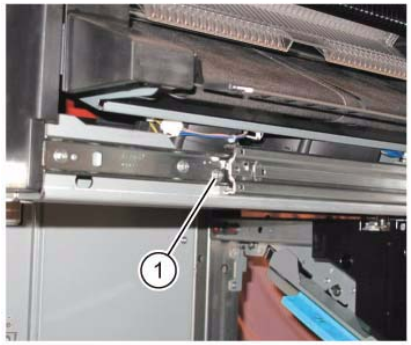


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

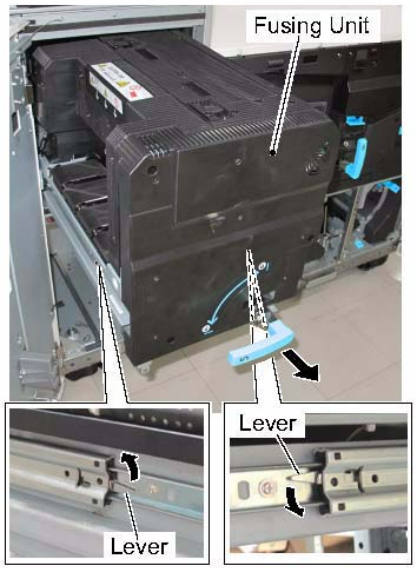


Figure 2 j0kol407002

5. Remove the Fusing Front Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

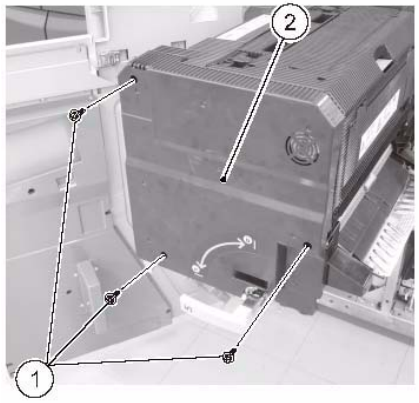


Figure 3 j0kol407005

6. Remove the Exit Cover. (Figure 4)
   (1) Remove the Screw (x2).

(2) Remove the Exit Cover.

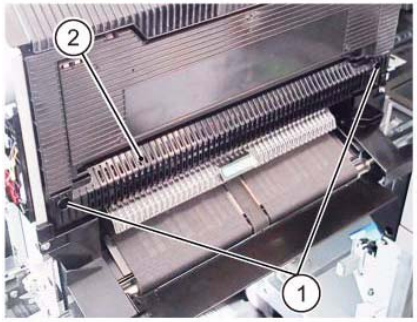


Figure 4 j0kol407007

7. Remove the Exit V-Tra Chute Assembly. (Figure 5)
   (1) Remove the Screw (x2).
   (2) Remove the Exit V-Tra Chute Assembly

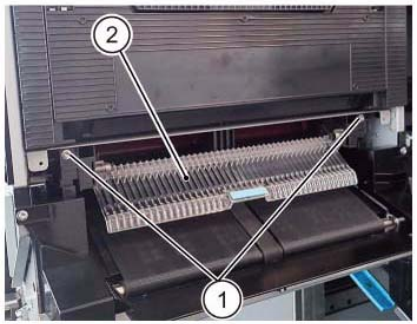


Figure 5 j0kol407008

8. Remove the Exit Front Cover. (Figure 6)
   (1) Remove the Screw.
   (2) Remove the Exit Front Cover.

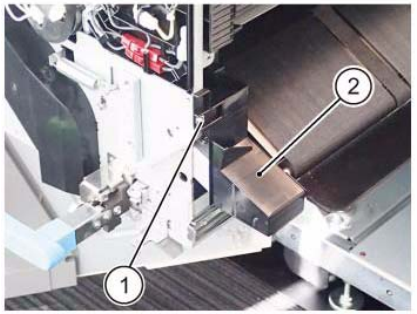


Figure 6 j0kol407009

9. Remove the Exit Rear Cover. (Figure 7)
   (1) Remove the Screw.
   (2) Remove the Exit Rear Cover.

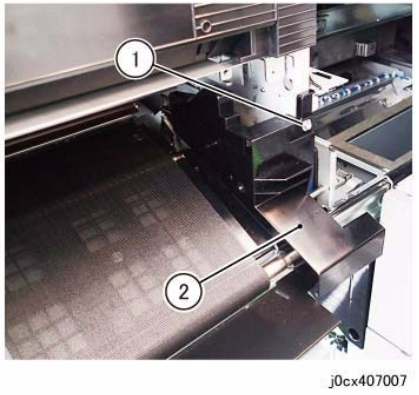


Figure 7 j0cx407007

10. Disconnect the Connector (x2), and move the Harness Bracket by removing the Screw. (Figure 8)
    (1) Release the wire harness from the Clamp.
    (2) Disconnect the Connector.
    (3) Disconnect the Connector.
    (4) Remove the Screw, and move it.

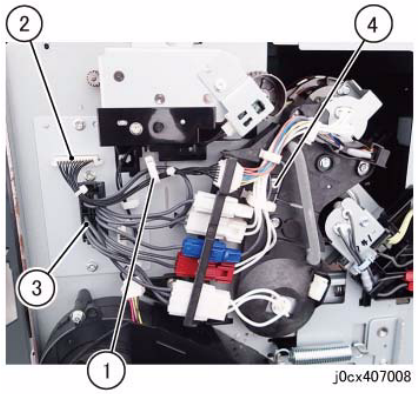


Figure 8 j0cx407008

11. Hold the U-shaped wire harness in place by using the Clamp. (Figure 9)
    (1) Fasten with the Clamp.

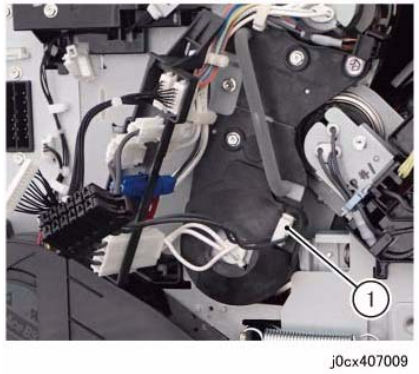


Figure 9 j0cx407009

12. Remove the Fusing Right Assembly by opening the Lock Pin Assembly (x2). (Figure 10)
    (1) Remove the Screw.
    (2) Remove the Lock Pin Assembly.
    (3) Remove the Screw.
    (4) Remove the Lock Pin Assembly.
    (5) Open the Fusing Right Assembly.

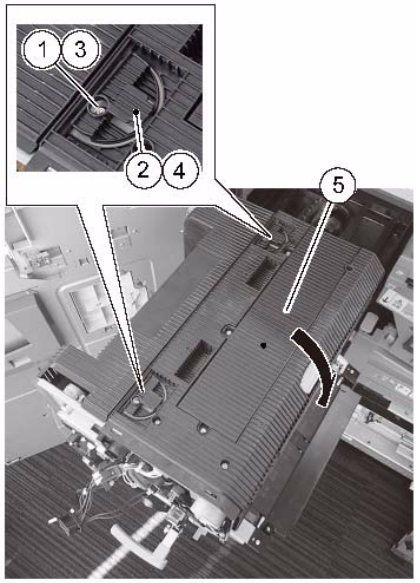


Figure 10 j0kol407010

13. With Fusing open, install the Lock Pin Assembly removed in Step 12. (Figure 11)
    (1) Install the Lock Pin Assembly.
    (2) Tighten the Screw.

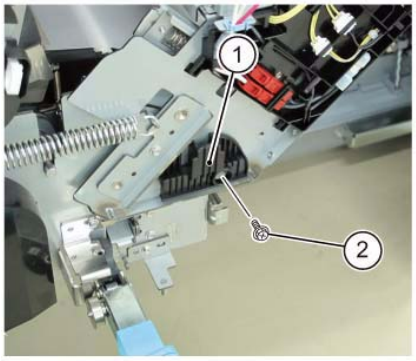


Figure 11 j0kol407011

14. Remove the Fusing Belt Unit by holding the front and rear Handles. (Figure 12)
    (1) Remove the Fusing Belt Unit by holding the Handles.

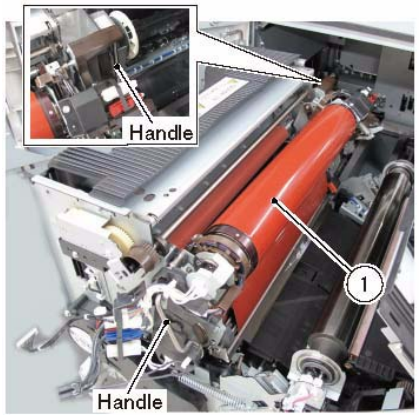


Figure 12 j0kol407013

NOTE: *When attaching and detaching the Fusing Belt Unit, align the arrow shown in the figure to the Left Frame Assembly at the Rear. (Figure 13)*

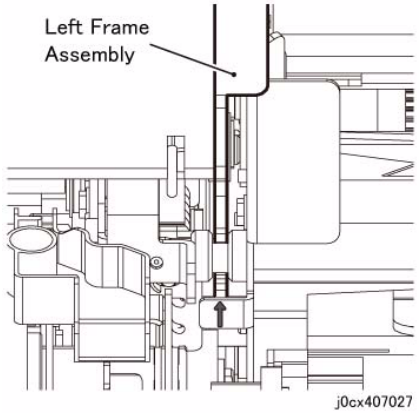


Figure 13 j0cx407027

15. Stand the Fusing Belt Unit up. (Figure 14)
    (1) Stand the Fusing Belt Unit up.

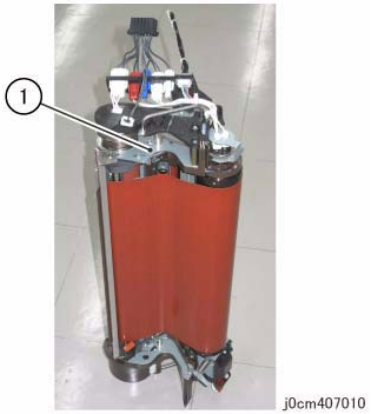


Figure 14 j0cm407010

Replacement

1. To install, carry out the removal steps in reverse order.

REP 7.3.3 Press Roll

Parts List on PL 7.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

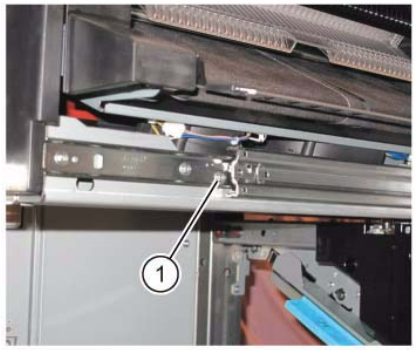


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

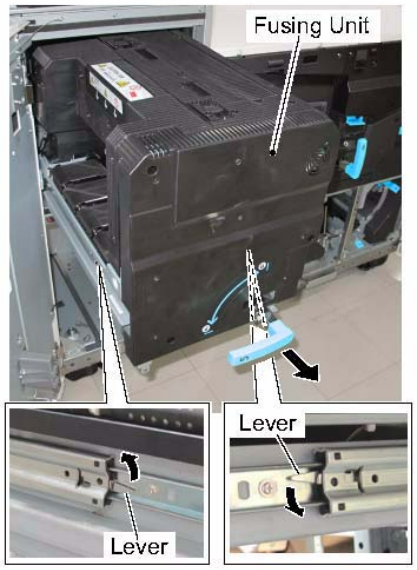


Figure 2 j0kol407002

5. Remove the Fusing Front Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

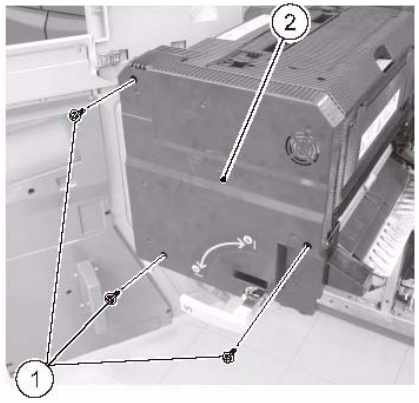


Figure 3 j0kol407005

6. Remove the Exit Cover. (Figure 4)
   (1) Remove the Screw (x2).

(2) Remove the Exit Cover.

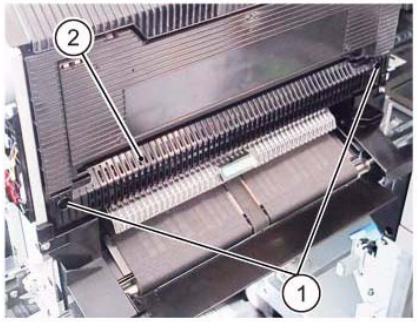


Figure 4 j0kol407007

7. Remove the Exit V-Tra Chute Assembly. (Figure 5)
   (1) Remove the Screw (x2).
   (2) Remove the Exit V-Tra Chute Assembly.

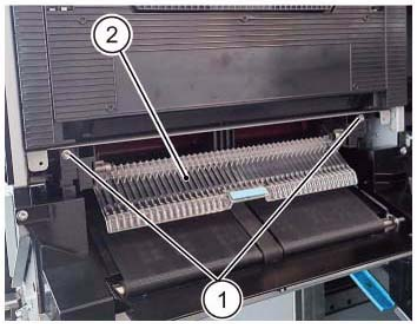


Figure 5 j0kol407008

8. Remove the Exit Front Cover. (Figure 6)
   (1) Remove the Screw.
   (2) Remove the Exit Front Cover.

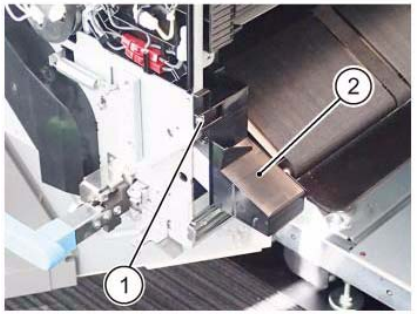


Figure 6 j0kol407009

9. Remove the Exit Rear Cover. (Figure 7)
   (1) Remove the Screw.
   (2) Remove the Exit Rear Cover.

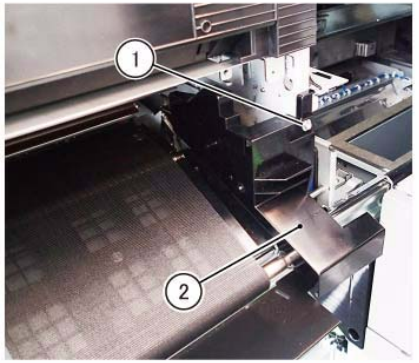


Figure 7 j0cx407007

10. Remove the Exit V-Tra Assembly. (Figure 8)
    (1) Release the wire harness from the Clamp (x3).
    (2) Disconnect the Connector (x2).
    (3) Remove the Screw (x2).
    (4) Remove the Exit V-Tra Assembly.

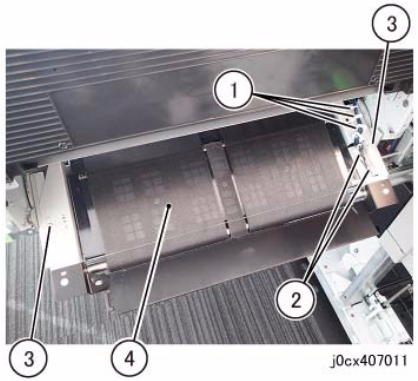


Figure 8 j0cx407011

11. Remove the Fusing Belt Unit. (REP 7.3.2)
12. Remove the P/R Finger Assembly. (Figure 9)
    (1) Remove the spring (x2).
    (2) Remove the P/R Finger Assembly.

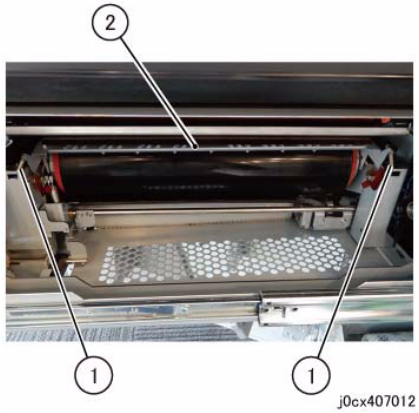


Figure 9 j0cx407012

13. Hold the front and back handles, and remove the Press Roll. (Figure 10)
    (1) Remove the Press Roll.

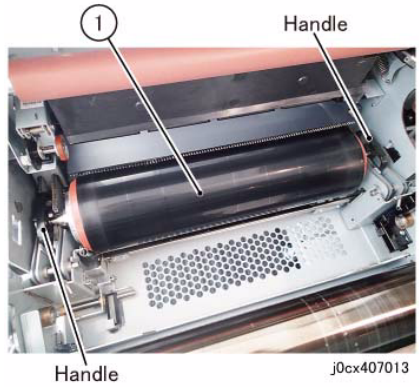


Figure 10 j0cx407013

Replacement

1. To install, carry out the removal steps in reverse order.
2. During replacement, remove the front and back handles, and attach them to the new Press Roll.
3. After replacement, clear the following HFSI (DC135) counter.
   "Chain Link: 010-804"

REP 7.3.4 Press Lever Assembly

Parts List on PL 7.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

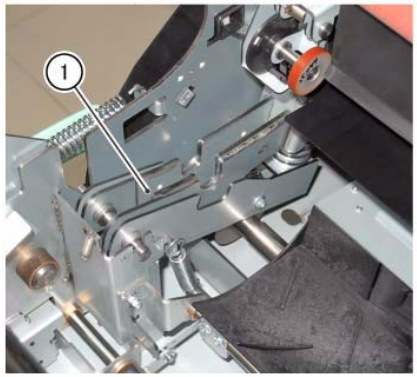
WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

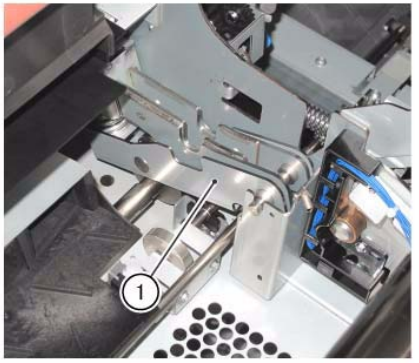
1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Press Roll. (REP 7.3.3)
4. Remove the Press Lever Assembly at the Front. (Figure 1)
   (1) Remove the Press Lever Assembly.



j0cm407015

Figure 1 j0cm407015

5. Remove the Press Lever Assembly at the Rear. (Figure 2)
   (1) Remove the Press Lever Assembly.



j0cm407016

Figure 2 j0cm407016

Replacement

1. To install, carry out the removal steps in reverse order.

REP 7.4.1 Fusing Belt

Parts List on PL 7.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

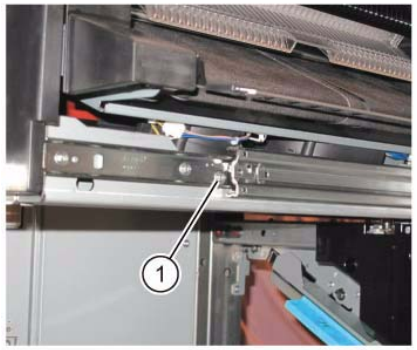


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

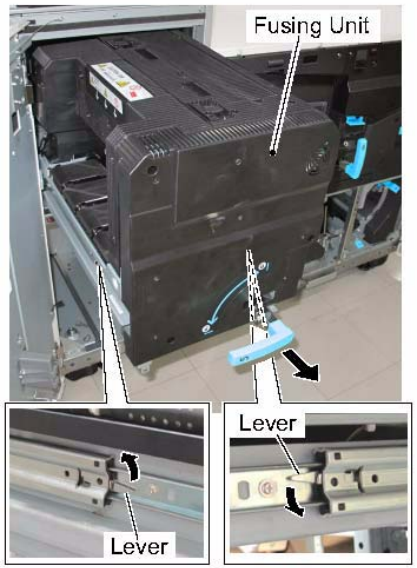


Figure 2 j0kol407002

5. Remove the Fusing Belt Unit. (REP 7.3.2)
6. Remove the Baffle Assembly. (Figure 3)
   (1) Remove the spring.
   (2) Remove the spring.
   (3) Remove the Baffle Assembly.

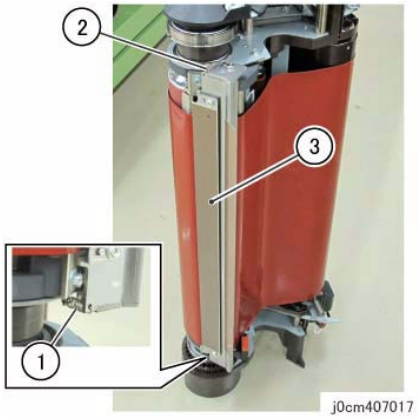


Figure 3 j0cm407017

7. Remove the Fusing Belt. (Figure 4)

NOTE: *Remove it carefully so as not to catch the Wire Harness.*

(1) Remove the Fusing Belt.

Figure 4 j0cm407018

Replacement

1. To install, carry out the removal steps in reverse order. For the installation of Fusing Belt, perform the following procedures.
2. Remove the ECO Rear Lower Cover. (PL 4.9)
3. Take out the Fusing Belt Guide Film stored in the ECO Box Unit, and insert it with the larger diameter facing down onto the Fusing Belt Unit. (Figure 5)

Figure 5 j0cx407031

4. Insert the Fusing Belt along the Fusing Belt Guide Film to the guide position, and pull out the Fusing Belt Guide Film. (Figure 6)

NOTE: *To prevent damage to the edges of the Fusing Belt, be careful not to push strongly against the Guide or make contact with other parts.*

Figure 6 j0cm407024

NOTE: *When replacing to a new Fusing Belt, replace also the following parts at the same time.*

- Belt Oil Wick Assembly (REP 7.4.3)
- Pad Assembly (REP 7.14.2)

5. After replacement, clear the following HFSI (DC135) counter.
"Chain Link: 010-801"
"Chain Link: 010-803"
"Chain Link: 010-806"

REP 7.4.2 (SCC) Heat Lamp

Parts List on PL 7.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

NOTE: *Do not touch the glass portion of the Heat Lamp directly with your hands. If you touched it, wipe it with a dry cloth, etc.*

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Fusing Belt Unit. (REP 7.3.2)
4. Remove the Fusing Belt. (REP 7.4.1)
5. Put paper, etc. on the floor, and set the Fusing Belt Unit horizontally.
6. Disconnect the Connector. (Figure 1)
   (1) Release the wire harness from the Clamp (x2).
   (2) Disconnect the Connector.

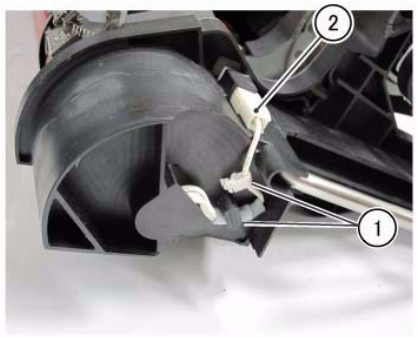


Figure 1 j0cm407032

7. Disconnect the Connector and release the Wire Harness. (Figure 2)
   (1) Disconnect the Connector and release the Wire Harness.

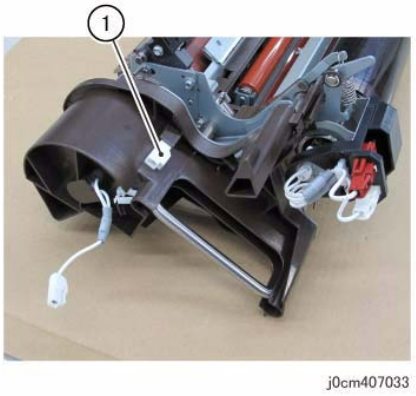


Figure 2 j0cm407033

8. Remove the Rear Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Rear Cover.

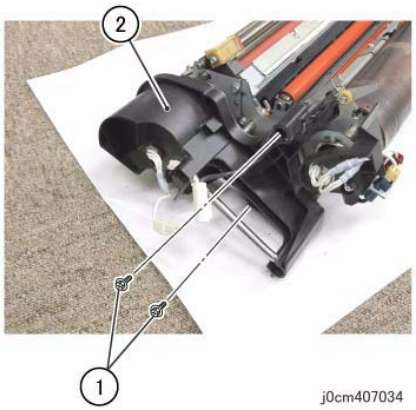
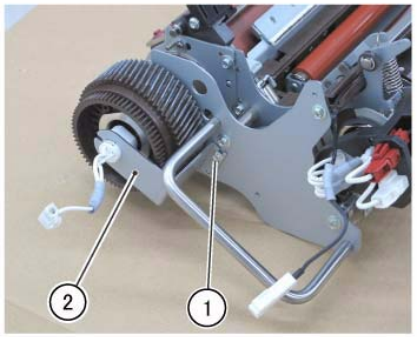


Figure 3 j0cm407034

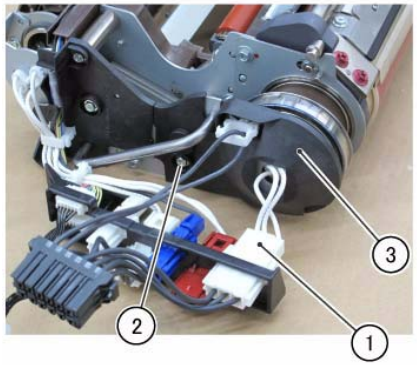
9. Remove the Rear Lamp Bracket. (Figure 4)
   (1) Loosen the Screw.
   (2) Remove the Rear Lamp Bracket.



j0cm407035

Figure 4 j0cm407035

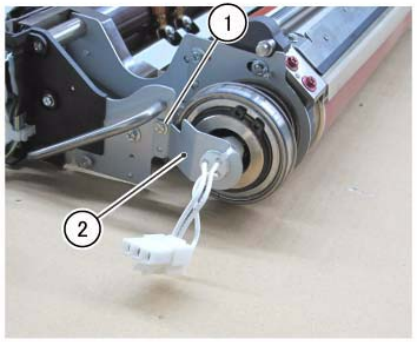
10. Remove the Front Lower Cover. (Figure 5)
    (1) Disconnect the Connector.
    (2) Remove the Screw.
    (3) Remove the Front Lower Cover.



j0cm407036

Figure 5 j0cm407036

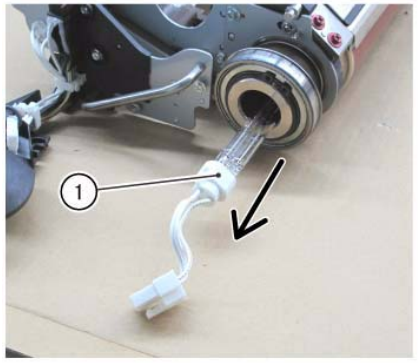
11. Remove the Front Lamp Bracket. (Figure 6)
    (1) Loosen the Screw.
    (2) Remove the Front Lamp Bracket.



j0cm407037

Figure 6 j0cm407037

12. Remove the Heat Lamp. (Figure 7)
    (1) Pull out the Heat Lamp.



j0cm407038

Figure 7 j0cm407038

Replacement

1. To install, carry out the removal steps in reverse order. For the installation of Heat Lamp, perform the following procedures.
2. Remove the ECO Rear Lower Cover. (PL 4.9)
3. Take out the Fusing Lamp Guide stored in the ECO Box Unit, and insert the Heat Lamp in the Fusing Lamp Guide. (Figure 8)

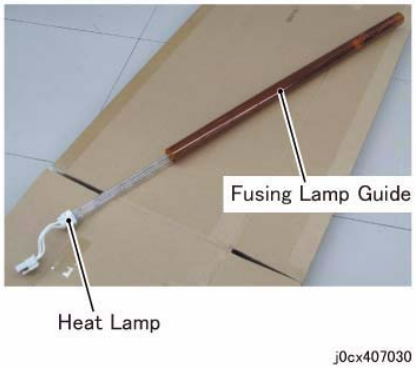


Figure 8 j0cx407030

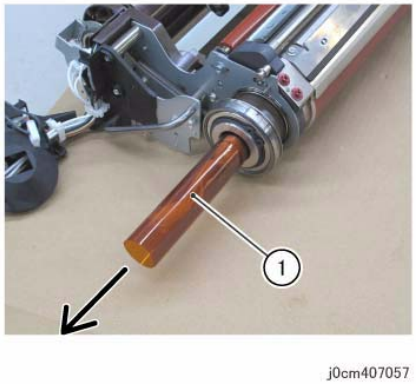


Figure 10 j0cm407057

4. Insert the Fusing Lamp Guide in the Heat Roll until it appears from the other side, push only the Heat Lamp further and the Connector out the other side. (Figure 9)
   (1) Insert the Fusing Lamp Guide.
   (2) Push the Heat Lamp further, and push the Connector to the other side.

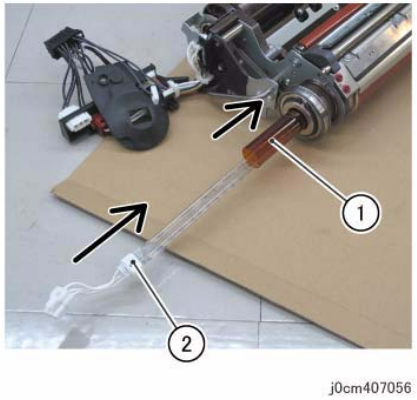


Figure 9 j0cm407056

5. Pull out the Fusing Lamp Guide. (Figure 10)
   (1) Pull out the Fusing Lamp Guide.

REP 7.4.3 Belt Oil Wick Assembly

Parts List on PL 7.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

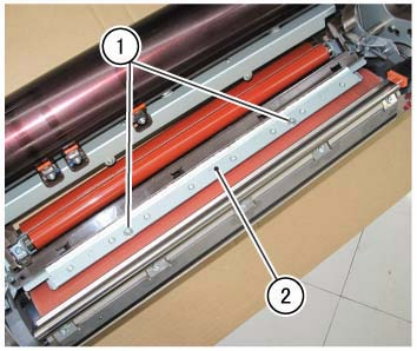
WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Fusing Belt Unit. (REP 7.3.2)
4. Remove the Fusing Belt. (REP 7.4.1)
5. Put paper, etc. on the floor, and set the Fusing Belt Unit horizontally.
6. Remove the Belt Oil Wick Assembly. (Figure 1)
   (1) Loosen the Screw (x2).
   (2) Remove the Belt Oil Wick Assembly.



j0cm407047

Figure 1 j0cm407047

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

   NOTE: *If there is excess oil (oil streaks, droplets) on the installation surface of the Belt Oil Wick Assembly or each Roll, wipe it off with a cloth, etc.*

2. Secure the Belt Oil Wick Assembly until it touches the Screw (x2). (Figure 2)

j0cm407048

Figure 2 j0cm407048

NOTE: *When replacing to a new Belt Oil Wick Assembly, replace also the following parts at the same time.*

- *Pad Assembly (*REP 7.14.2*)*

3. After replacing the Belt Oil Wick Assembly, clear the following HFSI (DC135) counters.
   "Chain Link: 010-801"
   "Chain Link: 010-806"

REP 7.5.1 Transport Belt

Parts List on PL 7.5

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Remove the V-Tra Motor 4 Assembly. (Figure 1)
   (1) Release the wire harness from the clamp (x2).
   (2) Disconnect the connector (x2).
   (3) Remove the screw (x3).
   (4) Remove the V-Tra Motor 4 Assembly.

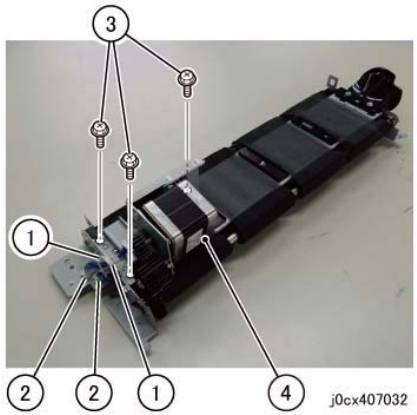


Figure 1 j0cx407032

2. Remove the Idler Roll. (Figure 2)
   (1) Loosen the tension of the Idler Roll, and remove the Idler Roll in the direction of the arrow.

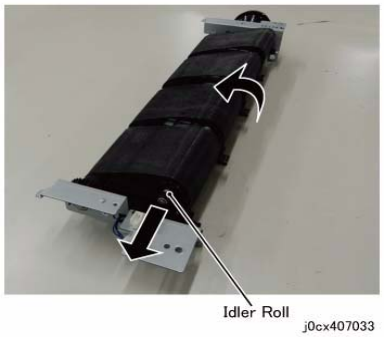


Figure 2 j0cx407033

NOTE: *Idler Roll has grease applied to the following 2 locations. (Figure 3)*

i. Conductive grease

ii. Dry grease (SANKOL)

When removing the Idler Roll, be careful that the applied grease (especially conductive grease) does not adhere to the Transport Belt. If it adheres, it may cause fusing failure, print stains, transfer failure, etc.

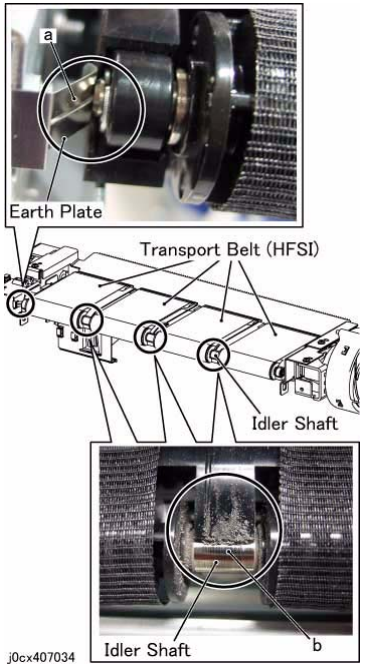


Figure 3 j0cx407034

3. Remove the Frame. (Figure 4)
   (1) Remove the KL-Clip.
   (2) Remove the Ball Bearing.
   (3) Remove the screw (x2).
   (4) Remove the Frame.

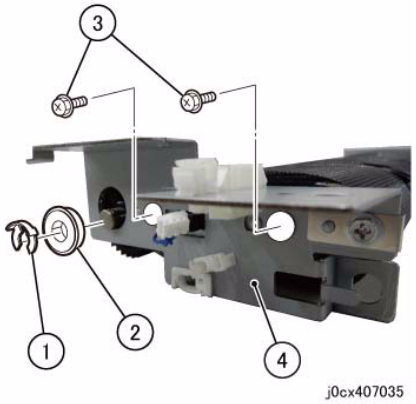


Figure 4 j0cx407035

4. Remove the Transport Belt. (Figure 5)
   (1) Remove the Drive Gear.
   (2) Remove the Transport Belt in the direction of the arrow.

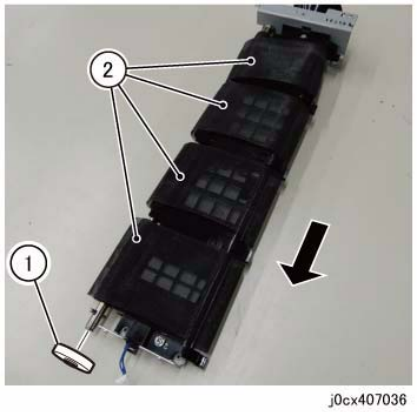


Figure 5 j0cx407036

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Transport Belt, clear the following HFSI (DC135) counters.

"Chain Link: 010-811"

REP 7.7.1 External Heat Roll Assembly

Parts List on PL 7.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

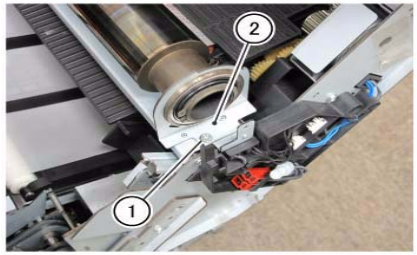
WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the E/R Main Lamp 1/2 & E/R Sub Lamp. (REP 7.7.2)
4. Remove the Front Bearing Holder. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the Front Bearing Holder.



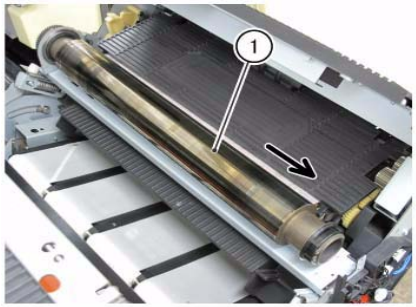
j0cm407026

Figure 1 j0cm407026

5. Slide the External Heat Roll Assembly towards the Front and remove it. (Figure 2)

   NOTE: *Be careful not to deform the E/R STS 1/2/3 when removing the External Heat Roll Assembly.*

   (1) Remove the External Heat Roll Assembly.



j0cm407027

Figure 2 j0cm407027

Replacement

1. To install, carry out the removal steps in reverse order.

REP 7.7.2 (SCC) E/R Main Lamp 1/2 & E/R Sub Lamp

Parts List on PL 7.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

NOTE: *Do not touch the glass portion of the E/R Main Lamp 1/2 & E/R Sub Lamp directly with your hands. If you touched it, wipe it with a dry cloth, etc.*

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

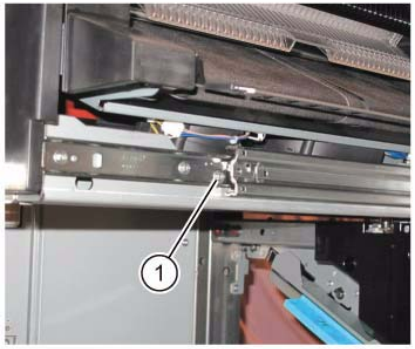


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

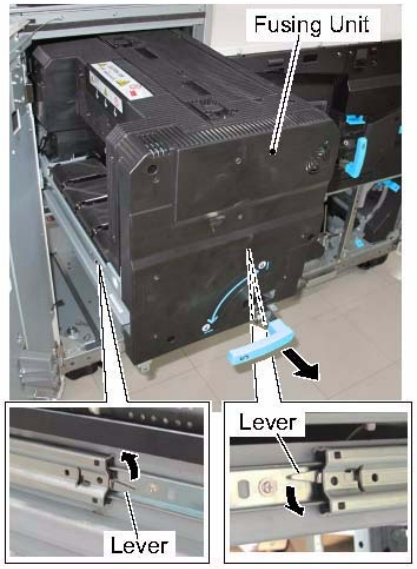


Figure 2 j0kol407002

5. Remove the Fusing Front Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

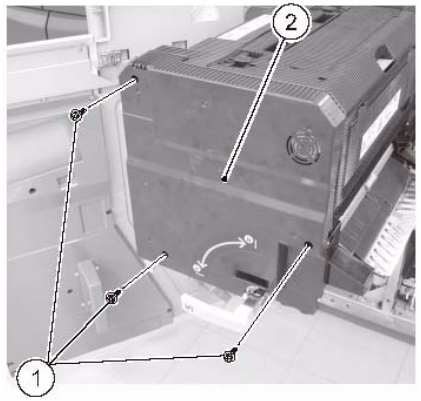


Figure 3 j0kol407005

6. Remove the Exit Cover. (Figure 4)
   (1) Remove the Screw (x2).

(2) Remove the Exit Cover.

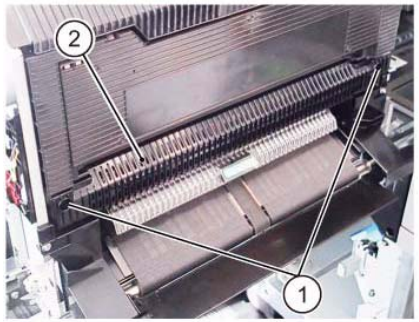


Figure 4 j0kol407007

7. Remove the Exit V-Tra Chute Assembly. (Figure 5)
   (1) Remove the Screw (x2).
   (2) Remove the Exit V-Tra Chute Assembly.

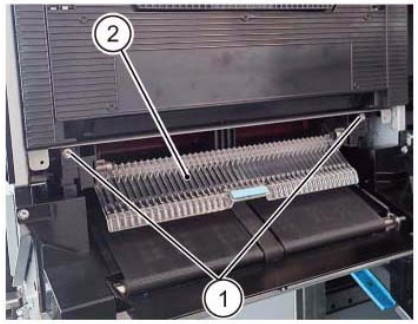


Figure 5 j0kol407008

8. Remove the Exit Front Cover. (Figure 6)
   (1) Remove the Screw.
   (2) Remove the Exit Front Cover.

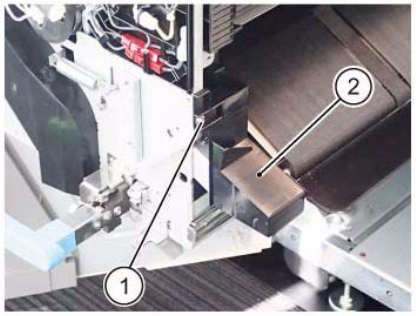


Figure 6 j0kol407009

9. Remove the Exit Rear Cover. (Figure 7)
   (1) Remove the Screw.
   (2) Remove the Exit Rear Cover.

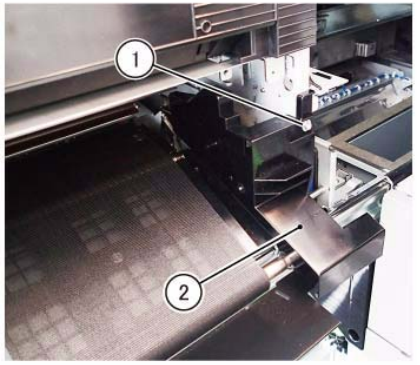


Figure 7 j0cx407007

10. Remove the Fusing Right Assembly by opening the Lock Pin Assembly (x2). (Figure 8)
    (1) Remove the Screw.
    (2) Remove the Lock Pin Assembly.
    (3) Remove the Screw.
    (4) Remove the Lock Pin Assembly.
    (5) Open the Fusing Right Assembly.

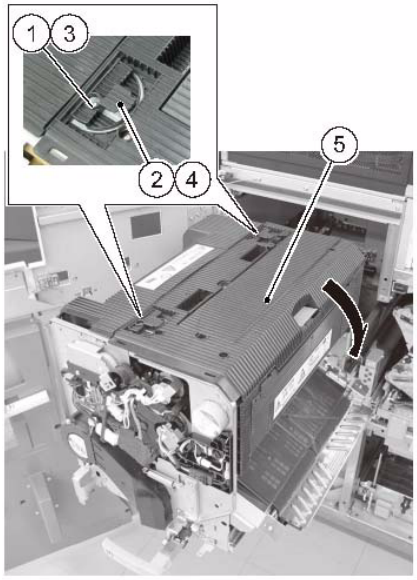


Figure 8 j0kol407012

11. With Fusing open, install the Lock Pin Assembly removed in Step 10. (Figure 9)
    (1) Install the Lock Pin Assembly.
    (2) Tighten the Screw.

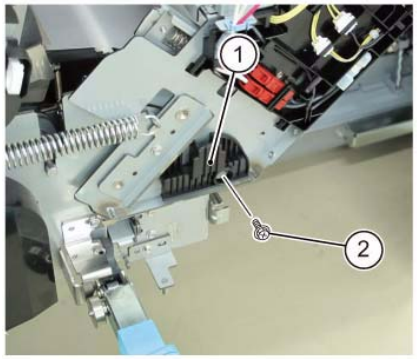


Figure 9 j0kol407011

12. Remove the Rear Lamp Bracket. (Figure 10)
    (1) Release the wire harness from the Harness Guide.
    (2) Disconnect the Connector (x2).
    (3) Remove the Screw.
    (4) Remove the Rear Lamp Bracket.

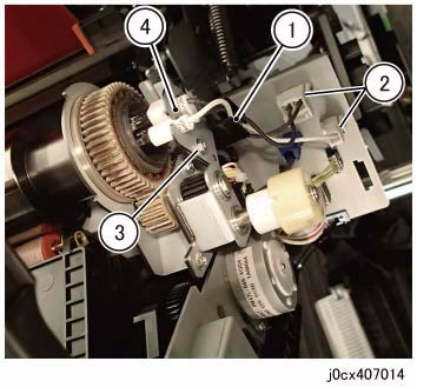


Figure 10 j0cx407014

13. Remove the Front Lamp Bracket. (Figure 11)
    (1) Release the wire harness from the harness holder.
    (2) Disconnect the Connector (Wire: Red).
    (3) Disconnect the Connector (Wire: White).
    (4) Release the wire harness from the Clamp.
    (5) Remove the Screw.
    (6) Remove the Front Lamp Bracket.

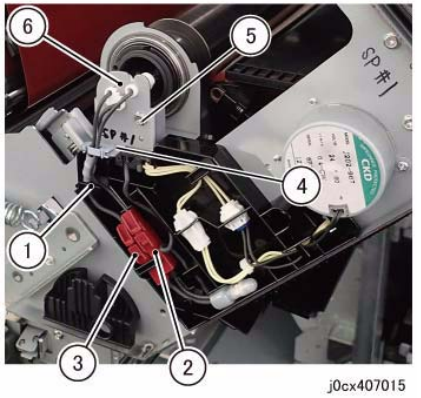


Figure 11 j0cx407015

14. Pull out the E/R Main Lamp 1/2 & E/R Sub Lamp. (Figure 12)

(1) Pull out the E/R Main Lamp 1/2 & E/R Sub Lamp.

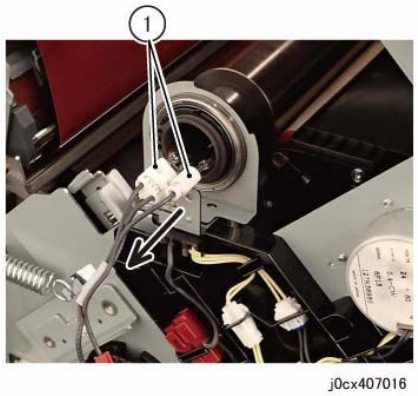


Figure 12 j0cx407016

Replacement

1. To install, carry out the removal steps in reverse order. For the installation of E/R Main Lamp 1/2 & E/R Sub Lamp, perform the following procedures.
2. Remove the ECO Rear Lower Cover. (PL 4.9)
3. Take out the Fusing Lamp Guide stored in the ECO Box Unit, and insert the E/R Main Lamp 1/2 & E/R Sub Lamp in the Fusing Lamp Guide. (Figure 13)

Figure 13 j0cx407028

4. Insert the Fusing Lamp Guide in the External Heat Roll until it appears from the other side, push only the E/R Main Lamp 1/2 & E/R Sub Lamp further and the Connector out the other side. (Figure 14)
   (1) Insert the Fusing Lamp Guide.
   (2) Push the E/R Main Lamp 1/2 & E/R Sub Lamp further, and push the Connector to the other side.

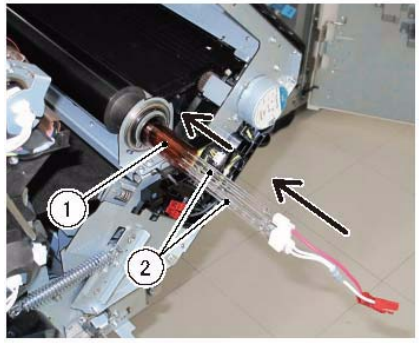


Figure 14 j0kol407014

5. Pull out the Fusing Lamp Guide.

REP 7.9.1 (SCC) IRS Sensor 1/2

Parts List on PL 7.9

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

1. Remove the V-Tra4 Assembly. (REP 7.3.1)
2. Remove the Sensor Bracket. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Release the Push Tie.
   (3) Remove the Clamps (x4).
   (4) Disconnect the Connector (x2).

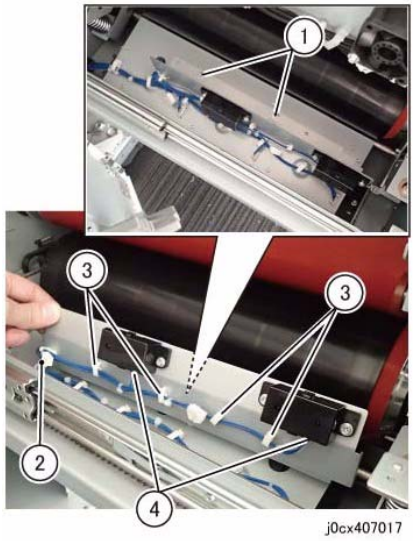


Figure 1 j0cx407017

3. Remove the IRS Sensor 1/2. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the IRS Sensor 1/2.

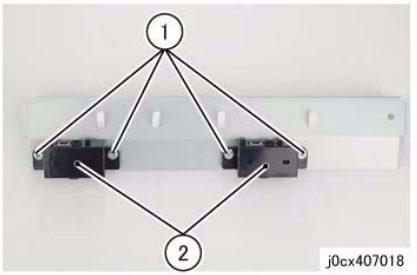


Figure 2 j0cx407018

Replacement

1. To install, carry out the removal steps in reverse order.

REP 7.12.1 (SCC) Fusing Motor

Parts List on PL 7.12

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

1. Remove the IOT-R Rear Left Cover. (PL 19.9)
2. Remove the Fusing Motor. (Figure 1)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x4).
   (3) Remove the Fusing Motor.

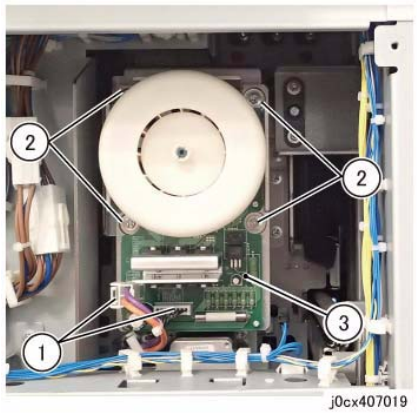


Figure 1 j0cx407019

Replacement

1. To install, carry out the removal steps in reverse order.

REP 7.13.1 Encoder Assembly

Parts List on PL 7.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

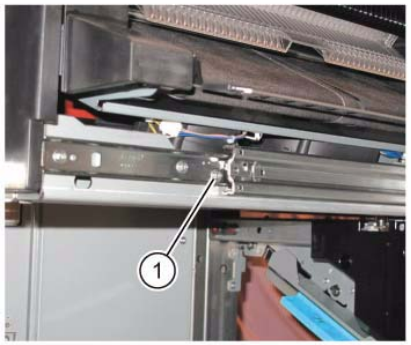


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

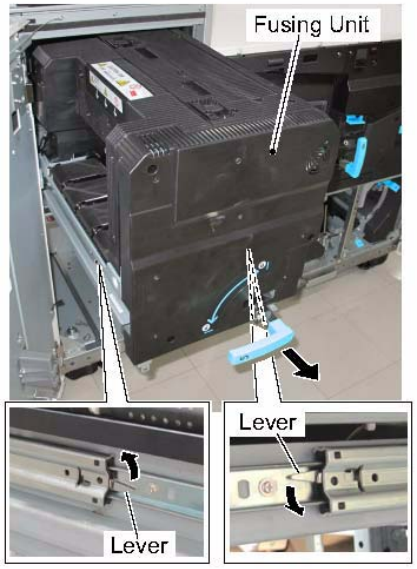


Figure 2 j0kol407002

5. Remove the Fusing Front Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

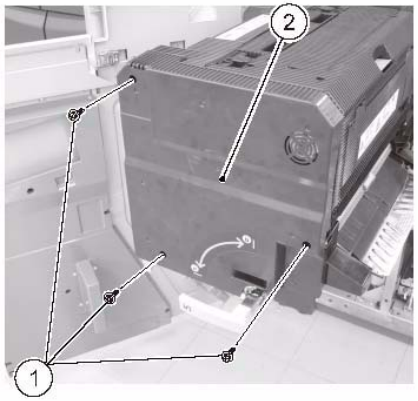


Figure 3 j0kol407005

6. Remove the Fusing Left Upper Cover. (Figure 4)
   (1) Remove the Screw (x4).
   (2) Remove the Fusing Left Upper Cover.

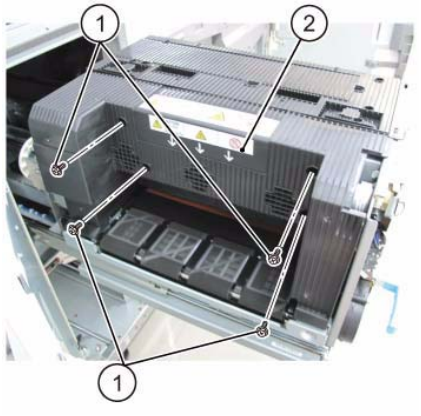


Figure 4 j0kol407006

7. Remove the Fusing Belt Unit. (REP 7.3.2)
8. Remove the Encoder Assembly. (Figure 5)
   (1) Remove the Screw.
   (2) Remove the Screw.
   (3) Remove the Encoder Assembly.

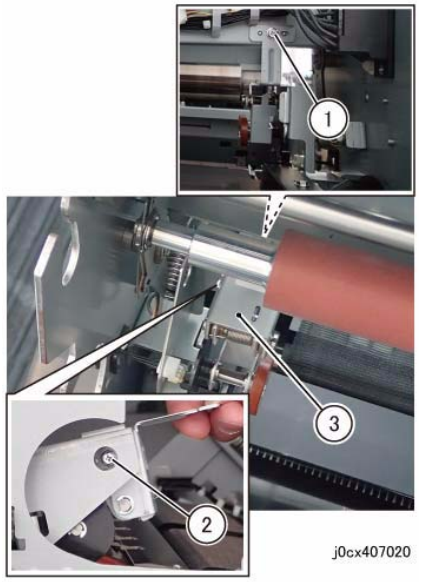


Figure 5 j0cx407020

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Encoder Assembly, rewrite NVM for the external diameter data described on the Encoder Roll.

   NVM: "741-029"

REP 7.13.2 Belt Walk Sensor Assembly

Parts List on PL 7.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

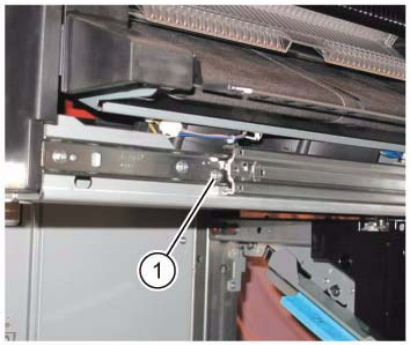


Figure 1 j0kol407001

4. Pull out the Fusing Unit further up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Fusing Rail by moving the Lever, and pull out the Fusing Unit further.

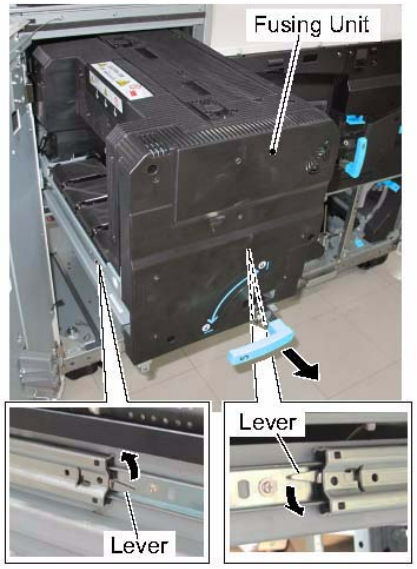


Figure 2 j0kol407002

5. Remove the Fusing Front Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

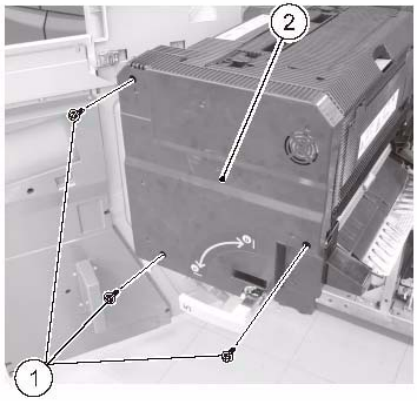


Figure 3 j0kol407005

6. Remove the Fusing Left Upper Cover. (Figure 4)
   (1) Remove the Screw (x4).
   (2) Remove the Fusing Left Upper Cover.

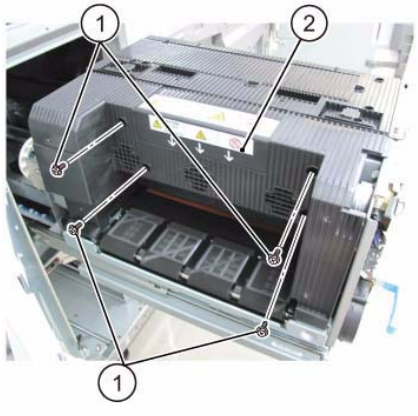


Figure 4 j0kol407006

7. Remove the Sensor Cover. (Figure 5)
   (1) Remove the Push Tie.
   (2) Remove the Connector (x3).
   (3) Remove the Screw.
   (4) Remove the Sensor Cover.

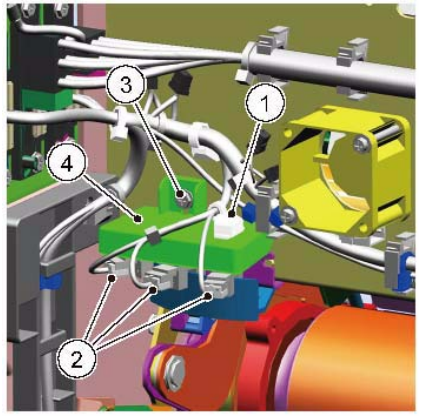


Figure 5 j0kol407015

8. Remove the Belt Walk Sensor Assembly. (Figure 6)
   (1) Remove the Screw.
   (2) Remove the Belt Walk Sensor Assembly.

NOTE: *Be careful when attaching and detaching the Actuator because it is easy to break.*

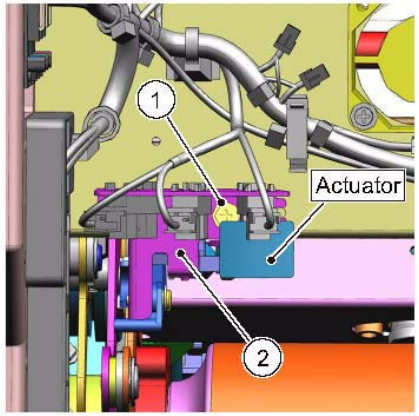


Figure 6 j0kol407016

REP 7.14.1 (SCC) I/R Main Lamp 1/2 & I/R Sub Lamp 1/2

Parts List on PL 7.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

NOTE: *Do not touch the glass portion of the I/R Main Lamp 1/2 & I/R Sub Lamp 1/2 directly with your hands. If you touched it, wipe it with a dry cloth, etc.*

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Fusing Belt Unit. (REP 7.3.2)
4. Remove the Fusing Belt. (REP 7.4.1)
5. Put paper, etc. on the floor, and set the Fusing Belt Unit horizontally.
6. Disconnect the Connector (x2). (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x2).

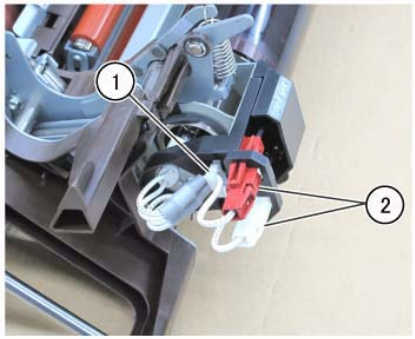
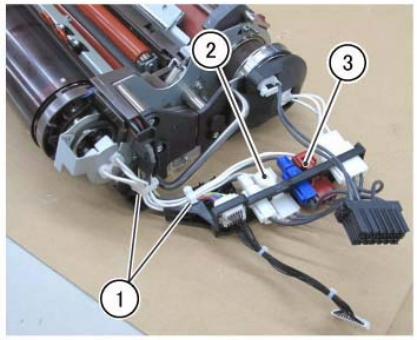


Figure 1 j0cm407028

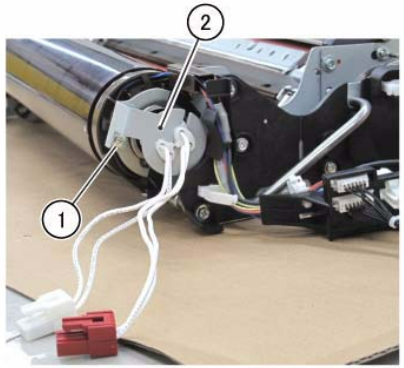
7. Release the wire harness. (Figure 2)
   (1) Release the wire harness from the Clamp (x2).
   (2) Disconnect the Connector (white).
   (3) Disconnect the Connector (red).



j0cm407059

Figure 2 j0cm407059

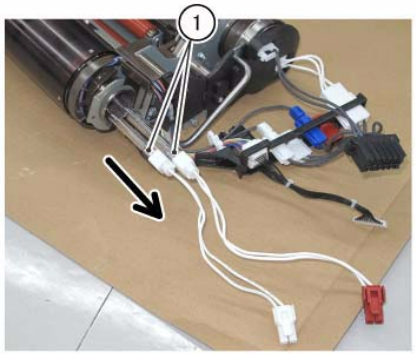
8. Remove the Lamp Holder. (Figure 3)
   (1) Loosen the Screw.
   (2) Remove the Lamp Holder.



j0cm407029

Figure 3 j0cm407029

9. Remove the I/R Main Lamp 1/2 & I/R Sub Lamp 1/2. (Figure 4)
   (1) Pull out the I/R Main Lamp 1/2 & I/R Sub Lamp 1/2.



j0cm407030

Figure 4 j0cm407030

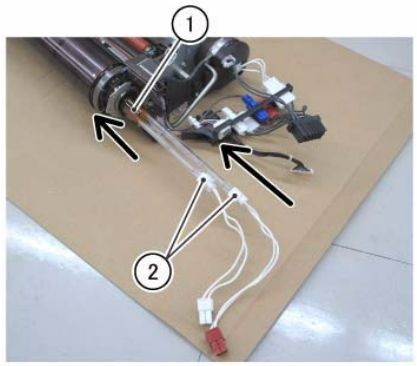
Replacement

1. To install, carry out the removal steps in reverse order. For the installation of I/R Main Lamp 1/2 & I/R Sub Lamp 1/2, perform the following procedures.
2. Remove the ECO Rear Lower Cover. (PL 4.9)
3. Take out the Fusing Lamp Guide stored in the ECO Box Unit, and insert the I/R Main Lamp 1/2 & I/R Sub Lamp 1/2 in the Fusing Lamp Guide. (Figure 5)

j0cx407029

Figure 5 j0cx407029

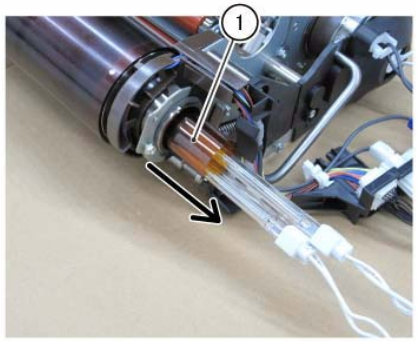
4. Insert the Fusing Lamp Guide in the Internal Heat Roll until it appears from the other side, push only the I/R Main Lamp 1/2 & I/R Sub Lamp 1/2 further and the Connector out the other side. (Figure 6)
   (1) Insert the Fusing Lamp Guide.
   (2) Push the I/R Main Lamp 1/2 & I/R Sub Lamp 1/2 further, and push the Connector to the other side.



j0cm407060

Figure 6 j0cm407060

5. Pull out the Fusing Lamp Guide. (Figure 7)
   (1) Pull out the Fusing Lamp Guide.



j0cm407061

Figure 7 j0cm407061

REP 7.14.2 Pad Assembly

Parts List on PL 7.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

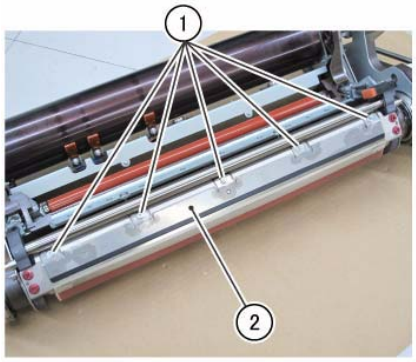
WARNING

Do not work on a hot Fusing Unit until it is cool enough.

CAUTION

Be sure to close the IOT-L Front Cover before pulling out the Fusing Unit.

1. Open the IOT-R Front Left Cover.
2. Pull out the Fusing Unit.
3. Remove the Fusing Belt Unit. (REP 7.3.2)
4. Remove the Fusing Belt. (REP 7.4.1)
5. Put paper, etc. on the floor, and set the Fusing Belt Unit horizontally.
6. Remove the Plate Assembly. (Figure 1)
   (1) Loosen the Screw (x5).
   (2) Remove the Plate Assembly.



j0cm407049

Figure 1 j0cm407049

7. Remove the Pad Assembly. (Figure 2)
   (1) Remove the Pad Assembly.

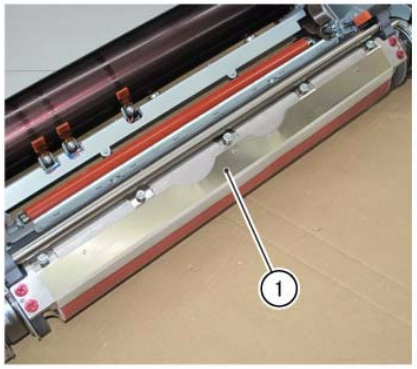


Figure 2 j0cm407050

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

   NOTE: *If oil is accumulated or adhered to the Pad Assembly installation surface or edge of the Plate Assembly, wipe it off with a cloth*

   NOTE: *When replacing to a new Pad Assembly, replace also the following parts at the same time.*

   - *Belt Oil Wick Assembly (*REP 7.4.3*)*

2. After replacing the Pad Assembly, clear the following HFSI (DC135) counters.

   "Chain Link: 010-801"

   "Chain Link: 010-806"

REP 8.1.1 Auger Motor 1 Assembly

Parts List on PL 8.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Left Cover. (REP 19.5.1)
3. Remove the IOT-L Rear Mid LH Cover. (PL 19.5)
4. Open the Left PWB Chassis Assembly. (Figure 1)
   (1) Remove the Screw (x8).
   (2) Open the Left PWB Chassis Assembly.
   (3) Release the Clamp.
   (4) Rotate the Stopper and insert it in the hole of the Bracket.

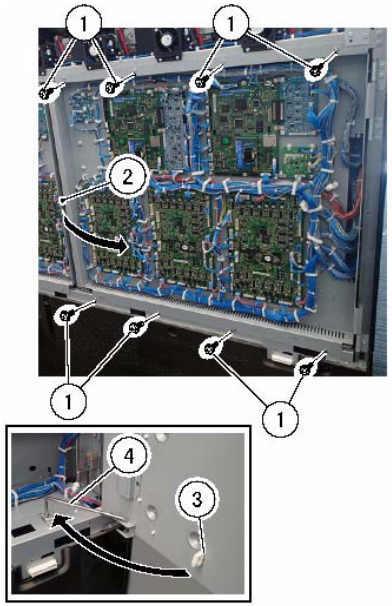


Figure 1 j0kol408001

5. Remove the Auger Motor 1 Assembly. (Figure 2)
   (1) Disconnect the Connector.
   (2) Loosen the Screw (x2).
   (3) Remove the Auger Motor 1 Assembly.

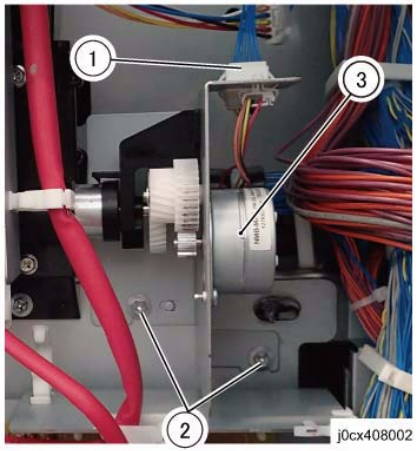


Figure 2 j0cx408002

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Auger Motor 1 Assembly, clear the following HFSI (DC135) counter.
   - Auger Motor 1 "Chain Link: 009-858"

REP 8.1.2 Down Joint Assembly

Parts List on PL 8.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Right Cover. (PL 19.5)
3. Remove the IOT-L Rear Mid Cover. (PL 19.5)
4. Open the Right PWB Chassis Assembly. (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Release the wire harness from the Clamp (x2).
   (3) Remove the Screw (x6).
   (4) Open the Right PWB Chassis Assembly.

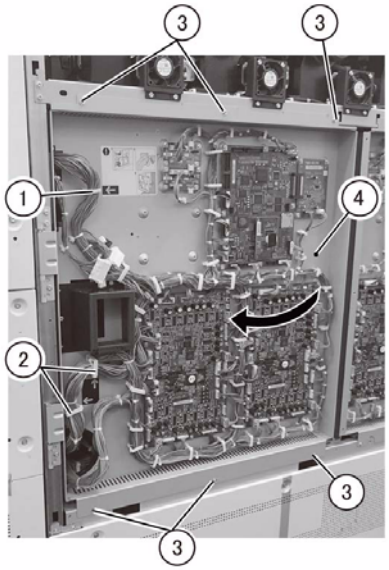


Figure 1 dar404001

5. Remove the Down Joint Assembly. (Figure 2)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x5).
   (3) To correct the position of Auger in the Tube, rotate the Gear, and move the Tab to the position shown.
   (4) Pull out the Down Joint Assembly towards you, and remove it.

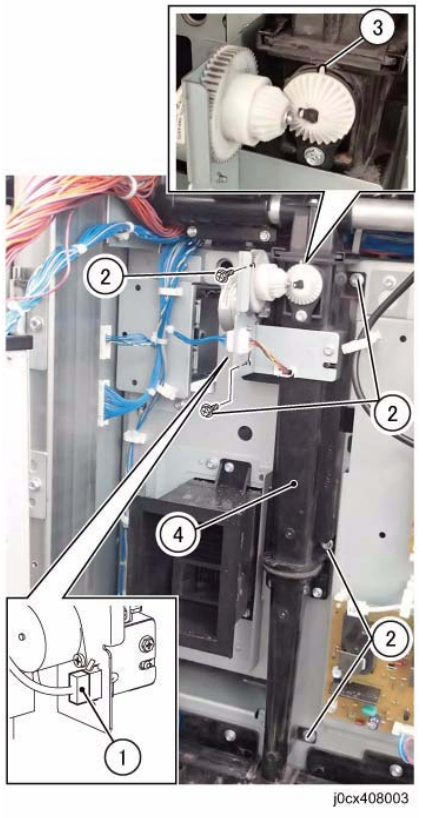


Figure 2 j0cx408003

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When installing the Down Joint Assembly, in order to prevent Auger breakage inside the Tube, make sure that the Tab of the Gear is in the position shown in the figure before installing it. (Figure 3)*

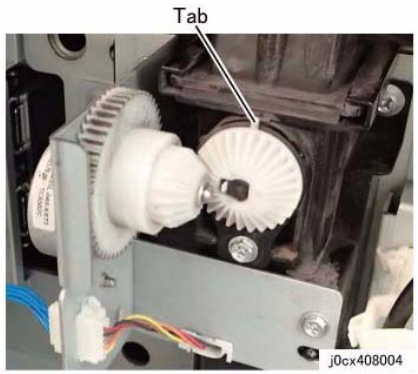


Figure 3 j0cx408004

2. When closing the Right PWB Chassis, be careful of pinching the Wire Harness.
3. After replacing the Down Joint Assembly, clear the following HFSI (DC135) counter.
   - Toner Collect Motor "Chain Link: 009-860"

REP 8.1.3 BTB Joint Assembly

Parts List on PL 8.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Right Cover. (PL 19.5)
3. Remove the IOT-L Rear Mid Cover. (PL 19.5)
4. Open the Right PWB Chassis Assembly. (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Release the wire harness from the Clamp (x2).
   (3) Remove the Screw (x6).
   (4) Open the Right PWB Chassis Assembly.

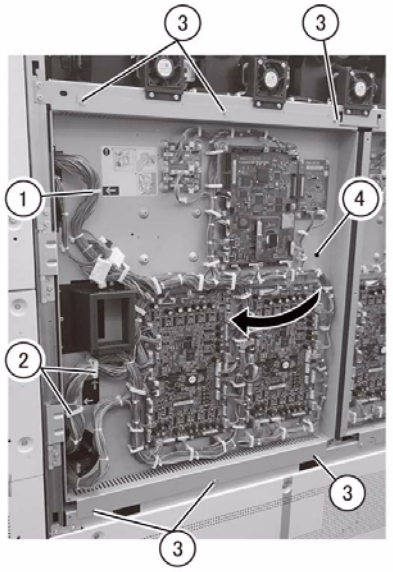


Figure 1 dar404001

5. Before removing the BTB Joint Assembly, check that the position of the Auger of the Down Joint Assembly is a safe position. (Figure 2)
   (1) Rotate the Gear so that the Tab of the Gear is in the position shown.

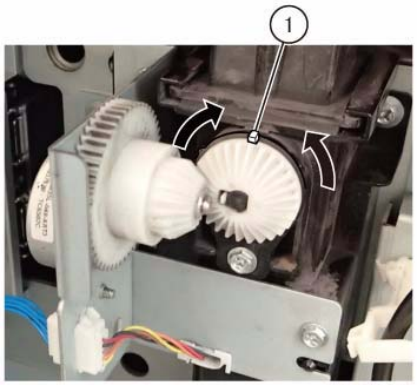


Figure 2 j0cx408005

6. Remove the BTB Joint Assembly. (Figure 3)

   NOTE: *When removing the BTB Joint Assembly, lay paper under the BTB Joint Assembly when working as the toner may fall.*

   (1) Remove the Screw.
   (2) Slide the L&R Pipe to the right.
   (3) Release the Clamp and Wire Harness (x2).
   (4) Disconnect the Connector.
   (5) Remove the Screw (x3).
   (6) Remove the BTB Joint Assembly.

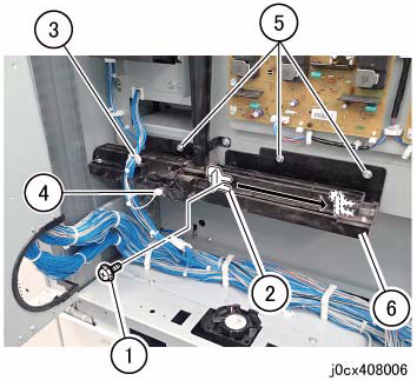


Figure 3 j0cx408006

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *After installing the BTB Joint Assembly, install the L & R Pipe properly. Fail Code (091-323 IOT-L & IOT-R Joint Sensor Fail) will be displayed if you forget to install it.*

   NOTE: *When closing the Right PWB Chassis, be careful of pinching the Wire Harness.*

REP 8.2.1 Joint Assembly (#6)

Parts List on PL 8.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the Main Pipe Assembly, lay paper under the Main Pipe Assembly when working as the toner may fall.*

1. Remove the Drive Fan Assembly. (REP 18.1.1)
2. Remove the Main Pipe Assembly. (REP 8.2.3)
3. Release the Harness from the Joint Assembly (#6). (Figure 1)
   (1) Release the harness from the Clamp (x2).
   (2) Release the harness from the Clamp.

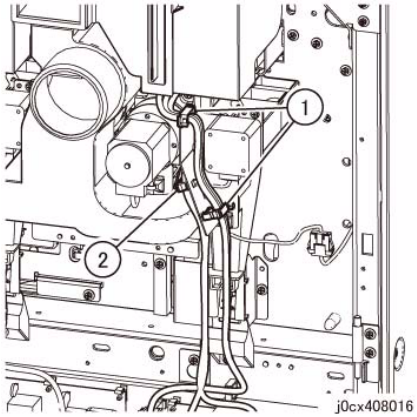


Figure 1 j0cx408016

4. Remove the Joint Assembly (#6). (Figure 2)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the Joint Assembly (#6).

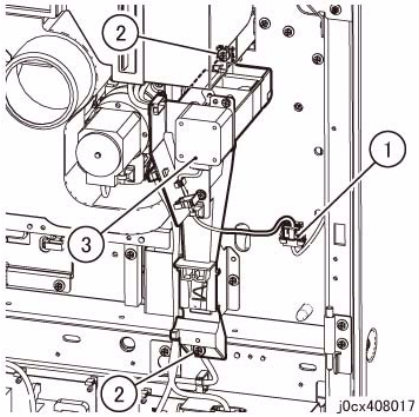


Figure 2 j0cx408017

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

REP 8.2.2 Joint Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5))

Parts List on PL 8.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for Joint Assembly (K (#5)) are described here. The steps for other Joint Assemblies (#1/Y (#2)/M (#3)/C (#4)) are the same as (K) #5.*

NOTE: *When removing the Main Pipe Assembly, lay paper under the Main Pipe Assembly when working as the toner may fall.*

1. Remove the Drive Fan Assembly. (REP 18.1.1)
2. Remove the Main Pipe Assembly. (REP 8.2.3)
3. Remove the Duct Assembly (#6). (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Duct Assembly (#6).

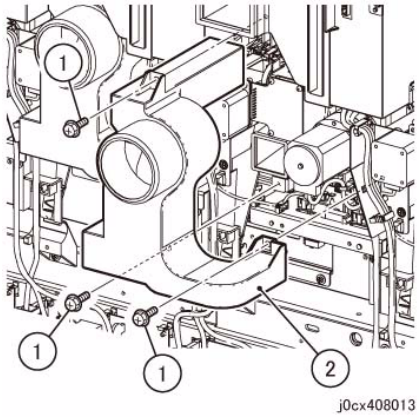


Figure 1 j0cx408013

4. Release the Harness from the Joint Assembly (K (#5)). (Figure 2)
   (1) Release the harness from the Clamp (x2).
   (2) Release the harness from the Clamp.

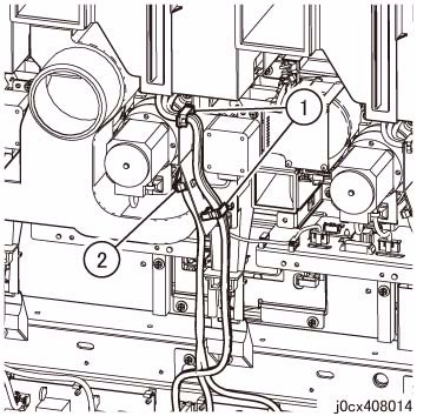


Figure 2 j0cx408014

5. Remove the Joint Assembly (K (#5)). (Figure 3)
   (1) Disconnect the Connector.
   (2) Release the harness from the Clamp (x2).
   (3) Remove the Screw (x2).
   (4) Remove the Joint Assembly (K (#5)).

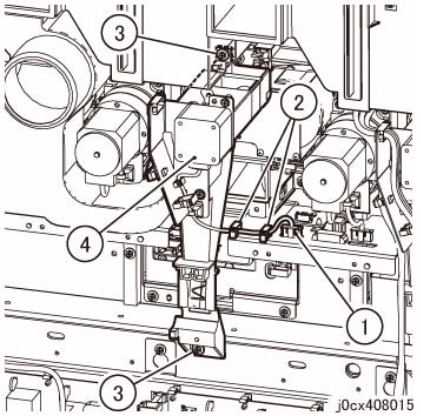


Figure 3 j0cx408015

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

REP 8.2.3 Main Pipe Assembly

Parts List on PL 8.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When removing the Main Pipe Assembly, lay paper under the Main Pipe Assembly when working as the toner may fall.*

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Left Cover. (REP 19.5.1)
3. Remove the IOT-L Rear Mid Cover. (PL 19.5)
4. Remove the IOT-L Rear Mid LH Cover. (PL 19.5)
5. Open the Right PWB Chassis Assembly. (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Release the wire harness from the Clamp (x2).
   (3) Remove the Screw (x6).
   (4) Open the Right PWB Chassis Assembly.

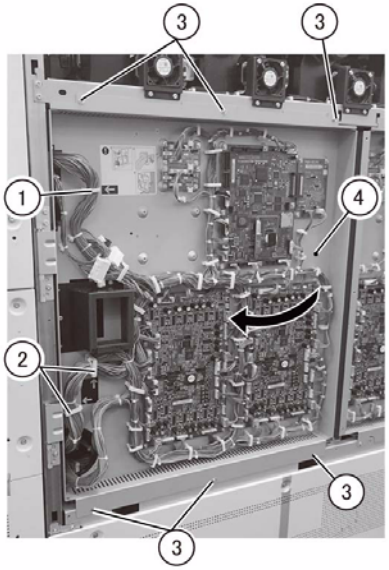


Figure 1 dar404001

6. Open the Left PWB Chassis Assembly. (Figure 2)
   (1) Remove the Screw (x8).
   (2) Open the Left PWB Chassis Assembly.
   (3) Release the Clamp.
   (4) Rotate the Stopper and insert it in the hole of the Bracket.

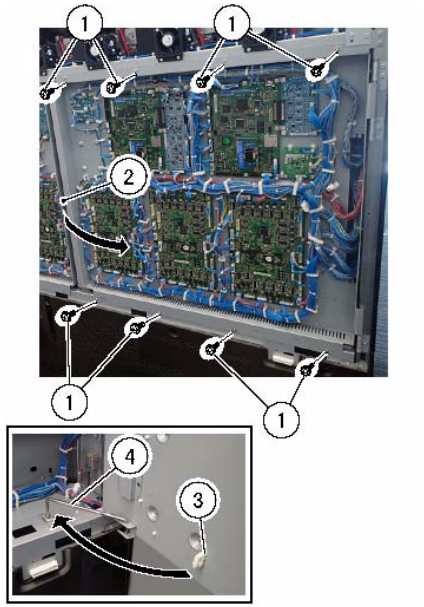


Figure 2 j0kol408001

7. [#1 Used Type Only] Release the Harness connected to the Developer HVPS (#1). (Figure 3)
   (1) Disconnect the Connector.
   (2) Release the harness from the Clamp (x2).

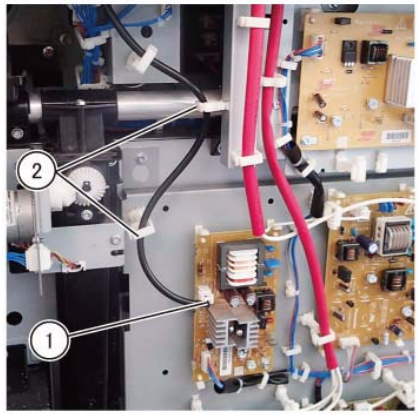


Figure 3 j0cx408024

8. Remove the HVPS Assembly (Y (#2)). (Figure 4)
   (1) Disconnect the Connector (x2).
   (2) Release the harness from the Clamp.
   (3) Release the harness from the Clamp (x5).
   (4) Release the harness from the Clamp.
   (5) Release the harness from the Clamp (x3).
   (6) Remove the Screw (x4).
   (7) Remove the Developer HVPS Assembly (Y (#2)).

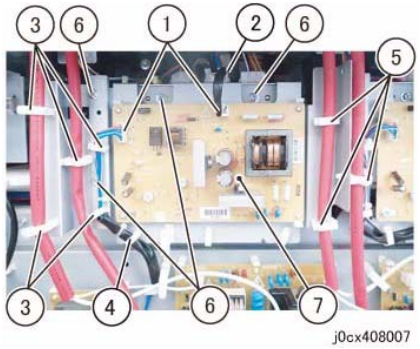


Figure 4 j0cx408007

9. Remove the Developer HVPS Assembly (M (#3)). (Figure 5)
   (1) Disconnect the Connector (x2).
   (2) Release the harness from the Clamp.
   (3) Release the harness from the Clamp (x2).
   (4) Release the harness from the Clamp (x4).
   (5) Release the harness from the Clamp (x3).
   (6) Remove the Screw (x4).
   (7) Remove the Developer HVPS Assembly (M (#3)).

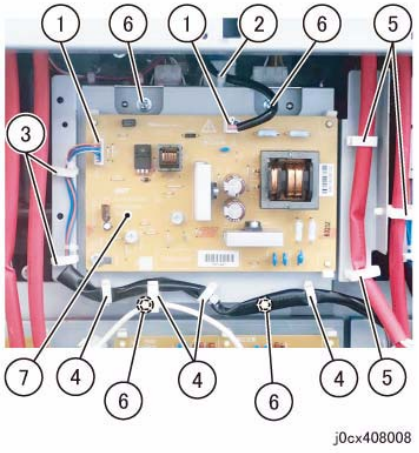
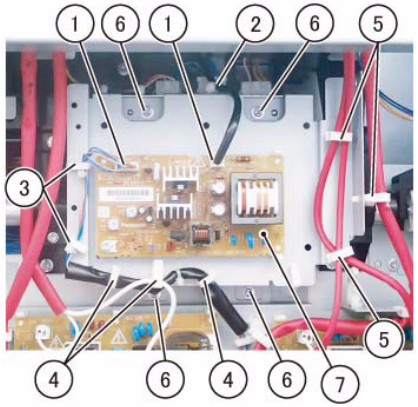


Figure 5 j0cx408008

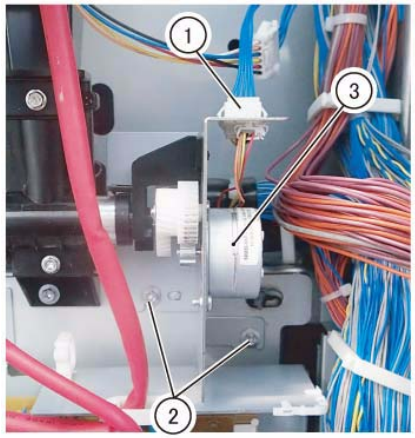
10. Remove the Developer HVPS Assembly (C (#4)/K (#5)) the same as Step 7.
11. [#6 Used Type Only] Remove Developer HVPS Assembly (#6). (Figure 6)
    (1) Disconnect the Connector (x2).
    (2) Release the harness from the Clamp.
    (3) Release the harness from the Clamp (x2).
    (4) Release the harness from the Clamp (x2), and remove the Push Tie.
    (5) Release the harness from the Clamp (x3).
    (6) Remove the Screw (x4).
    (7) Remove the Developer HVPS Assembly (#6).



j0cx408009

Figure 6 j0cx408009

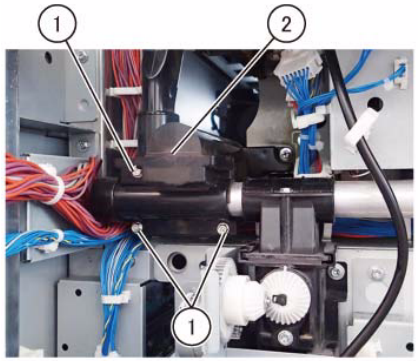
12. Remove the Auger Motor Assembly 1. (Figure 7)
    (1) Disconnect the Connector.
    (2) Loosen the Screw (x2).
    (3) Remove the Auger Motor Assembly 1.



j0cx408010

Figure 7 j0cx408010

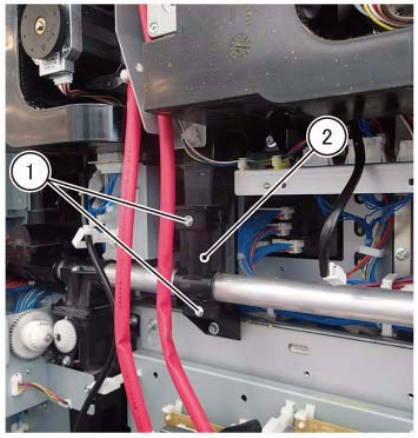
13. Pull the IBT Frame Assembly toward you to release the Cleaner Auger from the Main Pipe Assembly. (Perform up to Step 5 of REP 6.1.1)
14. Remove the Joint Cover. (Figure 8)
    (1) Remove the Tapping Screw (x3).
    (2) Remove the Joint Cover.



j0cx408011

Figure 8 j0cx408011

15. Remove the Pipe Lower Cover (x6). However, the illustration is a representative description of 1 location. (Figure 9)
    (1) Remove the Screw (x2).
    (2) Remove the Pipe Lower Cover.



j0cx408012

Figure 9 j0cx408012

16. Remove the Main Pipe Assembly. (Figure 10)
    (1) Lay paper under the Main Pipe Assembly to prevent toner falling.
    (2) Remove the Pipe Support of Main Pipe Assembly from the Down Joint Assembly, and remove the Main Pipe Assembly. Remove the Harness which interferes with the Main Pipe Assembly first if necessary.

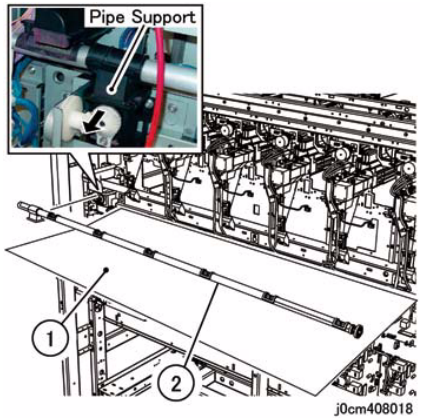


Figure 10 j0cm408018

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When closing the Right PWB Chassis Assembly, be careful of pinching the Harness.*

REP 8.6.1 Cleaner Motor Assembly (#6)

Parts List on PL 8.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Left Cover. (REP 19.5.1)
3. Move the Rear Drive Fan Assembly (#6) to the position shown. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Release the harness from the Clamp (x2).
   (3) Move the Rear Drive Fan Assembly (#6).

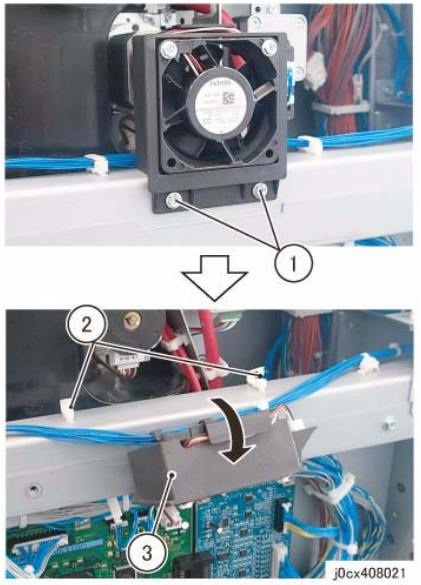


Figure 1 j0cx408021

4. Disconnect the Connector of the Cleaner Motor Assembly (K (#5)). (Figure 2)
   (1) Disconnect the Connector.

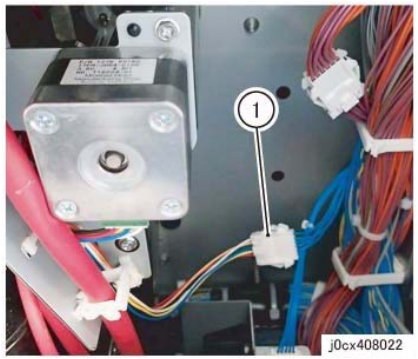


Figure 2 j0cx408022

5. Remove the Cleaner Motor Assembly (#6). (Figure 3)
   (1) Release the harness from the Clamp (x3).
   (2) Remove the Screw (x2).
   (3) Remove the Cleaner Motor Assembly (#6).

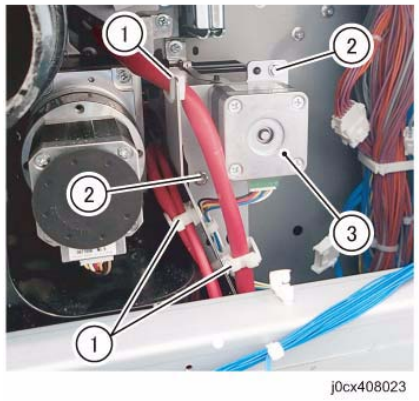


Figure 3 j0cx408023

Replacement

1. To install, carry out the removal steps in reverse order.

REP 8.6.2 Cleaner Motor Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5))

Parts List on PL 8.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for Cleaner Motor Assembly (K (#5)) are described here. The steps for other Cleaner Motor Assemblies (#1/Y (#2)/M (#3)/C (#4)) are the same as (K (#5)).*

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Left Cover. (REP 19.5.1)
3. Remove the Drive Fan Assembly. (REP 18.1.1)
4. Remove the Duct Assembly (#6). (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Duct Assembly (#6).

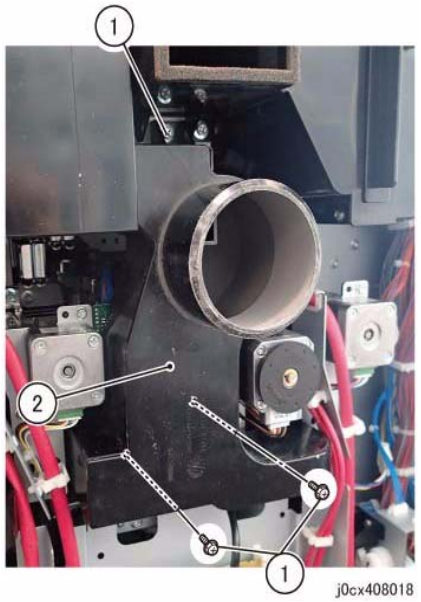


Figure 1 j0cx408018

5. Release the Harness from the Cleaner Motor Assembly (K (#5)). (Figure 2)
   (1) Release the harness from the Clamp (x2).
   (2) Release the harness from the Clamp.

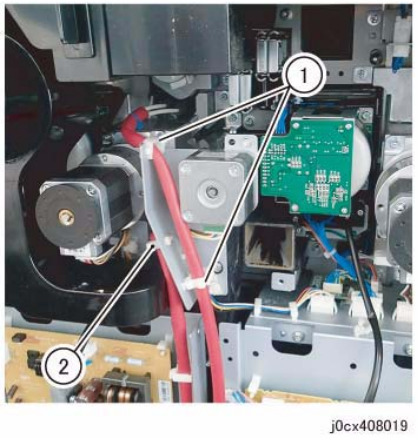


Figure 2 j0cX408019

6. Remove the Cleaner Motor Assembly (K (#5)). (Figure 3)
   (1) Disconnect the Connector.
   (2) Release the harness from the Clamp (x3).
   (3) Remove the Screw (x2).
   (4) Remove the Cleaner Motor Assembly (K (#5)).

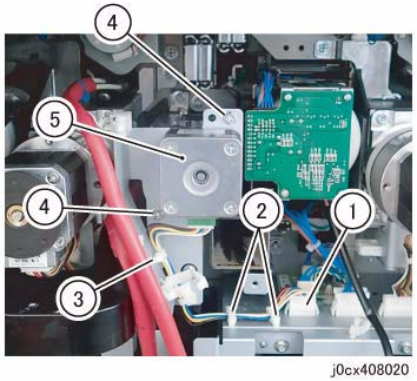


Figure 3 j0cx408020

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

REP 9.1.1 Big Module Service Position

Parts List on PL 9.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Push down the Big Module handle and pull out the Big Module.
3. Pull out Big Module up to the Service Position. (Figure 1)
   (1) Remove the Screw from the Left Rail.
   (2) Simultaneously release Stopper (x2) on the left and right Rail, and pull out the Big Module further.

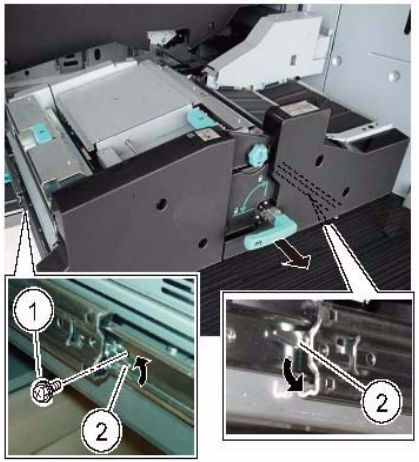


Figure 1 j0kol409001

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When releasing the Big Module Service Position and pushing it into the machine, be sure to push the Big Module with the Motion Cover pushed down. (Figure 2)*

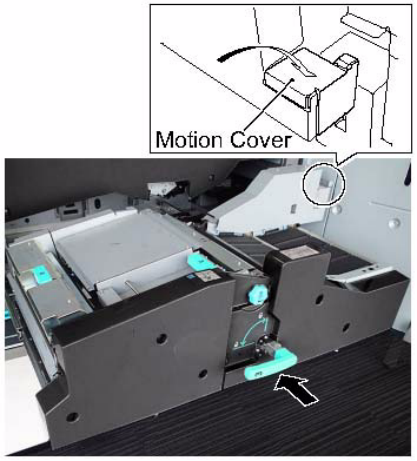


Figure 2 j0kol406028

REP 10.1.1 Tray 1/2 Front Cover Assembly

Parts List on PL 10.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for Tray 1 Front Cover Assembly are described here. The same applies to Tray 2 Front Cover Assembly.*

1. Pull out Tray 1 Assembly.
2. Remove the Connector Cover from the right of the Tray, and disconnect the Connector. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the Connector Cover.
   (3) Disconnect the Connector.

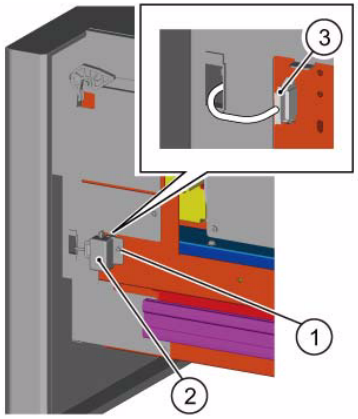


Figure 1 j0kol410008

3. Remove the Screw (x3) that secures the Tray 1 Front Cover Assembly. (Figure 2)
   (1) Remove the Screw (x3).

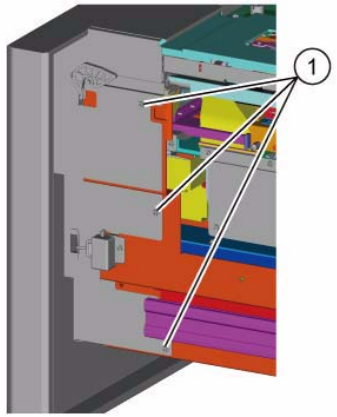


Figure 2 j0kol410009

4. Remove the Screw (x3) from the left of the Tray, and remove Tray 1 Front Cover Assembly. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove Tray 1 Front Cover Assembly.

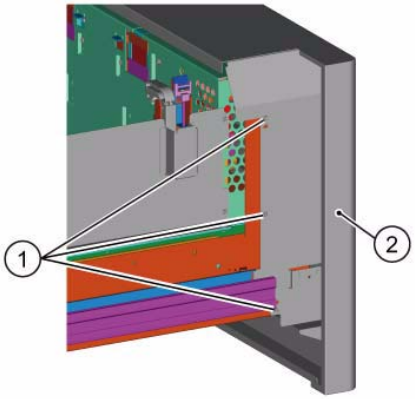


Figure 3 j0kol410010

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.
2. After installing Tray 1 Front Cover Assembly, make sure that the dimensions of the gaps (A) and (B) between IOT-L Front Left Door and Tray 1 Front Cover are the same. If they are not the same, perform the following procedure to make them the same. (Figure 4)
   (1) Pull out Tray 1 Assembly.
   (2) Loosen the Screw (x3).

(3) Adjust Tray 1 Front Cover Assembly.
(4) Tighten the Screw (x3).

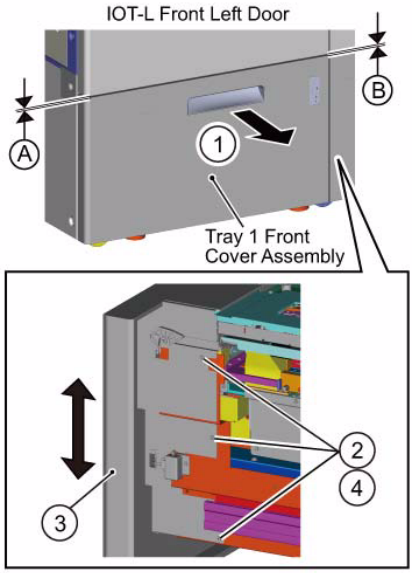


Figure 4 j0kol410011

REP 10.1.2 Tray 1/2 Assembly

Parts List on PL 10.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

As Tray 1/2 Assembly is heavy, the work must be done by 2 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (Tray 1/2 Assembly: 25 kg or less)

***NOTE:** The steps for Tray 1 Assembly are described here. The steps for Tray 2 Assembly are the same as Tray 1 Assembly.*

1. Remove the paper from the Tray.
2. Remove the ECO Box Unit. (REP 4.9.1)
3. Remove the IOT-L Rear Lower Cover. (PL 19.5)
4. Remove the Tray 1 Feeder Assembly. (REP 10.5.1)
5. Remove Tray 1 Lift Motor and Bracket. (REP 10.5.2)
6. Remove the Tray 1 Shift Motor. (REP 10.4.2)
7. Disconnect the Connector. (Figure 1)
   (1) Disconnect the Connector (x6).

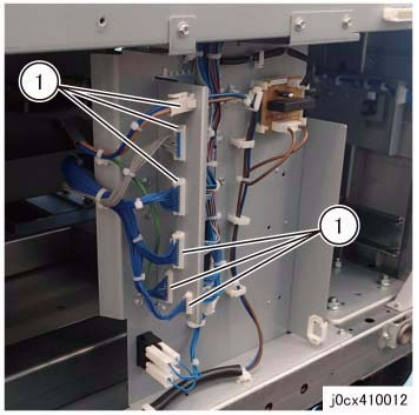


Figure 1 j0cx410012

8. Release the Wire Harness from the Push Tie (x2). (Figure 2)
   (1) Remove the Screw of the Ground Wire.
   (2) Remove the Push Tie (x2).

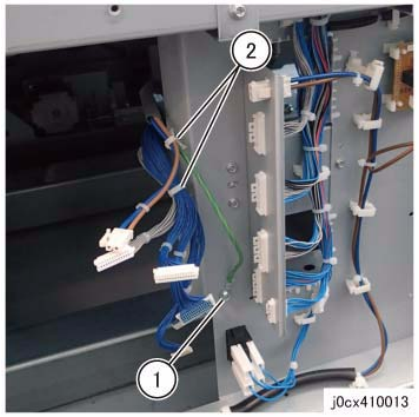


Figure 2 j0cx410013

9. Remove the Harness Bracket. (Figure 3)
   (1) Release the Clamp.
   (2) Remove the Screw (x3).
   (3) Remove the Harness Bracket.

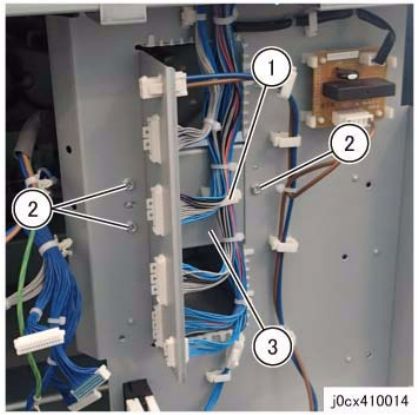


Figure 3 j0cx410014

10. Remove the Screw (x3) that secures Tray 1 Assembly at the rear. (Figure 4)
    (1) Remove the Screw (x3).

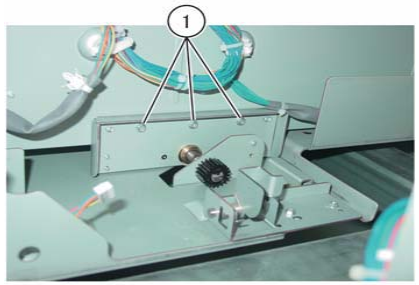


Figure 4 j0cm410007

11. Pull out Tray 1 Assembly up to the Service Position. (REP 10.1.3)
12. Store the Harness Bracket and secure it by using the tape. (Figure 5)
    (1) Secure the Harness Bracket by using tape.

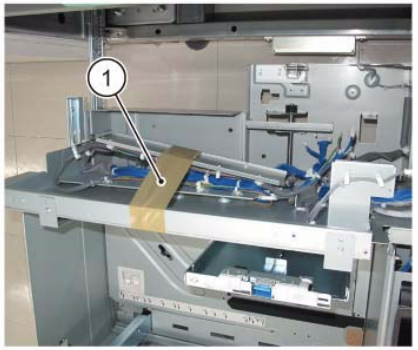
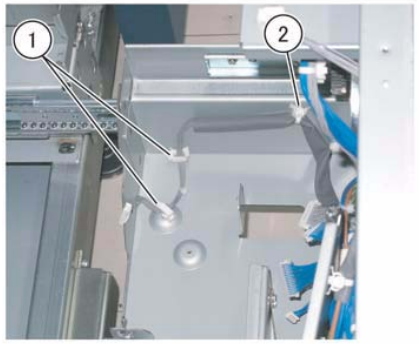


Figure 5 j0kol410001

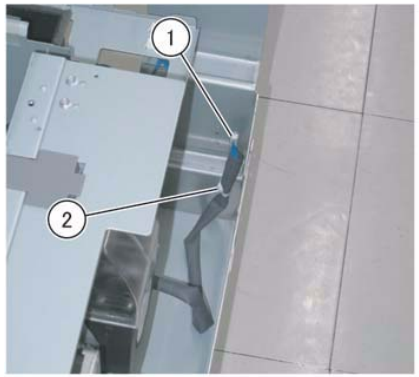
13. Release the wire harness from the Clamp. (Figure 6)
    (1) Release the wire harness from the Clamp (x2).
    (2) Remove the Push Tie.



j0cm410009

Figure 6 j0cm410009

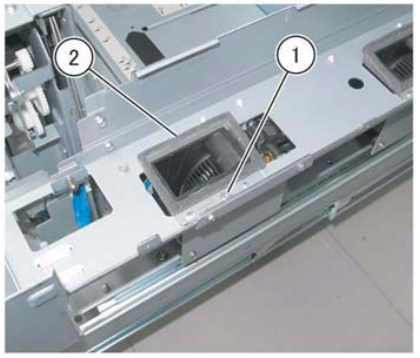
14. Disconnect the Connector from the Front, remove the Push Tie, and release the Wire Harness. (Figure 7)
    (1) Disconnect the Connector.
    (2) Remove the Push Tie.



j0cm410010

Figure 7 j0cm410010

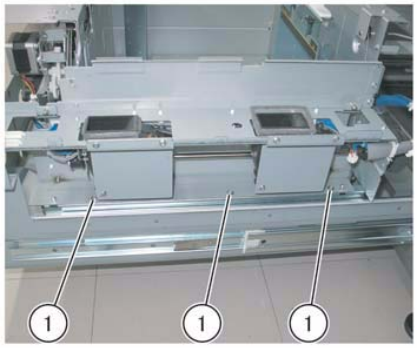
15. Remove the Duct at the front. (Figure 8)
    (1) Remove the Screw.
    (2) Remove the duct.



j0cm410011

Figure 8 j0cm410011

16. Remove the Screw (x3) that secures the right side of Tray 1 Assembly. (Figure 9)
    (1) Remove the Screw (x3).



j0cm410012

Figure 9 j0cm410012

17. Remove the Screw (x3) that secures the left side of Tray 1 Assembly. (Figure 10)
    (1) Remove the Screw (x3).

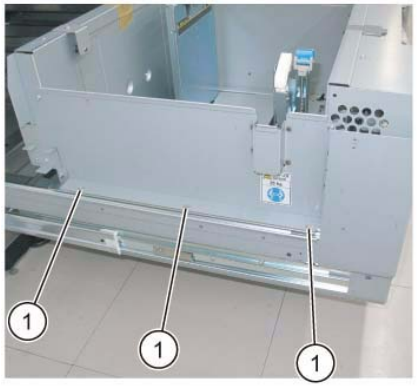


Figure 10 j0kol410002

18. Hold and remove the Left side and Right side of Tray 1 Assembly by 2 persons. (Figure 11)
    Remove Tray 1 Assembly by holding (4 locations) as shown (1).
    (A)Positioning Pin

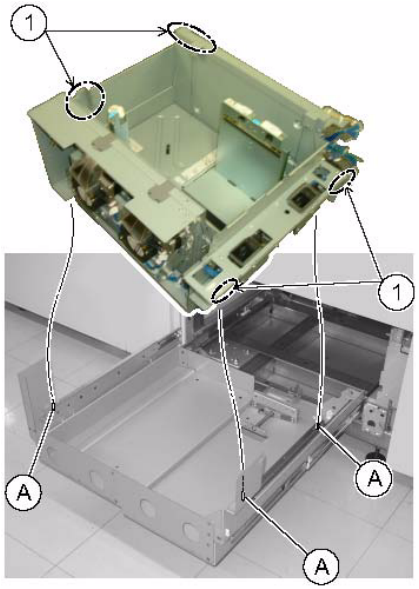


Figure 11 j0kol410003

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When installing the Harness Bracket, put the Harness Bracket pin in the hole of the Hinge Bracket. (Figure 12)*

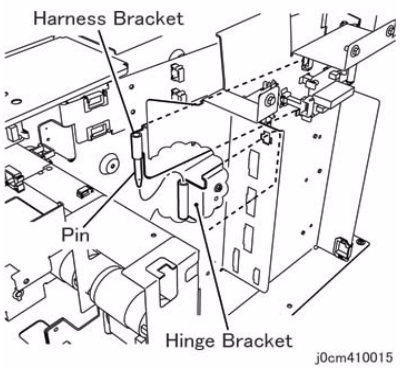


Figure 12 j0cm410015

2. After replacing the Tray 1/2 Assembly and installing the Tray 1/2 Assembly, perform ADJ 15.6.8 Aligner Guide/Tray GuidePosition Adjustment.

REP 10.1.3 Tray 1/2 Assembly Service Position

Parts List on PL 10.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out Tray 1/2 Assembly.
2. Pull out Tray 1/2 Assembly up to the Service Position. (Figure 1)
   (1) Push in the stopper (x2) of Left Rail/Right Rail simultaneously.
   (2) Pull Tray 1/2 Assembly forward.

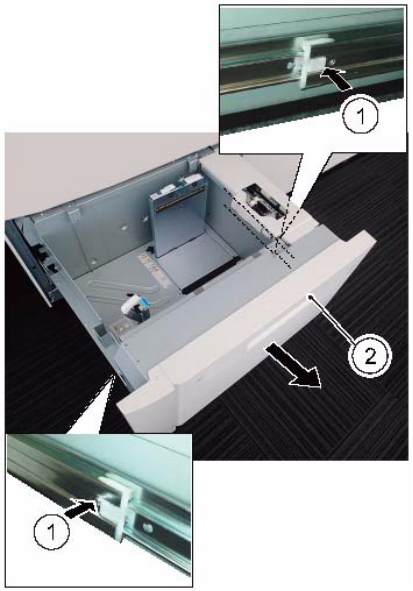


Figure 1 j0kol410004

Replacement

1. To install, carry out the removal steps in reverse order.

REP 10.1.4 Tray 1/2 Left/Right Rail Assembly

Parts List on PL 10.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

As Tray 1/2 Assembly is heavy, the work must be done by 2 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (Tray 1/2 Assembly: 25 kg or less)

***NOTE:** The steps for Tray 1 Assembly are described here. The steps for Tray 2 Assembly are the same as Tray 1 Assembly.*

1. Remove the paper from Tray 1.
2. Remove the ECO Box Unit. (REP 4.9.1)
3. Remove the IOT-L Rear Lower Cover. (PL 19.5)
4. Remove the Tray 1 Feeder Assembly. (REP 10.5.1)
5. Remove Tray 1 Lift Motor and Bracket. (REP 10.5.2)
6. Remove the Tray 1 Shift Motor. (REP 10.4.2)
7. Remove the Base. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the Base.

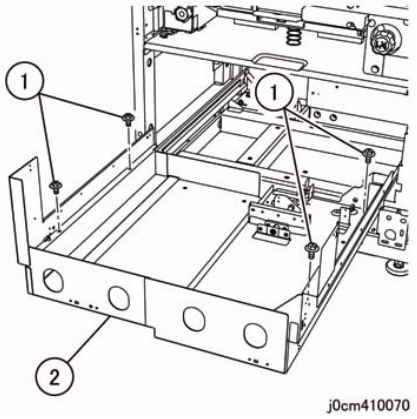


Figure 1 j0cm410070

8. Remove the Screws (x2) at the rear that secure the Tray Left Rail. (Figure 2)
   (1) Remove the Screw (x2).

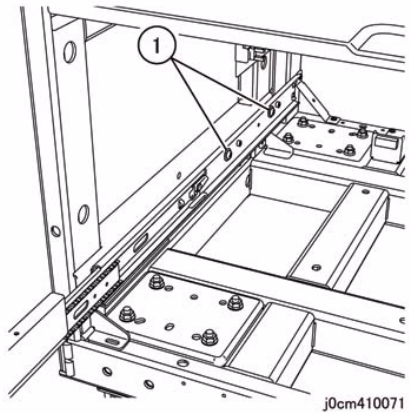


Figure 2 j0cm410071

9. Put the Tray Left Rail into the service position.
10. Remove the Screws (x2) at the front that secure the Tray Left Rail. (Figure 3)
    (1) Release the stopper and move the Tray Left Rail to align the positions of the Work Holes (x2) and the Screws (x2).
    (2) Remove the Screw (x2).
    (3) Remove the Tray Left Rail.

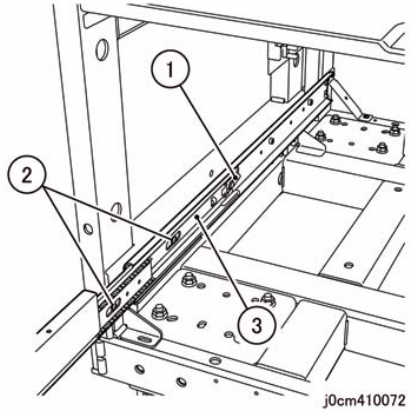


Figure 3 j0cm410072

11. In the same way, remove the Tray Right Rail.

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When installing the Tray Left/Right Rail, align the Positioning Screw (x2) of the Rail to the hole (x2) of the frame. (Figure 4)*

(A) Frame holes (x2)

(B) Rail Positioning Screws (x2)

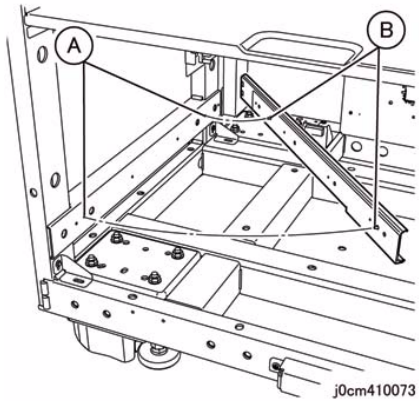


Figure 4 j0cm410073

REP 10.4.1 Shift Left/Right Rail

Parts List on PL 10.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

As Tray 1/2 Assembly is heavy, the work must be done by 2 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (Tray 1/2 Assembly: 25 kg or less)

NOTE: *The steps for Tray 1 Assembly are described here. The steps for Tray 2 Assembly are the same as Tray 1 Assembly.*

1. Remove the Tray 1 Assembly. (REP 10.1.2)
2. Remove the Shift Left Rail. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the Shift Left Rail.

   NOTE: *Loctite (to prevent Screw from being loose) is applied to the Screw that is installed on the Shift Rail. This Loctite is not the permanent fixation type and thus Screw removal is possible. However be extra careful during removal because a great amount of torque is required. Loctite application is not required during re-installation.*

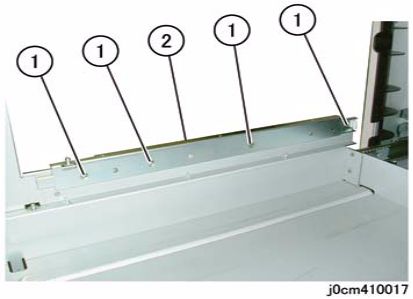


Figure 1 j0cm410017

3. Remove the Shift Right Rail. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the Shift Right Rail.

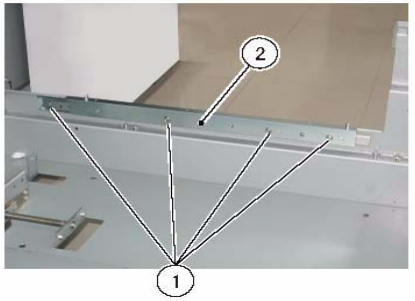


Figure 2 j0kol410012

Replacement

1. To install, carry out the removal steps in reverse order.

REP 10.4.2 Tray 1/2 Shift Motor

Parts List on PL 10.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Lower Cover. (PL 19.5)
3. Pull out Tray Assembly by about 15cm.
4. Remove the Tray Shift Motor from the rear. (Figure 1)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x5).
   (3) Remove the Tray Shift Motor.

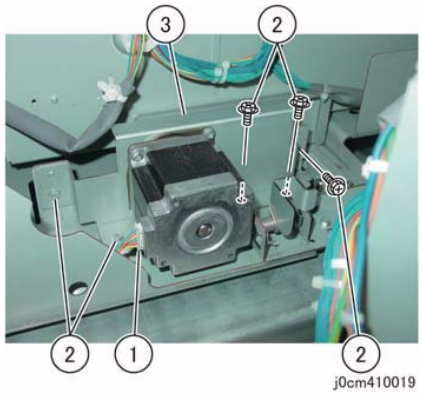


Figure 1 j0cm410019

Replacement

1. To install, carry out the removal steps in reverse order.

REP 10.5.1 Tray 1/2 Feeder Assembly

Parts List on PL 10.5

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out Tray 1/2 Assembly up to the Service Position. (REP 10.1.3)
2. Remove Tray 1/2 Front Cover Assembly. (REP 10.1.1)
3. Remove the Safety Plate. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Safety Plate.

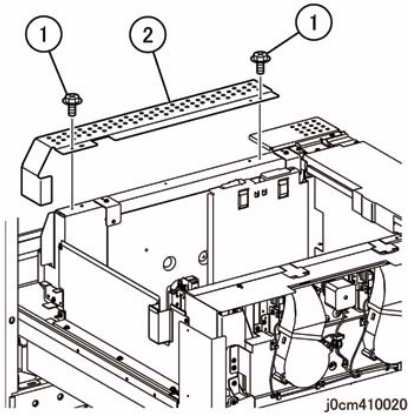


Figure 1 j0cm410020

4. Remove the Motor Cover. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the Motor Cover.

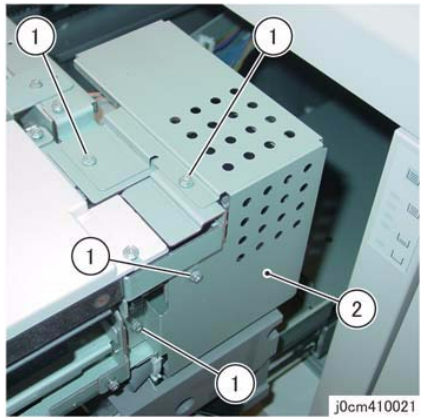


Figure 2 j0cm410021

5. Disconnect the Connector (x2) of the Feeder from the Rear of the Tray. (Figure 3)
   (1) Disconnect the Connector (x2).

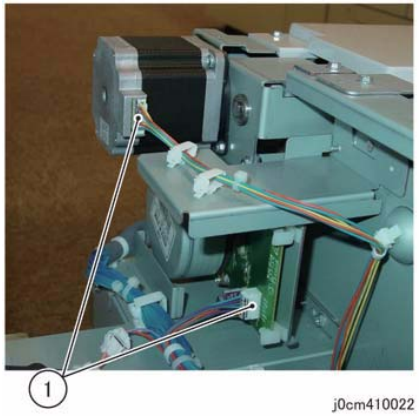


Figure 3 j0cm410022

6. Rotate the gear of the Tray Shift Motor in the direction of the arrow to move Tray 1/2 Assembly towards the rear. (Figure 4)
   (1) Turn the gear towards the direction of the arrow.

Figure 4 j0cm410023

7. Remove the Plate from the right of the Tray. (Figure 5)
   (1) Remove the Screw (x4).
   (2) Remove the Plate.

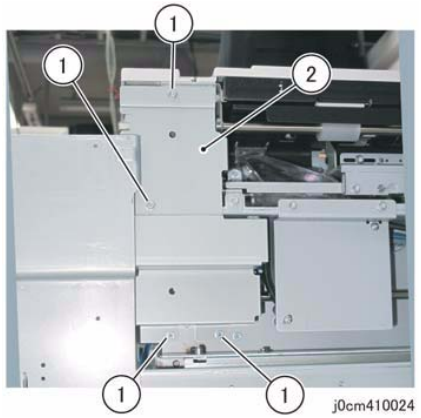


Figure 5 j0cm410024

8. Disconnect the Connector (x2) of the Feeder Assembly from the Front. (Figure 6)
   (1) Disconnect the Connector (x2).

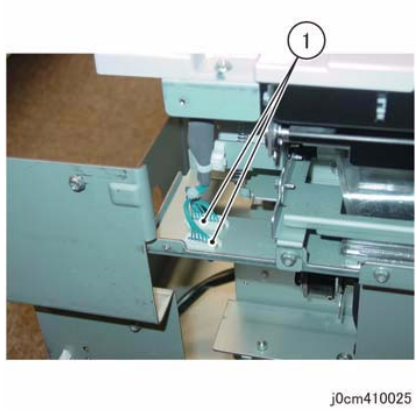


Figure 6 j0cm410025

9. Remove the Screw that secures Tray 1/2 Feeder Assembly. (Figure 7)
   (1) Remove the Screw (x2).

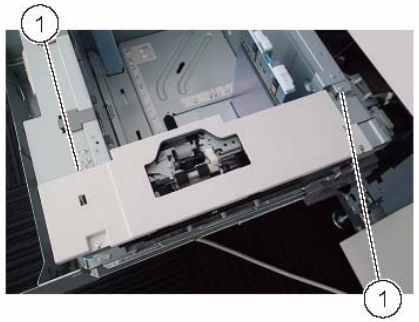


Figure 7 j0kol410005

10. Remove Tray 1/2 Feeder Assembly. (Figure 8)
    (1) Remove the Screw (x2).
    (2) Remove Tray 1/2 Feeder Assembly.

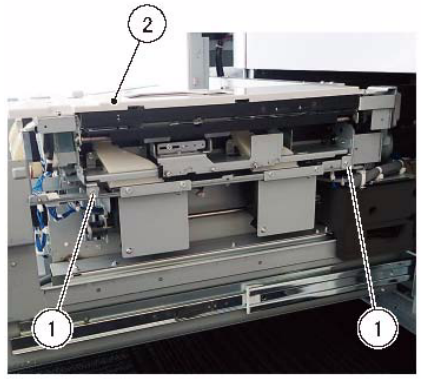


Figure 8 j0kol410013

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *Align the holes in the Feeder to the Pins of the Frame.*

   NOTE: *When installing Tray 1/2 Feeder Assembly, as it is possible to touch the Mylar affixed to the Tray Frame, handle it carefully. Check that the Mylar is not coming off and does not have any scratches after the Feeder Assembly installation. (Figure 9)*

   (A) Frame pin
   (B) Feeder hole
   (C) Mylar

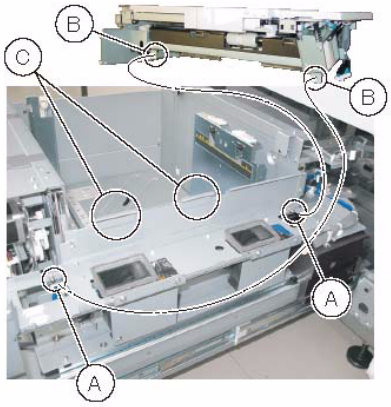


Figure 9 j0kol410014

2. After replacing Tray 1/2 Feeder Assembly, clear the following applicable Tray counters of HFSI (DC135).
   - Tray 1 Feed/Nudger Roll "Chain Link: 007-800"
   - Tray 2 Feed/Nudger Roll "Chain Link: 007-801"
   - Tray 1 Feed Assembly "Chain Link: 007-803"
   - Tray 2 Feed Assembly "Chain Link: 007-804"

REP 10.5.2 Tray 1/2 Lift Motor and Bracket

Parts List on PL 10.5

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for Tray 1 Assembly are described here. The steps for Tray 2 Assembly are the same as Tray 1 Assembly.*

1. Remove the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Lower Cover. (PL 19.5)
3. Remove Tray 1 Feeder. (REP 10.5.1)
4. Remove the Cable Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Cable Cover.

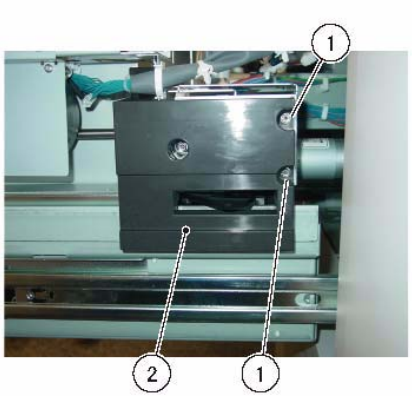


Figure 1 j0kol410015

5. Push in Tray 1 Assembly.
6. Remove the Guard Bracket Assembly. (Figure 2)
   (1) Disconnect the Connector.
   (2) Release the wire harness from the Clamp (x2).
   (3) Release the wire harness from the Clamp (x2).
   (4) Remove the Push Tie (x3).
   (5) Remove the Screw (x2).
   (6) Remove the Guard Bracket Assembly.

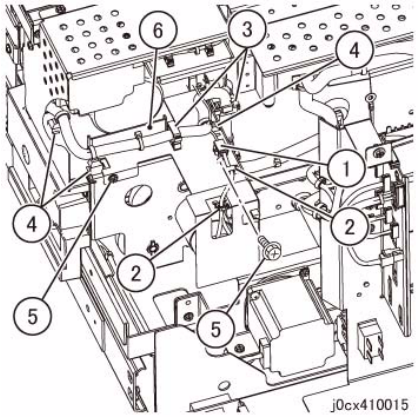


Figure 2 j0cx410015

7. Remove the Push Tie from the Tray 1 Lift Motor and Bracket. (Figure 3)
   (1) Remove the Push Tie.

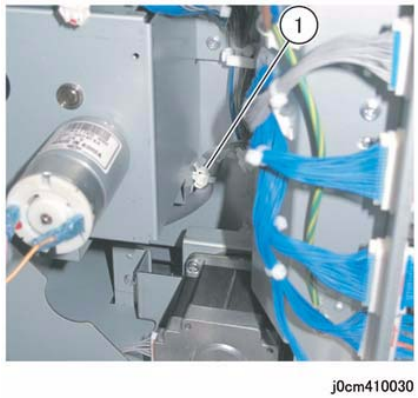


Figure 3 j0cm410030

8. Remove Tray 1 Lift Motor and Bracket. (Figure 4)
   (1) Remove the Screw (x6).
   (2) Remove the Tray 1 Lift Motor and Bracket.

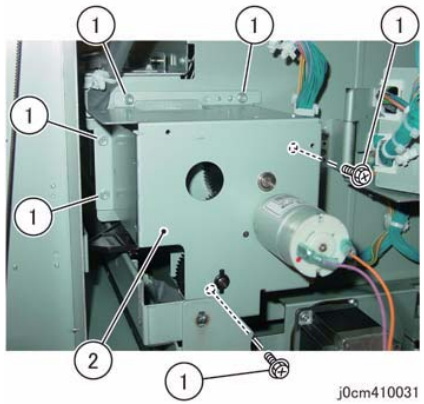


Figure 4 j0cm410031

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the Tray Lift Motor and Bracket, attach the bearing of the Tray Lift Motor and Bracket to the shaft. (Figure 5)*

   (A) Bearing
   (B) Shaft

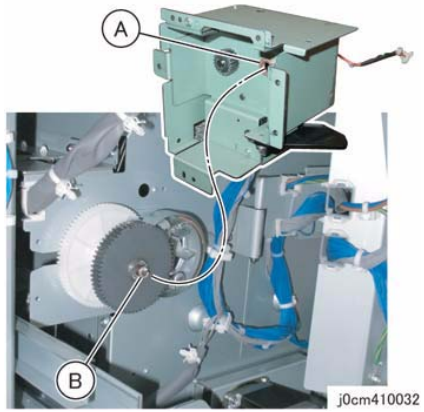


Figure 5 j0cm410032

REP 10.7.1 Tray 1/2 Feed/Nudger Roll

Parts List on PL 10.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When replacing the Tray 1/2 Feed/Nudger Roll, replace the Retard Roll at the same time because they have the same life duration.*

1. Perform Steps 2 to 5, and shift Tray to the Rear.
2. Turn ON the power.
3. Set the Side/End Guide of the Tray to the position of B5 SEF. (No paper required)
4. Push in the Tray and set the paper size to B5 SEF with UI.
5. After the Tray shift operation ends, turn the power Off.
6. Pull out the Tray 1/2.
7. Remove the Tray 1/2 Nudger Roll. (Figure 1)
   (1) Push the Nudger Roll Bracket in the direction of the arrow.
   (2) Remove the Tray 1/2 Nudger Roll.

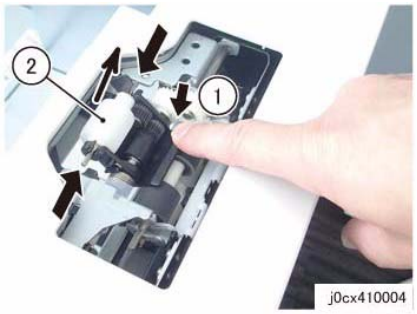


Figure 1 j0cx410004

8. Remove the Feed Roll. (Figure 2)
   (1) Pull the Tab of the Retard Roll Bracket in the direction of the arrow.
   (2) Press the Feed Roll Shaft in the direction of the arrow from both sides while pulling the Tab.
   (3) Remove the Feed Roll in the direction of the arrow.

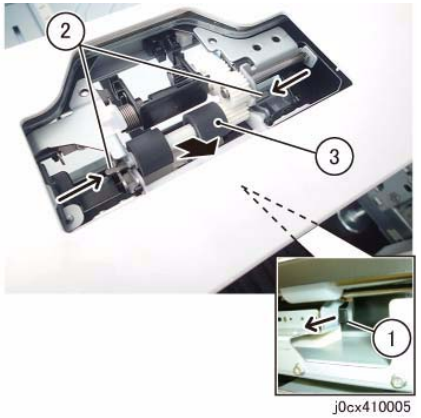


Figure 2 j0cx410005

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing Tray 1/2 Feed/Nudger Roll, clear the following applicable counters of HFSI (DC135).
   - Tray 1 Feed/Nudger Roll "Chain Link: 007-800"
   - Tray 2 Feed/Nudger Roll "Chain Link: 007-801"

REP 10.8.1 Tray 1/2 Take Away Roll

Parts List on PL 10.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out Tray 1/2 Assembly up to the Service Position. (REP 10.1.3)
2. Shift the bearing at the Rear of Tray 1/2 Take Away Roll towards the inner side. (Figure 1)
   (1) Remove the KL-Clip.
   (2) Shift the bearing towards the inner side.

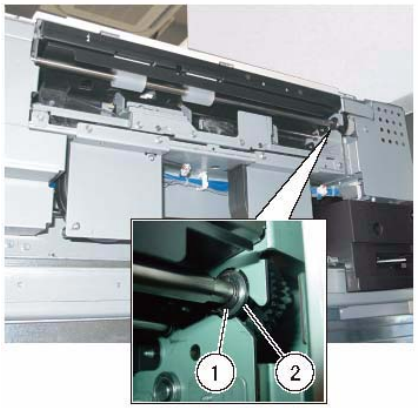


Figure 1 j0kol410016

3. Remove the Tray 1/2 Take Away Roll. (Figure 2)
   (1) Remove the Tray 1/2 Take Away Roll.

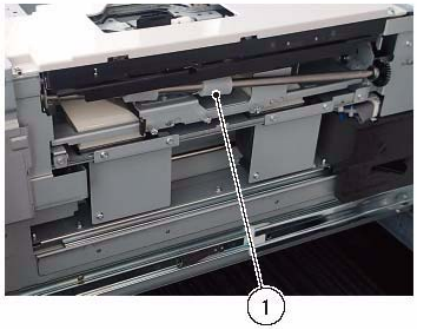


Figure 2 j0kol410017

4. Remove each of the parts from Tray 1/2 Take Away Roll. (Figure 3)
   (1) Remove the KL-Clip.
   (2) Remove the gear.
   (3) Remove the bearing.
   (4) Remove the Nylon Washer.
   (5) Remove the E-Clip.

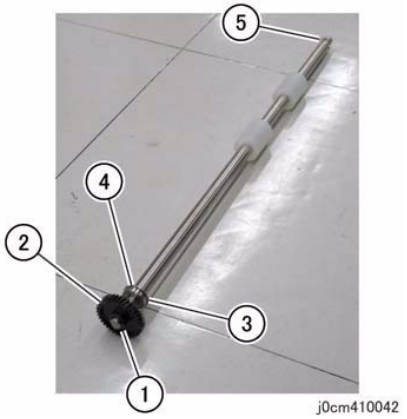


Figure 3 j0cm410042

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing Tray 1/2 Take Away Roll, clear the following counters of HFSI (DC135).
   - Tray 1 Take Away Roll "Chain Link: 007-806"
   - Tray 2 Take Away Roll "Chain Link: 007-807"

REP 10.10.1 Tray 1/2 Retard Roll

Parts List on PL 10.10

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

When removing the Retard Roll Assembly, always slide the Nip Release Lever sideways by pulling out. This is because the edge of the Retard Roll will come in contact with the cut-out part of the Tray Frame.

1. Pull out Tray 1/2 Assembly.
2. Remove Tray 1/2 Retard Roll Assembly. (Figure 1)
   (1) Remove the Nurling Screw (x3)
   (2) Remove the Tray 1/2 Retard Roll Assembly while pulling the Nip Release Lever.

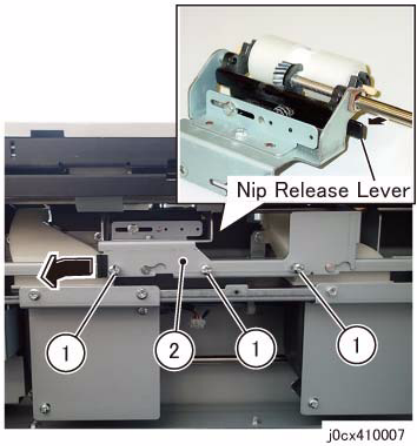


Figure 1 j0cx410007

3. Remove Tray 1/2 Retard Roll. (Figure 2)
   (1) Remove Tray 1/2 Retard Roll.

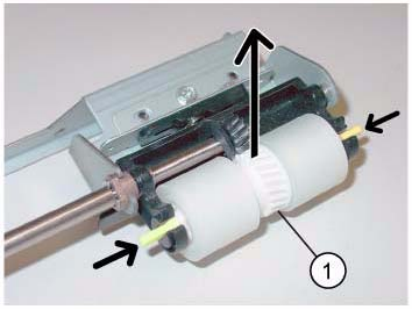


Figure 2 j0kol410007

Replacement

CAUTION

When installing the Retard Roll Assembly, always slide is sideways while pulling out the Nip Release Lever. This is because the edge of the Retard Roll will come in contact with the cut-out part of the Tray Frame.

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   ***NOTE:** When installing the Tray 1/2 Retard Roll Assembly, align the pin of the Retard Roll Assembly Pin to the groove of the coupling. (Figure 3)*

   (A) Coupling groove
   (B) Shaft pin

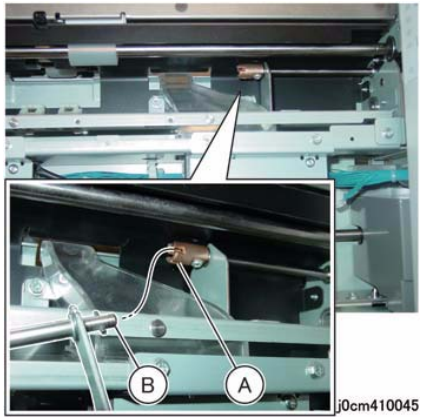


Figure 3 j0cm410045

2. After replacing Tray 1/2 Retard Roll, clear the following counters of HFSI (DC135).
   - Tray 1 Retard Roll "Chain Link: 007-800"
   - Tray 2 Retard Roll "Chain Link: 007-801"

REP 10.11.1 (SCC) Heater and Duct

Parts List on PL 10.11

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for Tray 1 Heater and Duct are described here. The steps for Tray 2 are the same as Tray 1.*

1. Pull out Tray 1 Assembly.
2. Remove Tray 1 Front Cover Assembly. (REP 10.1.1)
3. Remove the Blower Fan Assembly. (Figure 1)
   (1) Disconnect the Connector (x2).
   (2) Release the wire harness from the Clamp (x2).
   (3) Disconnect the Connector (x2).
   (4) Disconnect the Connector.
   (5) Remove the Screw (x4).
   (6) Remove the Blower Fan Assembly.

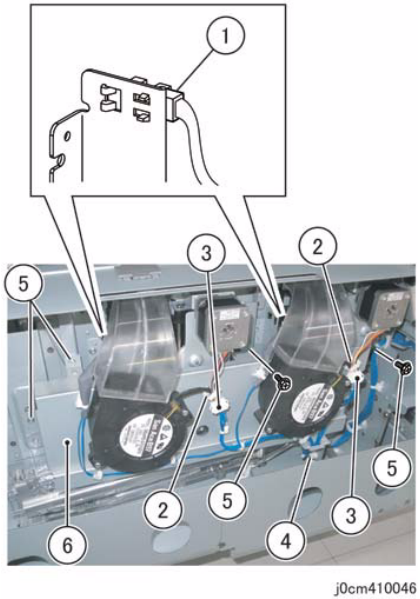


Figure 1 j0cm410046

4. Remove the Heater and Duct. (Figure 2)
   (1) Disconnect the Connector.
   (2) Release the wire harness from the Clamp.
   (3) Remove the Round Point Screws (x4).
   (4) Remove the Heater and Duct.
   (5) Disconnect the Connector.

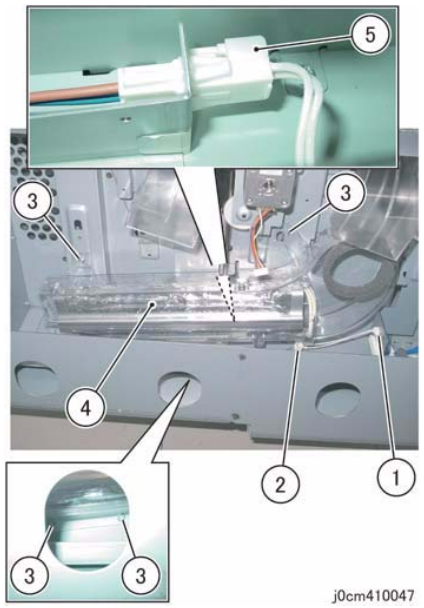


Figure 2 j0cm410047

Replacement

1. To install, carry out the removal steps in reverse order.

REP 10.11.2 (SCC) Tray 1/2 Lead/End Blower Fan

Parts List on PL 10.11

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The steps for Tray Lead/End Blower Fan of Tray 1 are described here. The steps for Tray 2 are the same as Tray 1.*

1. Pull out Tray 1 Assembly.
2. Remove Tray 1 Front Cover Assembly. (REP 10.1.1)
3. Release the Clamp (x2) and disconnect the Connector (x2) of the Fan. (Figure 1)
   (1) Release the Clamps (x2).
   (2) Disconnect the Connector (x2).

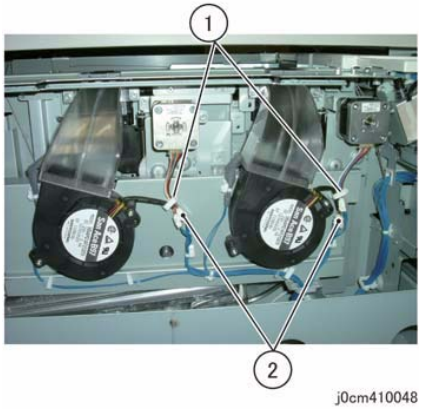


Figure 1 j0cm410048

4. Remove Tray 1 Lead/End Blower Fan. (Figure 2)
   (1) Remove the Round Point Screw (x2).
   (2) Remove Tray 1 End Blower Fan.
   (3) Remove the Round Point Screw (x2).
   (4) Remove Tray 1 Lead Blower Fan.

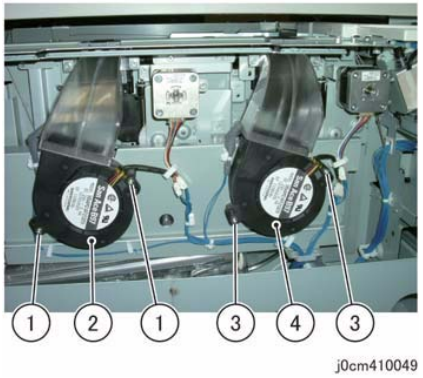


Figure 2 j0cm410049

Replacement

1. To install, carry out the removal steps in reverse order.

REP 10.13.1 Front/Rear Cable (Short/Long)

Parts List on PL 10.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out Tray 1/2 Assembly.
2. Remove all the paper from Tray 1/2.
3. Remove Tray 1/2 Front Cover Assembly. (REP 10.1.1)
4. Remove the Heater and Duct. (REP 10.11.1)
5. Pull out Tray 1/2 Assembly up to the Service Position. (REP 10.1.3)
6. Rotate the gear of the Tray Shift Motor in the direction of the arrow to move Tray 1/2 Assembly towards the rear. (Figure 1)
   (1) Turn the gear towards the direction of the arrow.

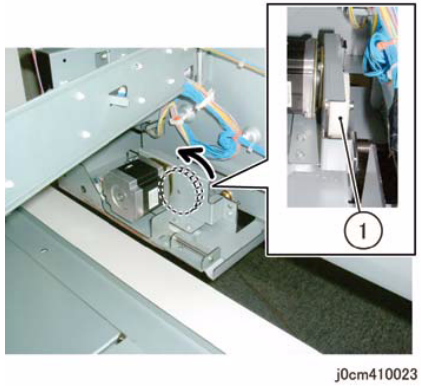


Figure 1 j0cm410023

7. Remove the Plate. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the Plate.

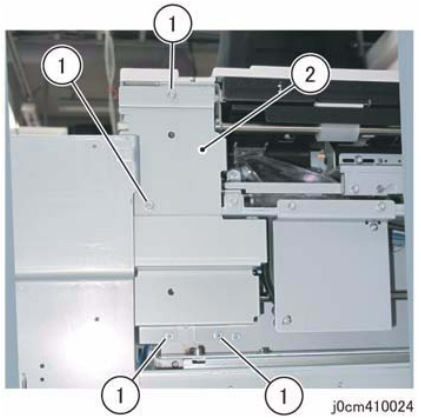


Figure 2 j0cm410024

8. Remove the Shutter Plate Assembly. (Figure 3)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x6).
   (3) Remove the Shutter Plate Assembly.

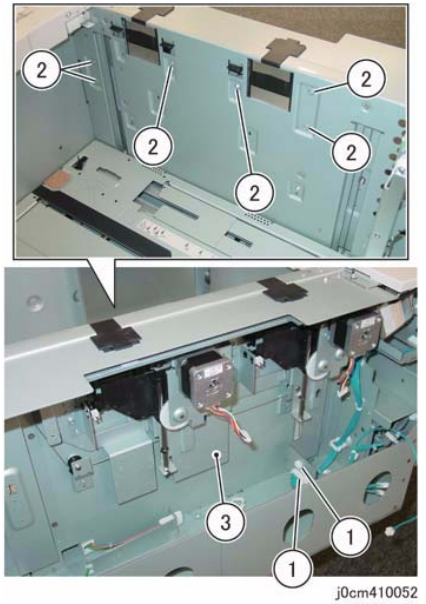


Figure 3 j0cm410052

9. Remove the Front Cable (Short/Long). (Figure 4)

(1) Remove the KL-Clip.
(2) Remove the Cable Guide.
(3) Remove the Front Cable (Short).
(4) Remove the Front Cable (Long).

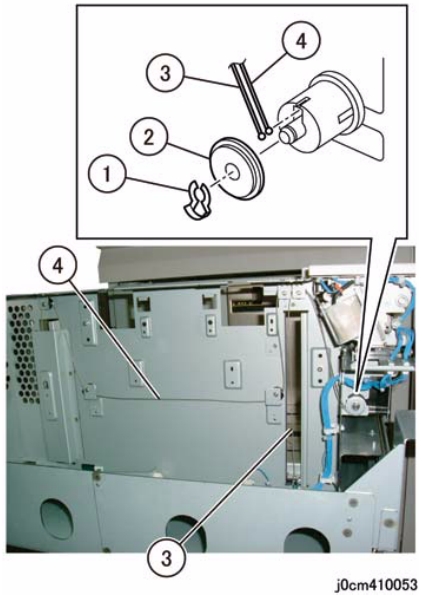


Figure 4 j0cm410053

10. Remove the Cable Cover. (Figure 5)
(1) Remove the Screw (x2).
(2) Remove the Cable Cover.

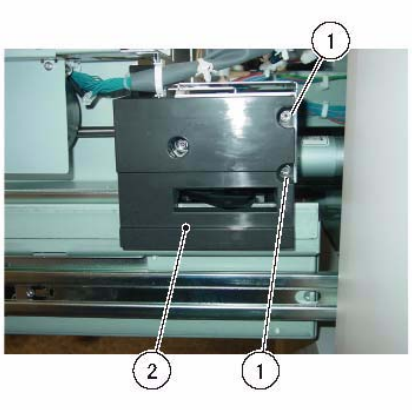


Figure 5 j0kol410015

11. Remove the Rear Cable (Short/Long). (Figure 6)
(1) Remove the KL-Clip.
(2) Remove the Cable Guide.
(3) Remove the Rear Cable (Short).
(4) Remove the Rear Cable (Long).

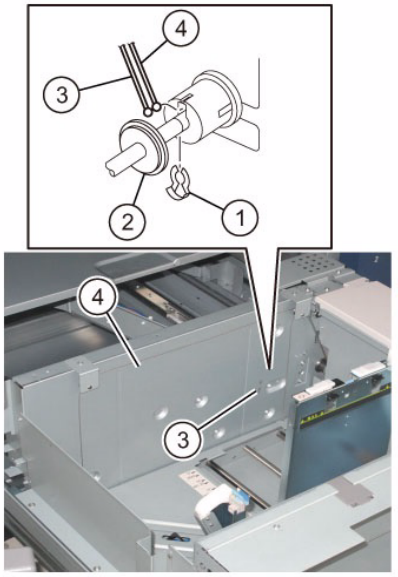


Figure 6 j0kol410006

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the Front/Rear Cable (Short/Long), install the Front/Rear (Long) first. (Figure 7)*

   (A) Long Type Cable
   (B) Short Type Cable

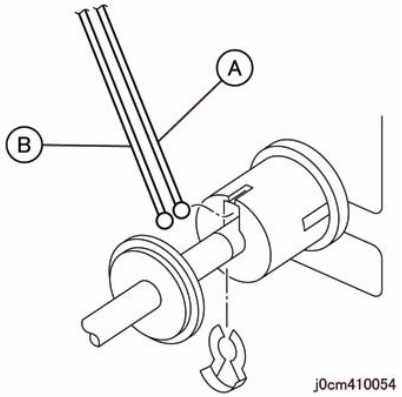


Figure 7 j0cm410054

NOTE: *When installing the Shutter Plate Assembly, make sure that the stopper (x3) are jutting out of the square holes. (Figure 8)*

(A) Stoppers (x3)

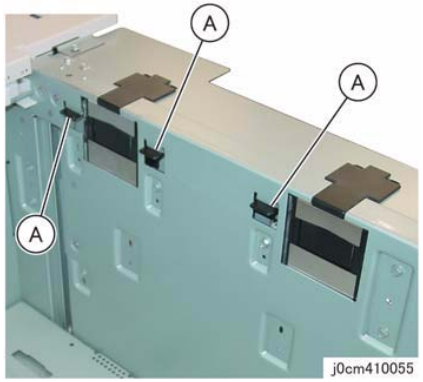


Figure 8 j0cm410055

REP 11.1.1 H-Tra 1 Assembly

Parts List on PL 11.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the H-Tra 1 Assembly is very heavy, be careful about your posture when performing the task.*

1. Open the IOT-L Front Left Door.
2. Remove the H-Tra 1 Cover. (Figure 1)
   (1) Lower the Knob of H-Tra 1 Assembly.
   (2) Remove the Screw (x3).
   (3) Remove the H-Tra 1 Cover.

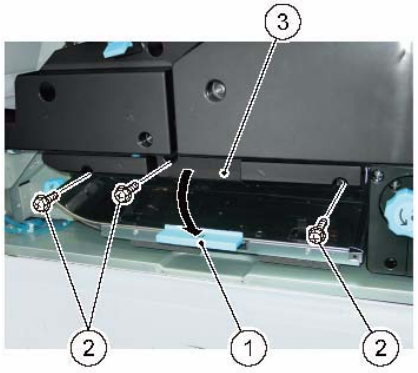


Figure 1 j0kol411001

3. Disconnect the Connector (x3), and remove the Screw (x2) that secures the H-Tra 1 Assembly. (Figure 2)
   (1) Disconnect the Connector (x3).
   (2) Remove the Screw (x2).

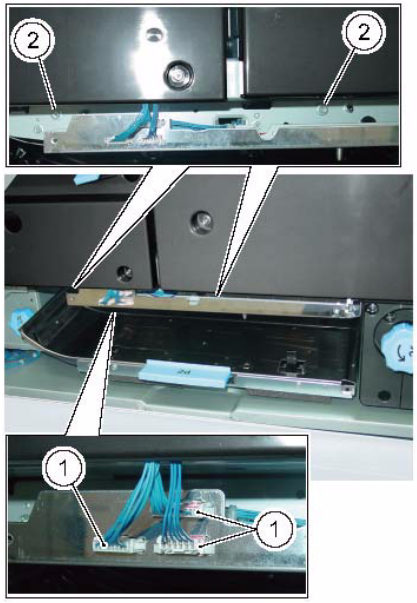


Figure 2 j0kol411002

4. Slide the Stopper Plate, and remove the H-Tra 1 Assembly. (Figure 3)

   NOTE: *When removing the H-Tra 1 Assembly, as the Lower Chute may unexpectedly open, and load may be applied to the hinge part causing a risk of deformation, always secure the Lower Chute with the Stopper Plate.*

   (1) Lift the Knob.
   (2) Loosen the Screw.
   (3) Slide the Stopper Plate, and loosen the Screw.
   (4) Pull out the H-Tra 1 Assembly to remove it.

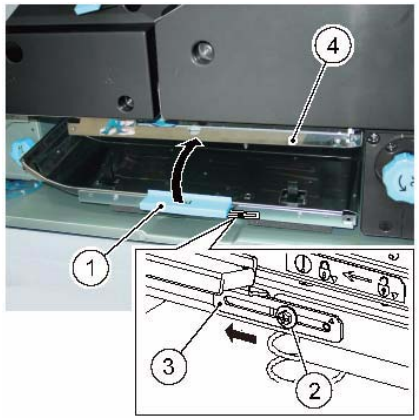


Figure 3 j0kol411003

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the H-Tra 1 Assembly, put the Tie Bar (x2) of the H-Tra 1 Assembly on the IOT-L Frame Rail (x2), and press it. (Figure 4)*

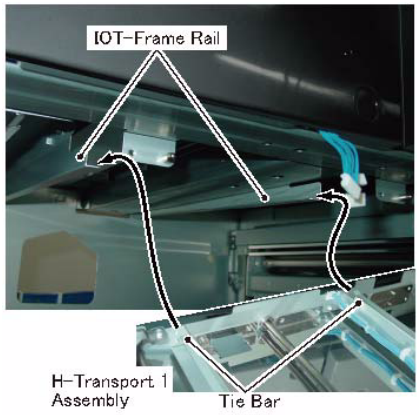


Figure 4 j0kol411010

NOTE: *After installing the H-Tra 1 Assembly, be sure to slide the Stopper Plate back to its original position.*

REP 11.1.2 H-Tra 2 Assembly

Parts List on PL 11.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the H-Tra 2 Assembly is very heavy, be careful about your posture when performing the task.*

1. Open the IOT-L Front Left/Right Door.
2. Push down the Big Module handle and pull out the Big Module slightly.
3. Remove the Screw (x2), and remove the bracket. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Bracket.

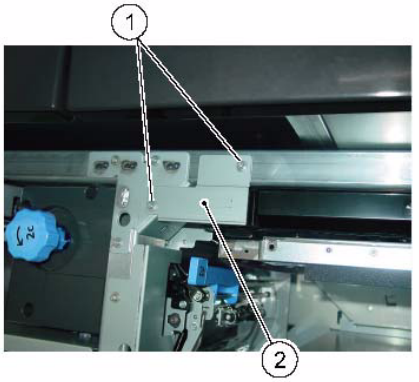


Figure 1 j0kol411004

4. Push in the Big Module, and raise the Handle.
5. Remove the H-Tra 2 Cover. (Figure 2)
   (1) Lower the Knob of H-Tra 2 Assembly.
   (2) Remove the Screw (x3).
   (3) Remove the H-Tra 2 Cover.

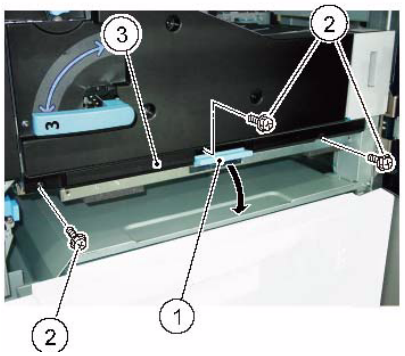


Figure 2 j0kol411005

6. Disconnect the Connector (x3), and remove the Screw (x2) that secures the H-Tra 2 Assembly. (Figure 3)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x2).

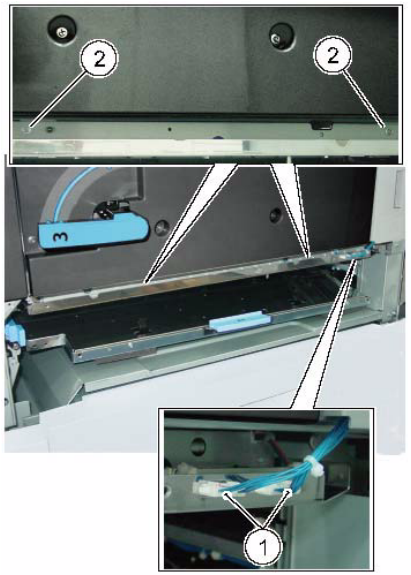


Figure 3 j0kol411006

7. Slide the Stopper Plate, and remove the H-Tra 2 Assembly. (Figure 4)

NOTE: *When removing the H-Tra 2 Assembly, as the Lower Chute may unexpectedly open, and load may be applied to the hinge part causing a risk of deformation, always secure the Lower Chute with the Stopper Plate.*

(1) Lift the Knob.
(2) Loosen the Screw.
(3) Slide the Stopper Plate, and loosen the Screw.
(4) Remove the H-Tra 2 Assembly.

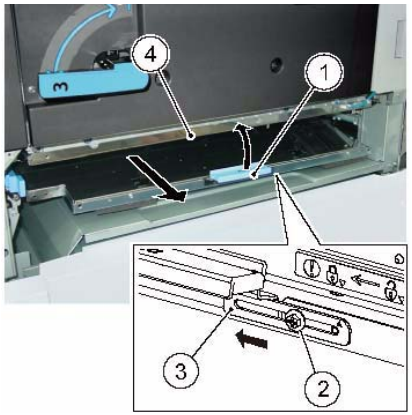


Figure 4 j0kol411007

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the H-Tra 2 Assembly, put the Tie Bar (x2) of the H-Tra 2 Assembly on the IOT-L Frame Rail (x2), and press it. (Figure 5)*

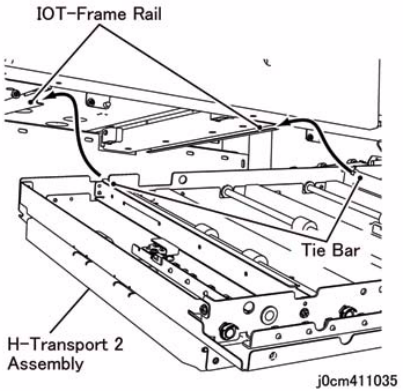


Figure 5 j0cm411035

NOTE: *After installing the H-Tra 2 Assembly, be sure to slide the Stopper Plate back to its original position.*

REP 11.1.3 J-Tra 1 Assembly

Parts List on PL 11.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the J-Tra 1 Assembly is very heavy, be careful about your posture when performing the task.*

1. Remove the H-Tra 2 Assembly. (REP 11.1.2)
2. Pull out Tray 1/2 Assembly.
3. Remove the J-Tra 1 Connector Cover. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the J-Tra 1 Connector Cover.

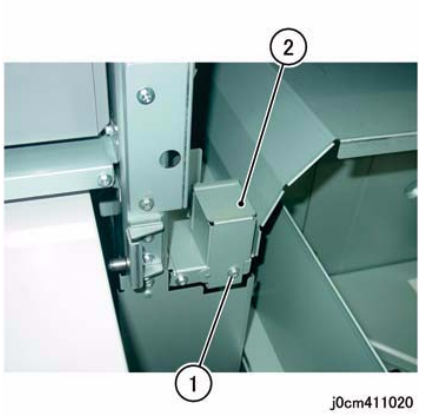


Figure 1 j0cm411020

4. Disconnect the Connector of the J-Tra 1 Assembly. (Figure 2)
   (1) Release the Push Tie.
   (2) Disconnect the Connector.

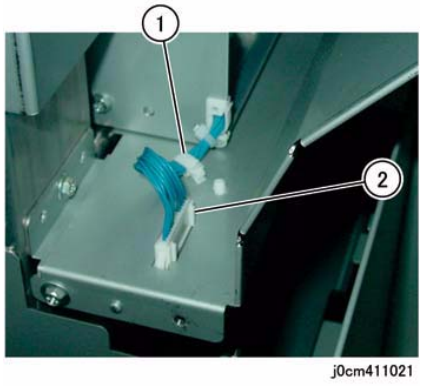


Figure 2 j0cm411021

5. Remove the Screw (x2) that secures the J-Tra 1 Assembly, and bring down the J-Tra 1 Assembly. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Pull the J-Tra 1 Assembly slightly forward.
   (3) Bring down the J-Tra 1 Assembly in the direction of the arrow.

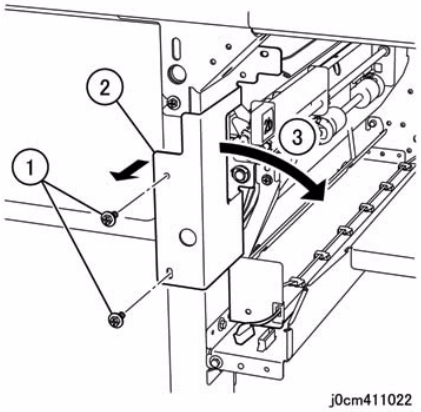


Figure 3 j0cm411022

6. Remove the J-Tra 1 Assembly. (Figure 4)
   (1) Move the J-Tra 1 Assembly to the Right.
   (2) Pull out the J-Tra 1 Assembly forward to remove it.

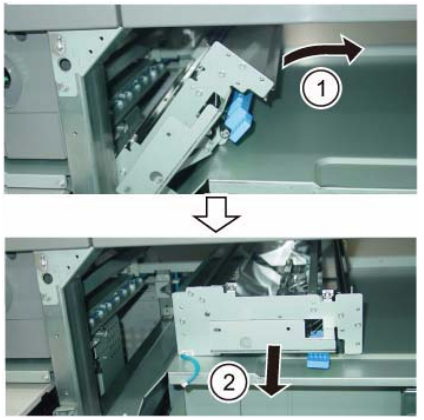


Figure 4 j0kol411008

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.1.4 J-Tra 2 Assembly

Parts List on PL 11.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the J-Tra 2 Assembly is very heavy, be careful about your posture when performing the task.*

1. Remove the H-Tra 2 Assembly. (REP 11.1.2)
2. Remove the J-Tra 2 Connector Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Connector Cover.

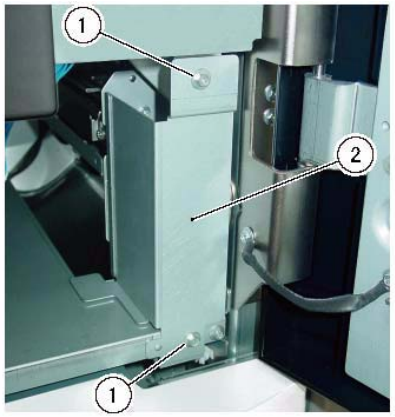


Figure 1 j0kol411011

3. Remove the Bracket. (Figure 2)
   (1) Remove the Push Tie, and release the Harness.
   (2) Disconnect the Connector.
   (3) Remove the Screw (x2).
   (4) Remove the Bracket.

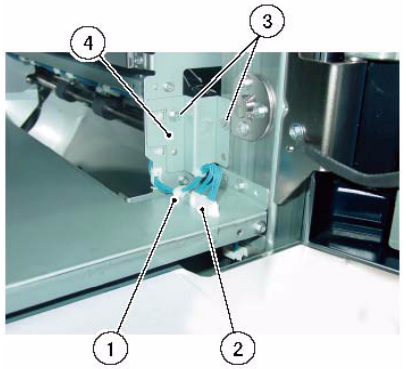


Figure 2 j0kol411012

4. Remove the J-Tra 2 Assembly. (Figure 3)

   NOTE: *When removing the J-Tra 2 Assembly, be careful not to pinch the Wire Harness.*

   (1) Pull the J-Tra 2 Assembly slightly forward.
   (2) Bring down to the left.
   (3) Pull out the J-Tra 2 Assembly forward to remove it.

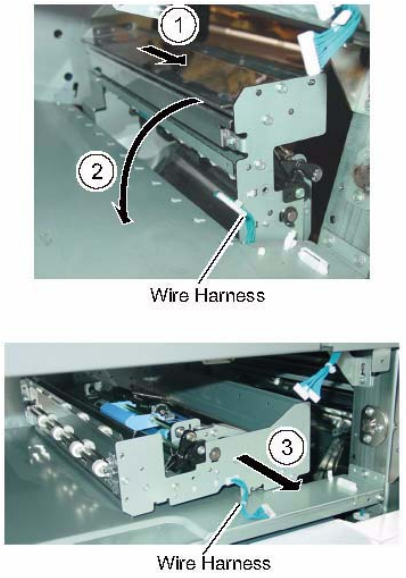


Figure 3 j0kol411009

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.3.1 H-Tra 1 Motor Assembly

Parts List on PL 11.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 1 Assembly. (REP 11.1.1)
3. Remove the H-Tra 1 Motor Assembly. (Figure 1)
   (1) Loosen the Screw.
   (2) Remove the spring.
   (3) Disconnect the Connector.
   (4) Release the Clamp, and remove the Push Tie.
   (5) Remove the Screw (x3).
   (6) Remove the H-Tra 1 Motor Assembly.

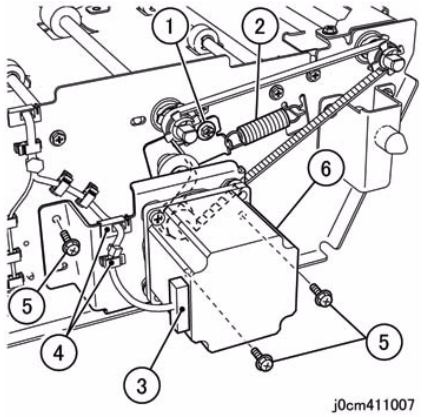


Figure 1 j0cm411007

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the H-Tra 1 Belt 1 in the direction of the arrow by 1 to 2 turns to accommodate the H-Tra 1 Belt 1, and tighten the Screw. (Figure 2)*

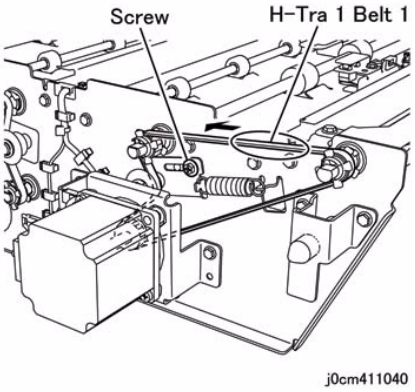


Figure 2 j0cm411040

REP 11.3.2 H-Tra 1 Belt 1

Parts List on PL 11.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 1 Assembly. (REP 11.1.1)
3. Remove the H-Tra 1 Belt 1. (Figure 1)
   (1) Loosen the Screw.
   (2) Remove the spring.
   (3) Remove the KL-Clip.
   (4) Remove the flange.
   (5) Remove the H-Tra 1 Belt 1.

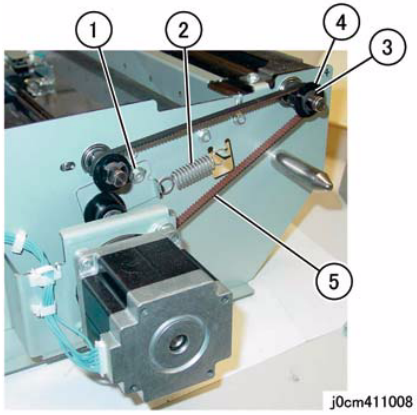


Figure 1 j0cm411008

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the H-Tra 1 Belt 1 in the direction of the arrow by 1 to 2 turns to accommodate the H-Tra 1 Belt 1, and tighten the Screw. (Figure 2)*

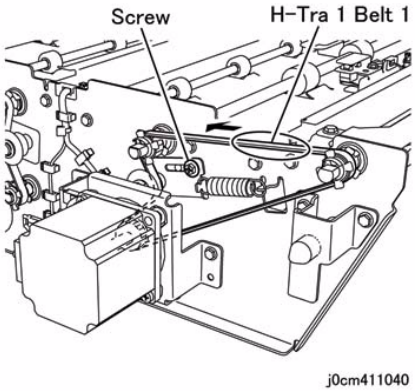


Figure 2 j0cm411040

REP 11.4.1 H-Tra 1 Motor 2

Parts List on PL 11.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 1 Assembly. (REP 11.1.1)
3. Invert the H-Tra 1 Assembly, and remove the Motor Cover. (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Motor Cover.

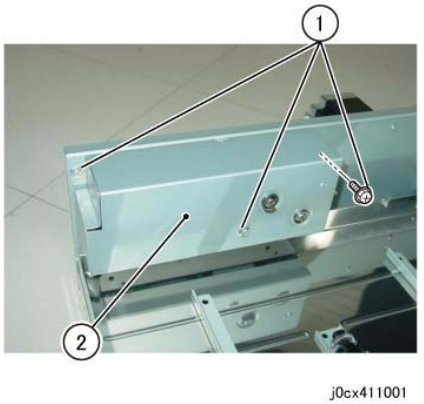


Figure 1 j0cx411001

4. Remove the H-Tra 1 Motor 2. (Figure 2)

   NOTE: *When removing H-Tra 1 Motor 2, be careful not to damage the Pulley with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x4).
   (3) Remove the H-Tra 1 Motor 2.

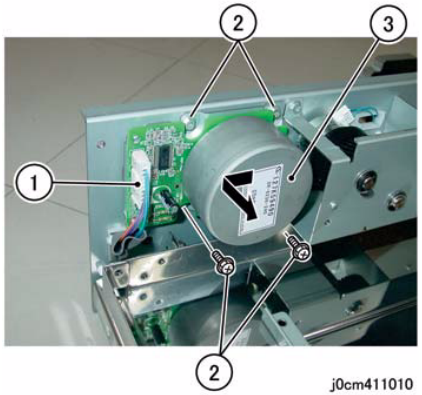


Figure 2 j0cm411010

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.4.2 H-Tra 1 Belt 2

Parts List on PL 11.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 1 Assembly. (REP 11.1.1)
3. Remove the H-Tra 1 Belt 2. (Figure 1)
   (1) Loosen the Screw.
   (2) Remove the spring.
   (3) Remove the H-Tra 1 Belt 2.

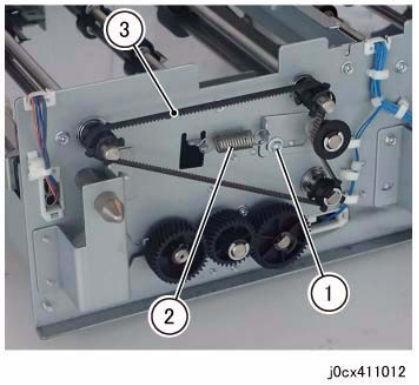


Figure 1 j0cx411012

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the H-Tra 1 Belt 2 in the direction of the arrow by 1 to 2 turns to accommodate the H-Tra 1 Belt 2, and tighten the Screw. (Figure 2)*

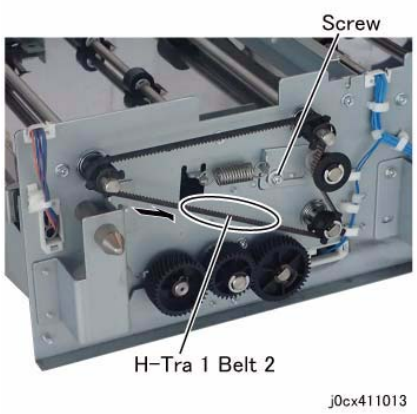


Figure 2 j0cx411013

REP 11.6.1 H-Tra 2 Out Motor

Parts List on PL 11.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 2 Assembly. (REP 11.1.2)
3. Invert the H-Tra 2 Assembly, and remove the Motor Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Motor Cover.

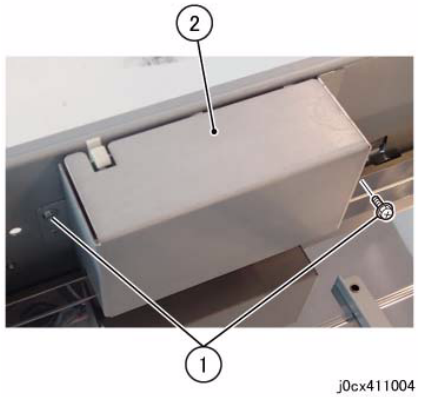


Figure 1 j0cx411004

4. Remove the H-Tra 2 Motor (OUT). (Figure 2)

   NOTE: *When removing H-Tra 2 Motor (OUT), be careful not to damage the Pulley with the hole of Frame.*

   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x4).
   (3) Remove the H-Tra 2 Motor (OUT) from the PWB Support (x2).

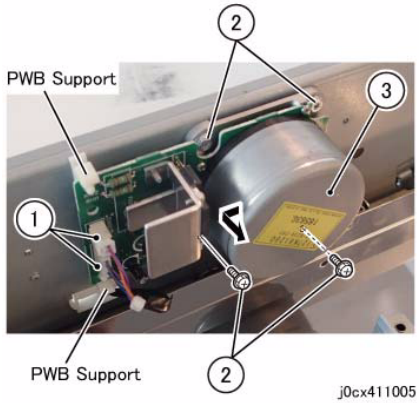


Figure 2 j0cx411005

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.6.2 H-Tra 2 Belt (OUT)

Parts List on PL 11.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 2 Assembly. (REP 11.1.2)
3. Remove the H-Tra 2 Motor (OUT). (REP 11.6.1)
4. Remove the H-Tra 2 Belt (OUT). (Figure 1)
   (1) Loosen the Screw.
   (2) Remove the spring.
   (3) Remove the H-Tra 2 Belt (OUT).

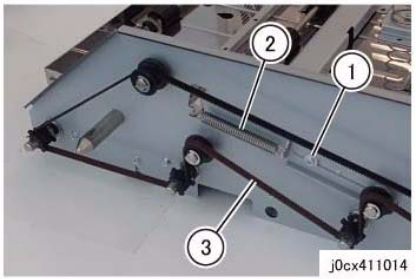


Figure 1 j0cx411014

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the H-Tra 2 Belt (OUT) in the direction of the arrow by 1 to 2 turns to accommodate the H-Tra 2 Belt (OUT), and tighten the Screw. (Figure 2)*

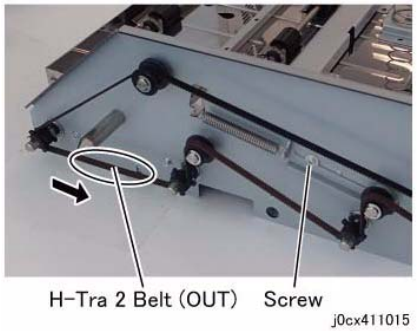


Figure 2 j0cx411015

REP 11.7.1 H-Tra 2 In Motor

Parts List on PL 11.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 2 Assembly. (REP 11.1.2)
3. Invert the H-Tra 2 Assembly, and remove the Motor Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Motor Cover.

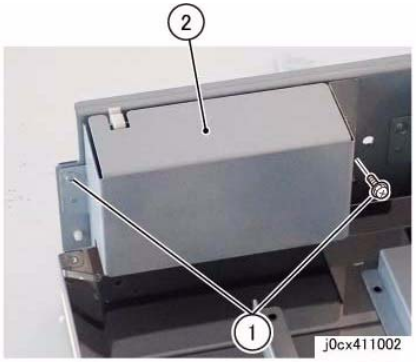


Figure 1 j0cx411002

4. Remove the H-Tra 2 Motor (IN). (Figure 2)

   NOTE: *When removing H-Tra 2 Motor (IN), be careful not to damage the Pulley with the hole of Frame.*

   (1) Disconnect the Connector (x2).
   (2) Remove the Screw (x4).
   (3) Remove the H-Tra 2 Motor (IN) from the PWB Support (x2).

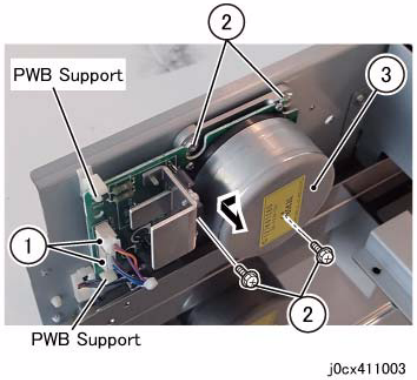


Figure 2 j0cx411003

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.7.2 H-Tra 2 Belt (IN)

Parts List on PL 11.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the H-Tra 2 Assembly. (REP 11.1.2)
3. Remove the H-Tra 2 Motor (IN). (REP 11.7.1)
4. Remove the H-Tra 2 Belt (IN). (Figure 1)
   (1) Loosen the Screw.
   (2) Remove the spring.
   (3) Remove the H-Tra 2 Belt (IN).

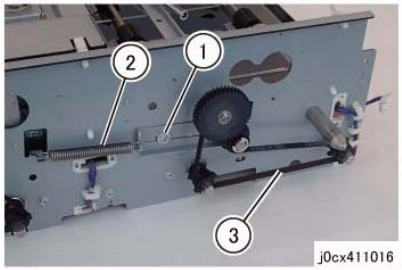


Figure 1 j0cx411016

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the H-Tra 2 Belt (IN) in the direction of the arrow by 1 to 2 turns to accommodate the H-Tra 2 Belt (IN), and tighten the Screw. (Figure 2)*

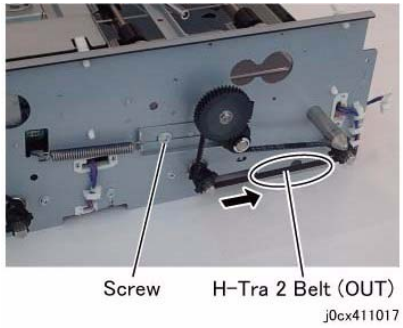


Figure 2 j0cx411017

REP 11.8.1 (SCC) J-Tra 1 Motor

Parts List on PL 11.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the J-Tra 1 Assembly. (REP 11.1.3)
3. Remove the Motor Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Motor Cover.

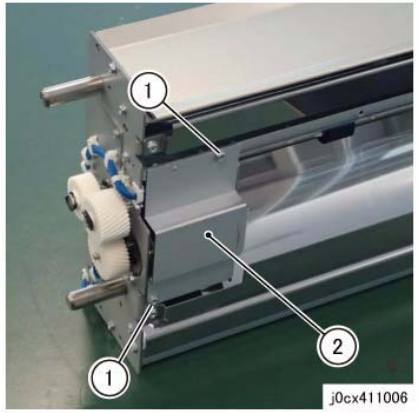


Figure 1 j0cx411006

4. Remove the gear. (Figure 2)
   (1) Remove the KL-Clip.
   (2) Remove the gear.

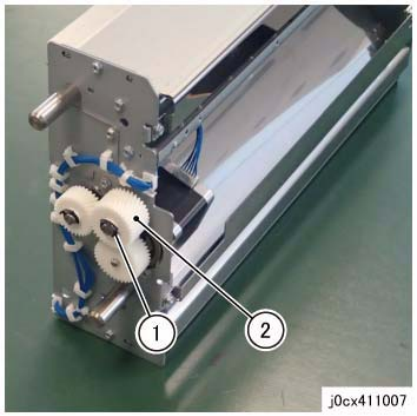


Figure 2 j0cx411007

5. Remove the J-Tra 1 Motor. (Figure 3)

   NOTE: *When removing J-Tra 1 Motor, be careful not to damage the Gear with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the J-Tra 1 Motor.

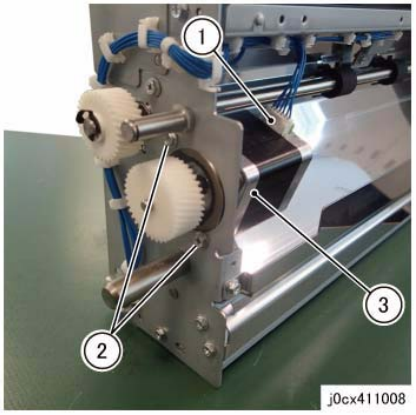


Figure 3 j0cx411008

Replacement

1. To install, carry out the removal steps in reverse order.

REP 11.10.1 (SCC) J-Tra 2 Motor

Parts List on PL 11.10

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the J-Tra 2 Assembly. (REP 11.1.4)
3. Remove the Motor Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Motor Cover.

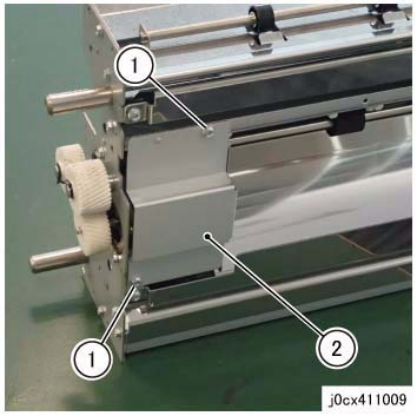


Figure 1 j0cx411009

4. Remove the gear. (Figure 2)
   (1) Remove the KL-Clip.
   (2) Remove the gear.

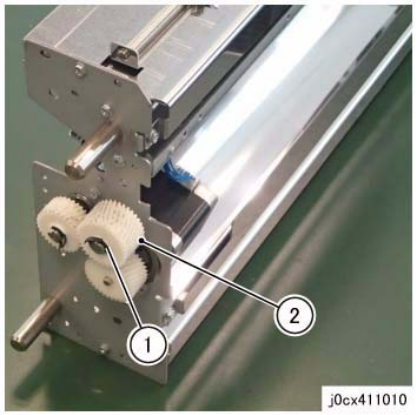


Figure 2 j0cx411010

5. Remove the J-Tra 2 Motor. (Figure 3)

   NOTE: *When removing J-Tra 2 Motor, be careful not to damage the Gear with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the J-Tra 2 Motor.

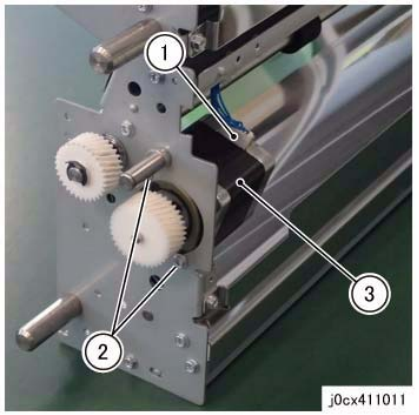


Figure 3 j0cx411011

Replacement

1. To install, carry out the removal steps in reverse order.

REP 12.1.1 (SCC) Baritori Roll Assembly

Parts List on PL 12.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the Connector Cover from the Baritori Roll Assembly. (Figure 1)
   (1) Remove the Connector Cover.s

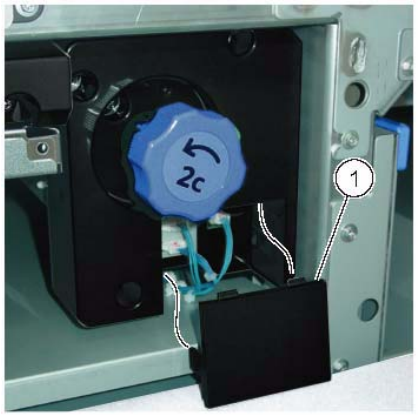


Figure 1 j0kol412001

3. Disconnect the Connector (x3). (Figure 2)
   (1) Disconnect the Connector (x3).

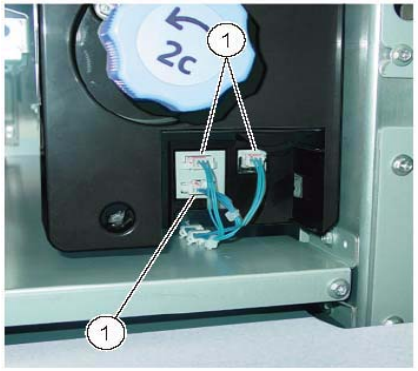


Figure 2 j0kol412002

4. Remove the Baritori Roll Assembly. (Figure 3)

   NOTE: *When removing the Baritori Roll Assembly, be careful not to pinch the Wire Harness.*

   (1) Remove the Screw (x2).
   (2) Remove the Baritori Roll Assembly.

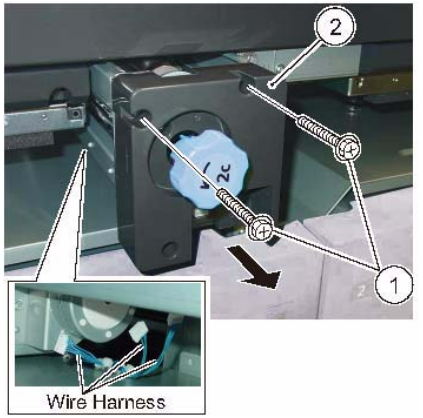


Figure 3 j0kol412003

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Baritori Roll Assembly, clear the following HFSI (DC 135) counters.
   - Upper Roll Assembly 'Chain Link: 010-860'
   - Burr Press T/A Roll Assembly 'Chain Link: 010-861'

REP 12.3.1 Upper Roll Assembly

Parts List on PL 12.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the Baritori Roll Assembly. (REP 12.1.1)
2. Remove the Screw Cover from the Baritori Roll Assembly. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Pull out the Knob Cover slightly.
   (3) Remove the Screw Cover.

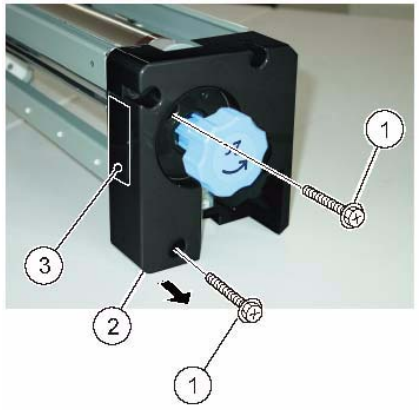


Figure 1 j0kol412004

3. Remove the Knob Cover. (Figure 2)
   (1) Remove the Screw.
   (2) Remove the Knob.
   (3) Remove the Knob Cover.

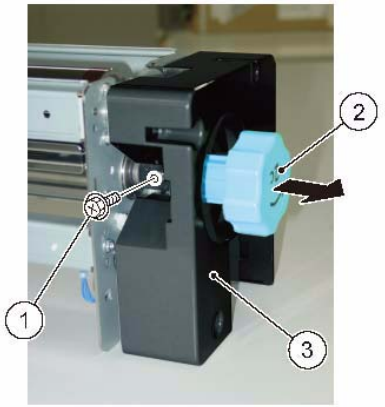


Figure 2 j0kol412005

4. Remove the KL-Clip, Washer, and Bearing from the rear. (Figure 3)
   (1) Remove the KL-Clip.
   (2) Remove the washer.
   (3) Remove the bearing.

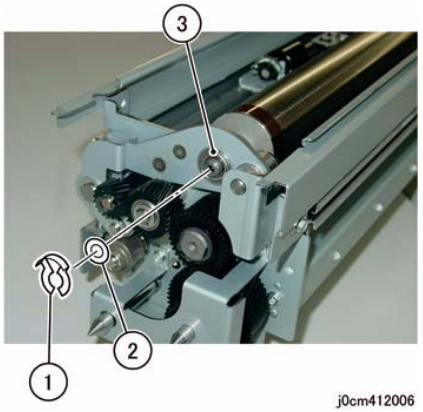


Figure 3 j0cm412006

5. Remove the KL-Clip, Washer, and Bearing from the front. (Figure 4)
   (1) Remove the KL-Clip.
   (2) Remove the washer.
   (3) Remove the bearing.

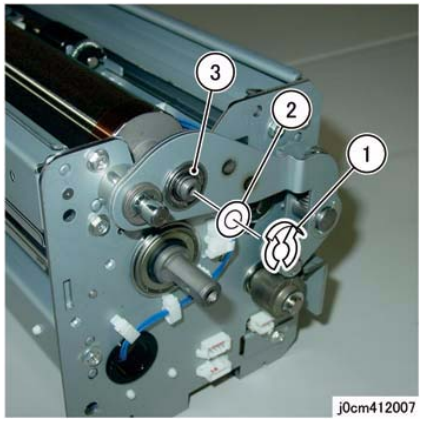


Figure 4 j0cm412007

6. Remove the Upper Roll Assembly. (Figure 5)
   (1) Move the Baritori Roll Assembly to the rear.
   (2) Lift the Shaft from the front and remove the Upper Roll Assembly.

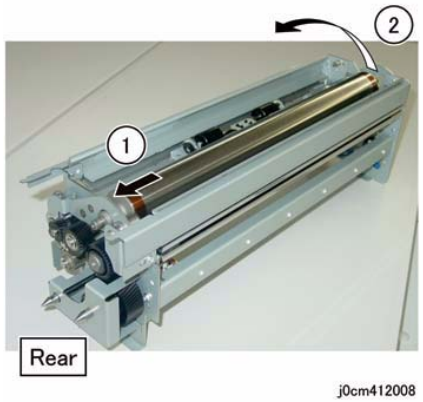


Figure 5 j0cm412008

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Upper Roll Assembly, clear the following HFSI (DC 135) counter.
   - Upper Roll Assembly 'Chain Link: 010-860'

REP 12.3.2 Front/Rear Lever Assembly

Parts List on PL 12.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the Baritori Roll Assembly. (REP 12.1.1)
2. Remove the Front/Rear Lever Assembly.

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points. (Figure 1)

NOTE: *After removing or replacing the Front/Rear Lever Assembly, install the Nip Screw so that it has the dimensions shown in the figure.*

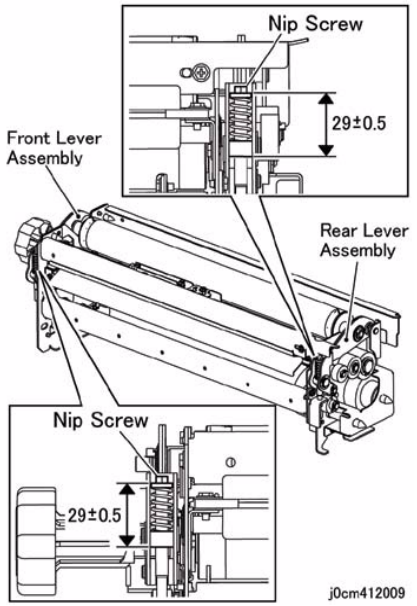


Figure 1 j0cm412009

REP 14.1.1 D1 Transport Assembly

Parts List on PL 14.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the D1 Transport Assembly is very heavy, be careful about your posture when performing the task. (D1 Transport Assembly: 10.9 kg or less)*

1. Open the IOT-R Front Left/Right Cover.
2. Remove the Harness Cover. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the Harness Cover.

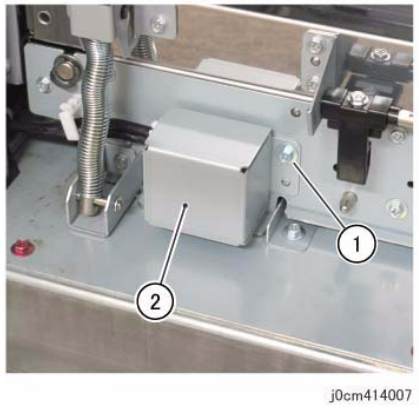


Figure 1 j0cm414007

3. Disconnect the Connector (x2). (Figure 2)
   (1) Release the wire harness from the Clamp (x2).
   (2) Disconnect the Connector (x2).

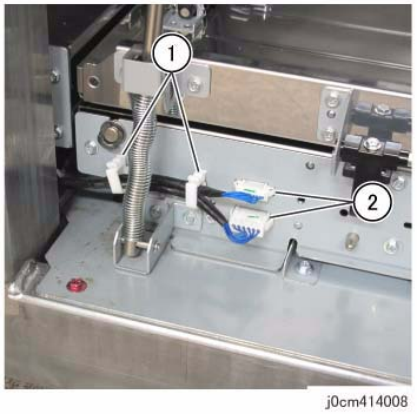


Figure 2 j0cm414008

4. When removing the D1 Transport Assembly, retract the Wire Harness (x2), released in Step 3, to the back of the Frame pillar on the left side so as not to damage it. (Figure 3)
   (1) Retract the Wire Harness (x2) to the back of the Frame pillar.

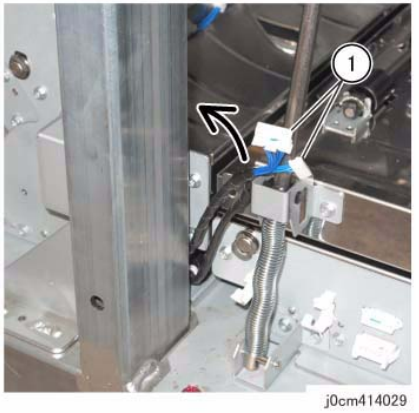


Figure 3 j0cm414029

5. Remove the D1 Transport Assembly. (Figure 4)
   (1) Remove the Screw.
   (2) Remove the Screw.
   (3) Remove the D1 Transport Assembly.

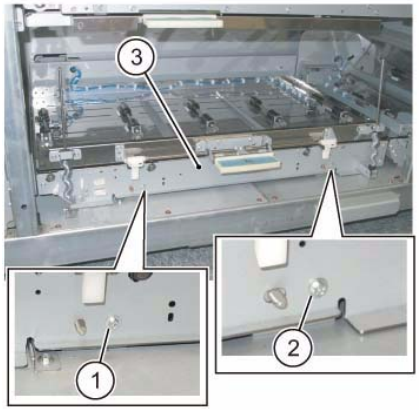


Figure 4 j0kol414001

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When replacing with a new D1 Transport Assembly, replace the following parts at the same time.*

   - *D-Tra Roll 6 (PL 14.4)*
   - *D-Tra Roll 7 (PL 14.4)*

REP 14.1.2 D2 Transport Assembly

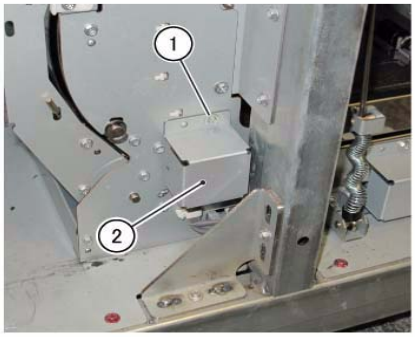
Parts List on PL 14.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

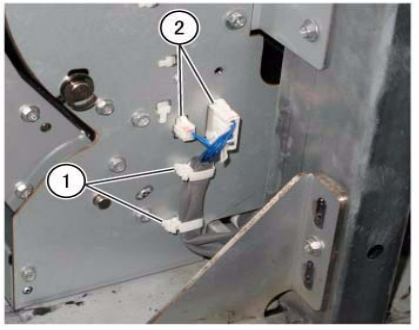
1. Open the IOT-R Front Left/Right Cover.
2. Remove the Harness Cover. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the Harness Cover.



j0cm414001

Figure 1 j0cm414001

3. Disconnect the Connector (x2). (Figure 2)
   (1) Release the wire harness from the Clamp (x2).
   (2) Disconnect the Connector (x2).



j0cm414002

Figure 2 j0cm414002

4. Remove the D2 Transport Assembly. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the D2 Transport Assembly.

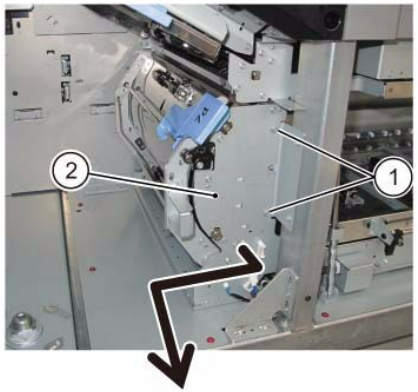


Figure 3 j0kol414002

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When replacing with a new D2 Transport Assembly, replace the following parts at the same time.*

   - *D-Tra Roll 1 (PL 14.3)*
   - *D-Tra Roll 2 (PL 14.3)*
   - *D-Tra Roll 3 (PL 14.3)*
   - *D-Tra Roll 4 (PL 14.3)*
   - *D-Tra Roll 5 (PL 14.3)*

2. After replacement, clear the following HFSI (DC135) counter.
   "Chain Link: 008-870"

REP 14.1.3 Gate Chute Assembly

Parts List on PL 14.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the D2 Transport Assembly. (REP 14.1.2)
3. Remove the Lock Cover. (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Lock Cover.

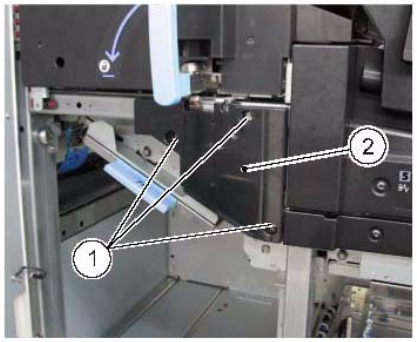


Figure 1 j0kol414003

4. Remove the Gate Chute Assembly. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Gate Chute Assembly.

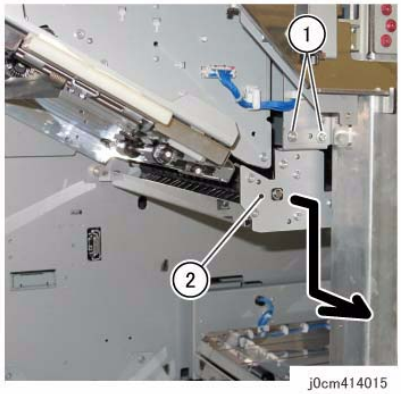


Figure 2 j0cm414015

Replacement

1. To install, carry out the removal steps in reverse order.

REP 14.1.4 Duplex Inverter Transport Assembly

Parts List on PL 14.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the Duplex Inverter Transport Assembly is very heavy, be careful about your posture when performing the task. (Duplex Inverter Transport Assembly: 7.3 kg or less)*

1. Open the IOT-R Front Left/Right Cover.
2. Remove the Inner Frame Cover. (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Inner Frame Cover.

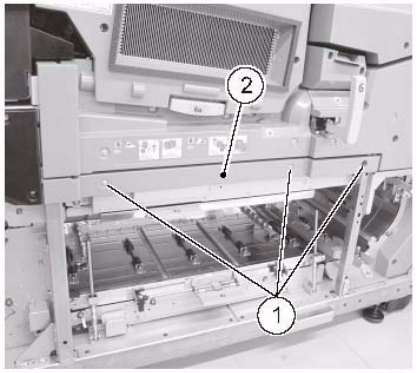


Figure 1 j0kol414006

3. Remove the Harness Cover. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Harness Cover.

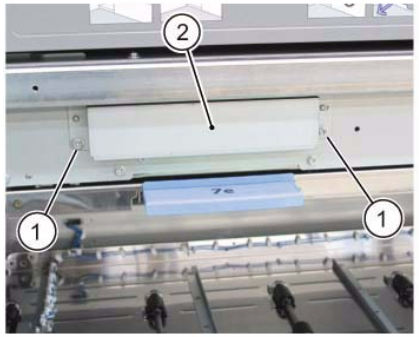


Figure 2 j0kol414004

4. Remove the Duplex Inverter Transport Assembly. (Figure 3)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector.
   (3) Remove the Screw (x2).
   (4) Remove the Duplex Inverter Transport Assembly.

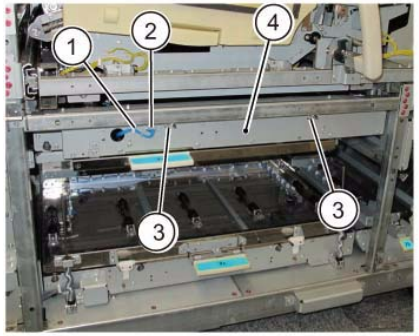


Figure 3 j0kol414005

Replacement

1. To install, carry out the removal steps in reverse order.

REP 14.1.5 Duplex Transport Assembly

Parts List on PL 14.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the Duplex Transport Assembly is very heavy, be careful about your posture when performing the task. (Duplex Transport Assembly: 7.05 kg or less)*

1. Open the IOT-R Front Left/Right Cover.
2. Remove the D2 Transport Assembly. (REP 14.1.2)
3. Remove the Gate Chute Assembly. (REP 14.1.3)
4. Remove the Duplex Transport Assembly. (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector.
   (3) Remove the Screw (x2).
   (4) Pull the Duplex Transport Assembly slightly forward, and remove it downwards while removing it from the Stud.

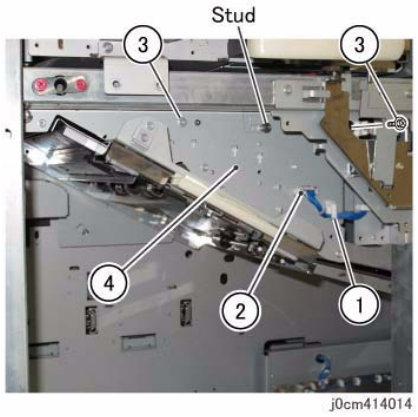


Figure 1 j0cm414014

Replacement

1. To install, carry out the removal steps in reverse order.

REP 14.3.1 (SCC) D-Tra Motor 1 Assembly

Parts List on PL 14.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the D1 Transport Assembly. (REP 14.1.1)
3. Relax the Belt tension. (Figure 1)
   (1) Loosen the Screw.
   (2) Slide the Tension Bracket in the direction of the arrow.
   (3) Tighten the Screw.

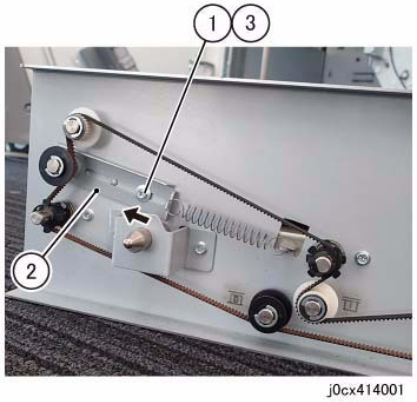


Figure 1 j0cx414001

4. Remove the D-Tra Motor 1 Assembly. (Figure 2)
   (1) Release the wire harness from the Clamp.
   (2) Release the Push Tie.
   (3) Disconnect the Connector.
   (4) Remove the Screw (x3).
   (5) Remove the D-Tra Motor 1 Assembly.

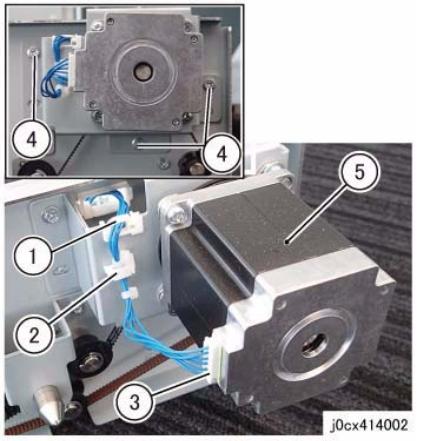


Figure 2 j0cx414002

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the D1 Transport Belt in the direction of the arrow by 1 to 2 turns to accommodate the D1 Transport Belt, and tighten the Screw. (Figure 3)*

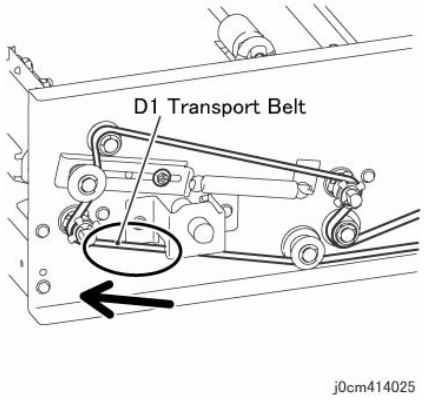


Figure 3 j0cm414025

REP 14.3.2 D1 Transport Belt

Parts List on PL 14.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the D-Tra Motor 1 Assembly. (REP 14.3.1)
3. Remove the D1 Transport Belt. (Figure 1)

Figure 1 j0cm414012

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *The D1 Transport Belt should be installed this way. (Figure 2)*

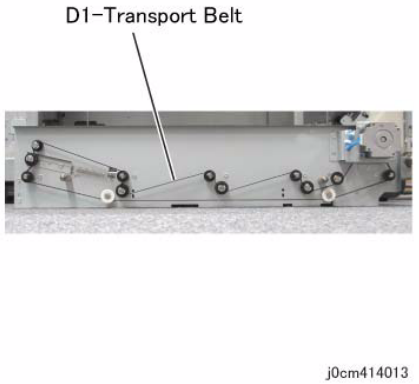


Figure 2 j0cm414013

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the D1 Transport Belt in the direction of the arrow by 1 to 2 turns to accommodate the D1 Transport Belt, and tighten the Screw. (Figure 3)*

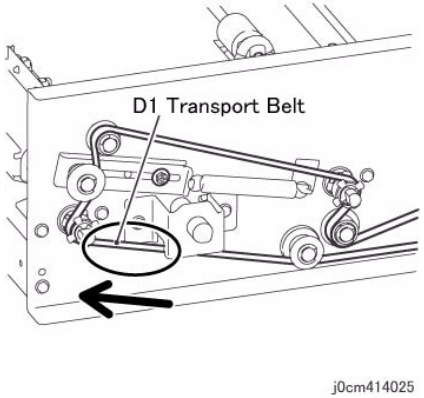


Figure 3 j0cm414025

REP 14.4.1 (SCC) D-Tra Motor 2 Assembly

Parts List on PL 14.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the D2 Transport Assembly. (REP 14.1.2)
3. Relax the Belt tension. (Figure 1)
   (1) Loosen the Screw.
   (2) Slide the Tension Bracket in the direction of the arrow.
   (3) Tighten the Screw.

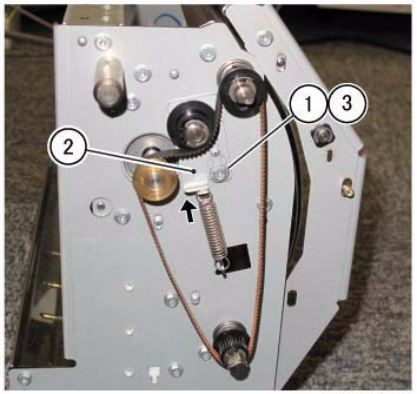


Figure 1 j0cm414004

4. Remove the Motor Cover. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Motor Cover.

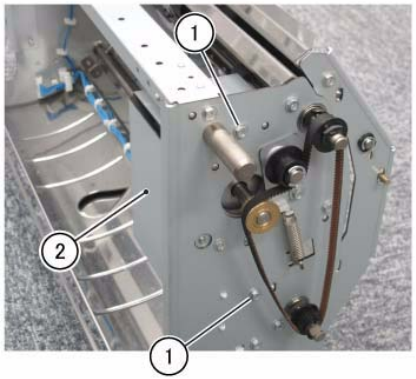


Figure 2 j0cm414005

5. Remove the D-Tra Motor 2 Assembly. (Figure 3)

   NOTE: *When removing the D-Tra Motor 2 Assembly, be careful not to damage the Pulley with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the D-Tra Motor 2 Assembly.

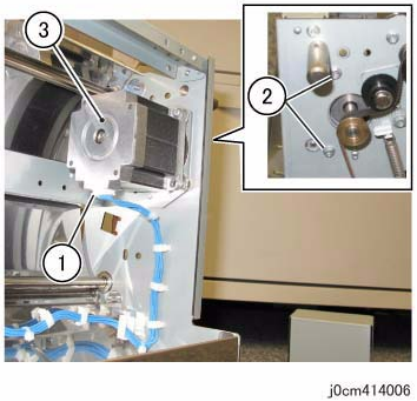


Figure 3 j0cm414006

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the Belt in the direction of the arrow by 1 to 2 turns to accommodate the Belt, and tighten the Screw. (Figure 4)*

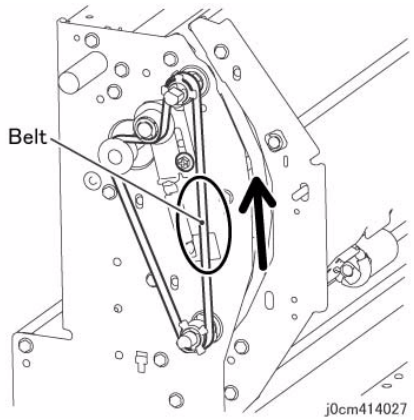


Figure 4 j0cm414027

REP 14.6.1 (SCC) Dup Invert Motor

Parts List on PL 14.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the Duplex Inverter Transport Assembly. (REP 14.1.4)
3. Remove the Dup Invert Motor. (Figure 1)

   NOTE: *When removing Dup Invert Motor, be careful not to damage the Gear with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the Dup Invert Motor.

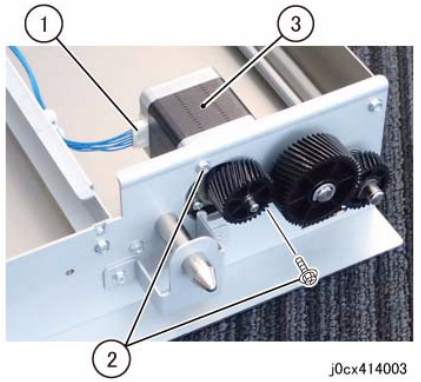


Figure 1 j0cx414003

Replacement

1. To install, carry out the removal steps in reverse order.

REP 14.7.1 (SCC) Duplex Motor Assembly

Parts List on PL 14.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the Duplex Transport Assembly. (REP 14.1.5)
3. Relax the Belt tension. (Figure 1)
   (1) Loosen the Screw.
   (2) Slide the Tension Bracket in the direction of the arrow.
   (3) Tighten the Screw.

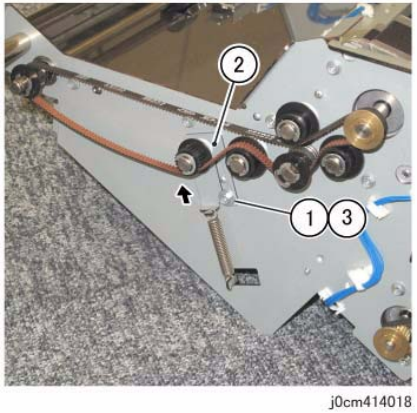


Figure 1 j0cm414018

4. Remove the Duplex Motor Assembly. (Figure 2)

   NOTE: *When removing the Duplex Motor Assembly, be careful not to damage the Pulley with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the Duplex Motor Assembly.

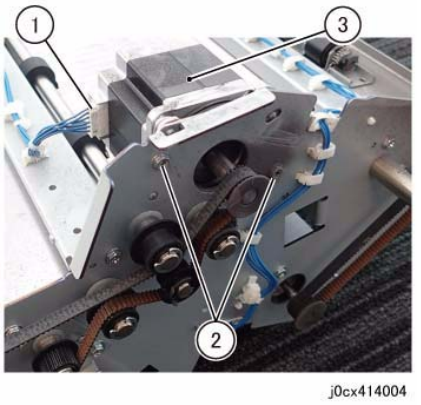


Figure 2 j0cx414004

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *When securing the Tension Bracket, with the Screw loosened, rotate the indicated part of the Belt in the direction of the arrow by 1 to 2 turns to accommodate the Belt, and tighten the Screw. (Figure 3)*

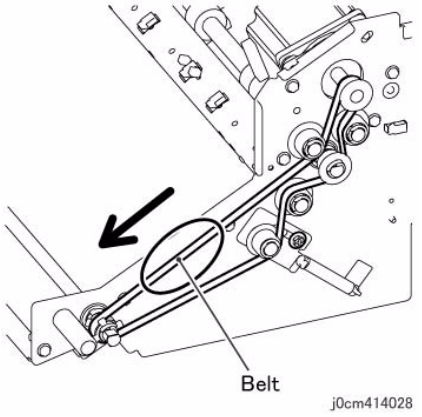


Figure 3 j0cm414028

REP 14.7.2 (SCC) Duplex Out Motor

Parts List on PL 14.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the Duplex Transport Assembly. (REP 14.1.5)
3. Remove the Motor Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Motor Cover.

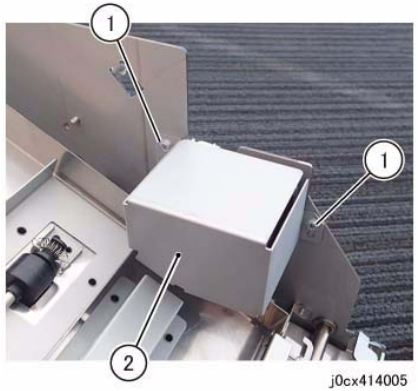


Figure 1 j0cx414005

4. Remove the Duplex Out Motor. (Figure 2)

   NOTE: *When removing the Duplex Out Motor, be careful not to damage the Pulley with the hole of Frame.*

   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the Duplex Out Motor.

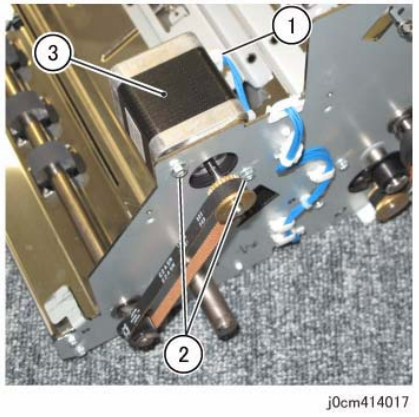


Figure 2 j0cm414017

Replacement

1. To install, carry out the removal steps in reverse order.

REP 15.1.1 Pre Regi. Assembly

Parts List on PL 15.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door
2. Push down the Big Module handle and pull out the Big Module slightly.
3. Remove the Pre Regi. Cover. (Figure 1)
   (1) Lift up the Pre Regi. Upper Chute.
   (2) Remove the Screw (x4).
   (3) Remove the Pre Regi. Cover.

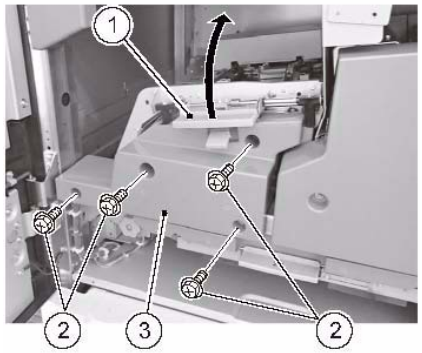


Figure 1 j0kol415001

4. Remove the Pre Regi. Assembly. (Figure 2)
   (1) Disconnect the Connector (x2).
   (2) Release the wire harness from the Clamp.
   (3) Remove the Screw (x2).
   (4) Lower the Pre Regi. Upper Chute.
   (5) Pull out the Pre Regi. Assembly towards you, and remove it.

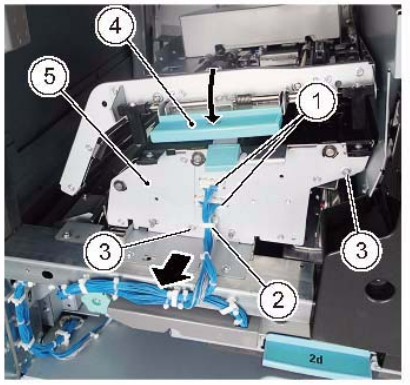


Figure 2 j0kol415002

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the Pre Regi. Assembly, align the Pre Regi. Rail and the Notch of the Pre Regi. Assembly Frame, and push in. (Figure 3)*

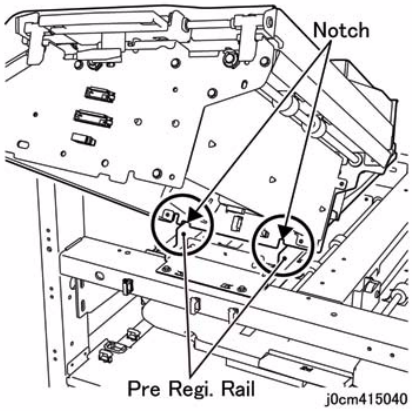


Figure 3 j0cm415040

2. After replacing the Pre Regi. Assembly, clear the following HFSI (DC135) counter.
   - Transport Roll "Chain Link: 008-805"
   - Multi Feed Sensor "Chain Link: 008-810"
   - Pre Regi. Roll 1 "Chain Link: 008-811"
   - Pre Regi. Roll 2 "Chain Link: 008-812"

REP 15.1.2 I-Transport Assembly (Option)

Parts List on PL 15.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the I-Transport Assembly is very heavy, be careful about your posture when performing the task.*

1. Remove the Pre Regi. Assembly. (REP 15.1.1)
2. Disconnect the Connector (x2) that is connected to the I-Transport Assembly. (Figure 1)
   (1) Remove the Screw.
   (2) Remove the Connector Cover.
   (3) Release the wire harness from the Clamp.
   (4) Disconnect the Connector (x2).

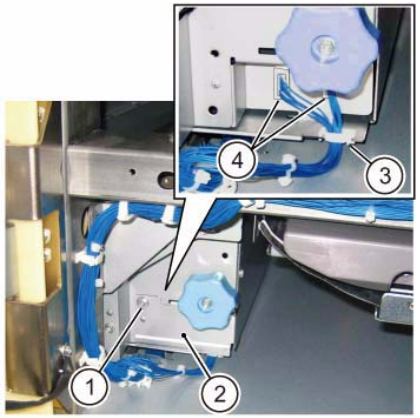


Figure 1 j0kol415003

3. Remove the I-Transport Assembly. (Figure 2)
   (1) Remove the Screw.
   (2) Lift the I-Transport Assembly, and remove it towards you.

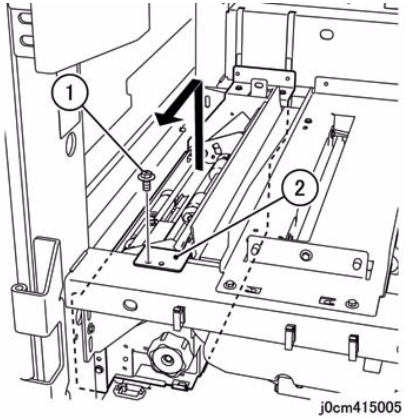


Figure 2 j0cm415005

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When installing the I-Transport Assembly, align Stud (x2) at Rear to the Notch (x2) of the Guide. (Figure 3)*

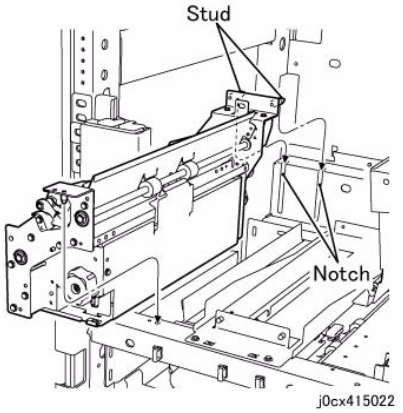


Figure 3 j0cx415026

2. After replacing the I-Transport Assembly, clear the following HFSI (DC135) counter.
   - I-Tra Roll 1 "Chain Link: 008-804"
   - I-Tra Roll 2 "Chain Link: 008-804"

REP 15.7.1 Aligner Assembly

Parts List on PL 15.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

As the Aligner Assembly is very heavy, be careful about your posture when performing the task. (Aligner Assembly: 15.95 kg or less)

1. Remove the Pre Aligner Assembly. (REP 15.7.2)
2. Remove the Aligner Assembly. (Figure 1)
   (1) Disconnect the Connector (x4).
   (2) Release the Ground Wire from the Clamp.
   (3) Remove the Screw at the Aligner, and remove the Grand Wire.
   (4) Remove the Aligner Assembly.

   NOTE: *The task should be performed by 2 persons in principle. However, when working alone, remove the Aligner Top Cover (0.76 kg) to reduce the weight to 15.8 kg or less, then remove it. (PL 15.7)*

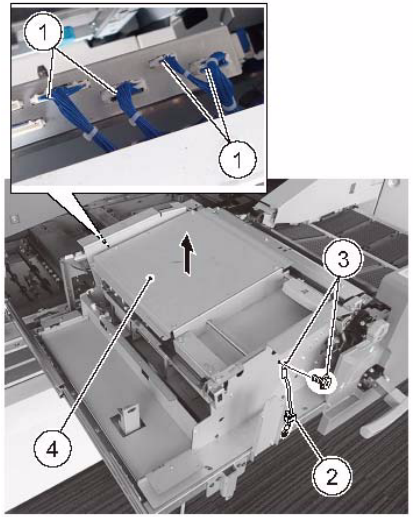


Figure 1 j0kol415004

Replacement

1. To install, carry out the removal steps in reverse order.
2. After installing the Aligner Assembly, Aligner Assembly, perform ADJ 15.6.8 Aligner Guide/Tray Guide Position Adjustment, and clear the following HFSI (DC135) counters.
   - Regi. Roll "Chain Link: 008-830"
   - Regi. Motor "Chain Link: 008-831"

REP 15.7.2 Pre Aligner Assembly

Parts List on PL 15.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out Big Module up to the Service Position. (REP 9.1.1)
2. Remove the Drawer Left Cover. (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Drawer Left Cover.

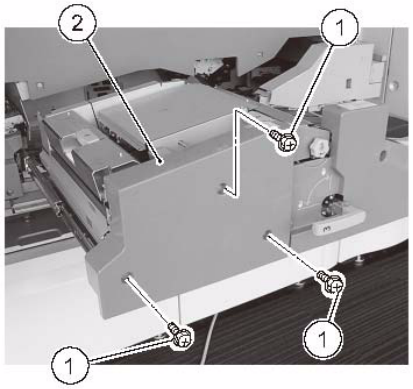


Figure 1 j0kol415005

3. Disconnect the Connector (x3) of the Pre Aligner Assembly. (Figure 2)
   (1) Disconnect the Connector (x3).

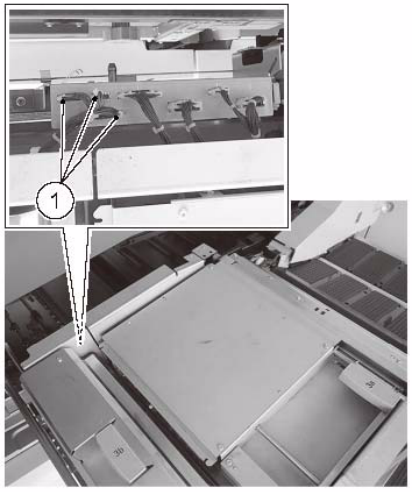


Figure 2 j0kol415006

4. Remove the Gear Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Gear Cover.

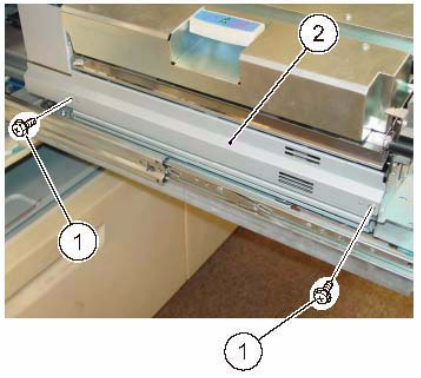


Figure 3 j0kol415007

5. Remove the Bracket Assembly. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Rotate the Bracket Assembly by 90 degrees, and pull it out.

   NOTE: *When pulling out the Bracket Assembly, be careful not to damage the gear.*

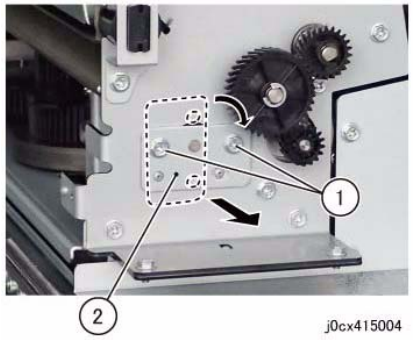


Figure 4 j0cx415004

6. Remove the Pre Aligner Assembly. (Figure 5)
   (1) Remove the Screw (x3). (Remove the Screw at the Rear using a Long Driver.)
   (2) Remove the Pre Aligner Assembly.

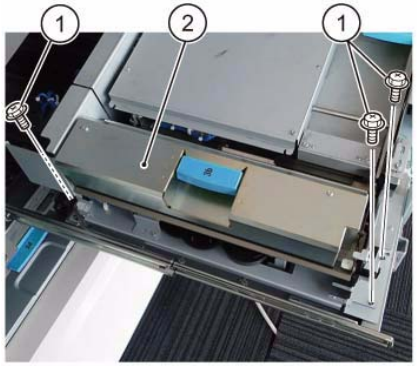


Figure 5 j0kol415008

Replacement

1. To install, carry out the removal steps in reverse order.

REP 15.10.1 Aligner Crossed N/R Motor 1/2/3 Assembly

Parts List on PL 15.10

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *The procedure of Aligner Crossed N/R Motor 3 Assembly is described here. The procedure is the same for Aligner Crossed N/R Motor 1/2 Assembly.*

1. Open the IOT-L Front Left Door/Front Right Door.
2. Pull out Big Module up to the Service Position. (REP 9.1.1)
3. Remove the Drawer Left Cover. (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Drawer Left Cover.

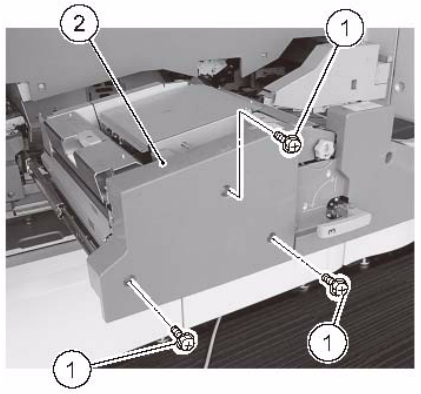


Figure 1 j0kol415005

4. Remove the Aligner Top Cover. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the Aligner Top Cover.

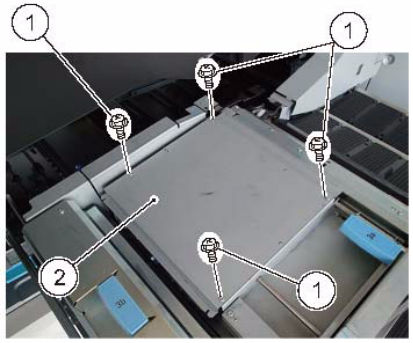


Figure 2 j0kol415009

5. Remove the Aligner Crossed N/R Motor 3 Assembly. (Figure 3)
   (1) Disconnect the Connector (x2).
   (2) Remove the Nut (x3).
   (3) Remove the Aligner Crossed N/R Motor 3 Assembly.

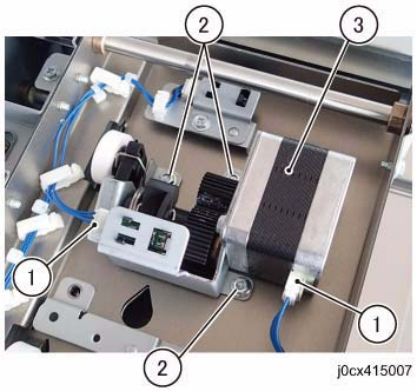


Figure 3 j0cx415007

Replacement

1. To install, carry out the removal steps in reverse order.

REP 15.11.1 Aligner Move Frame Assembly

Parts List on PL 15.11

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the Aligner Assembly is very heavy, be careful about your posture when performing the task (Aligner Assembly: 15.95 kg or less). Also, lift it carefully so as not to touch the 2nd Belt Assembly.*

1. Remove the Pre Aligner Assembly. (REP 15.7.2)
2. Remove the Aligner Top Cover. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the Aligner Top Cover.

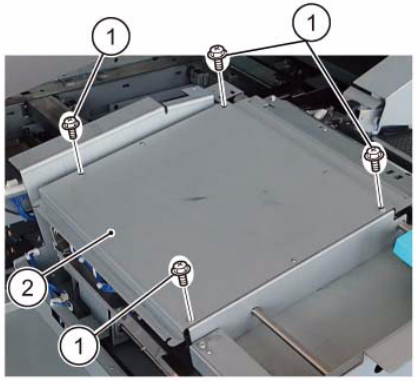


Figure 1 j0kol415010

3. Remove the Aligner Assembly. (Figure 2)
   (1) Disconnect the Connector (x4).
   (2) Release the Ground Wire from the Clamp.
   (3) Remove the Screw at the Aligner, and remove the Grand Wire.
   (4) Remove the Aligner Assembly.

NOTE: *The task should be performed by 2 persons in principle. However, when working alone, remove the Aligner Top Cover (0.76 kg) to reduce the weight to 15.8 kg or less, then remove it. (PL 15.7)*

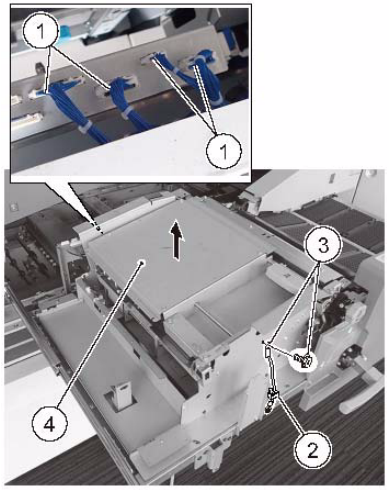


Figure 2 j0kol415004

4. Open the Upper Front/Rear Chute Assembly. (Figure 3)
   (1) Loosen the Screw.
   (2) Slide the Stopper Bracket.
   (3) Open the Upper Front/Rear Chute Assembly.

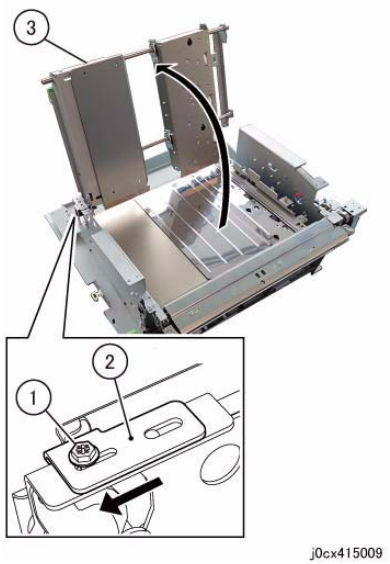


Figure 3 j0cx415009

5. When gap A between the Aligner Move Frame and Aligner Frame is narrow, turn the Screw in the direction of the arrow, and move the Aligner Move Frame Assembly to the Front. (Figure 4)
   (1) When gap A between the Aligner Move Frame and Aligner Frame is narrow, turn the Screw in the direction of the arrow.

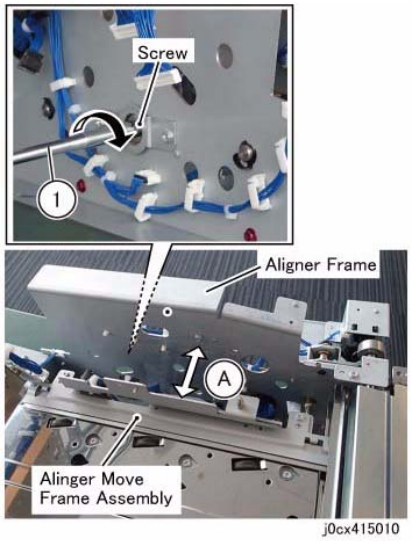


Figure 4 j0cx415010

6. Release the Harness from the Rear, and pull it out to the Front. (Figure 5)
   (1) Release the harness from the Clamp.
   (2) Release the Push Tie.
   (3) Pull the Harness from the Bush to the Front.

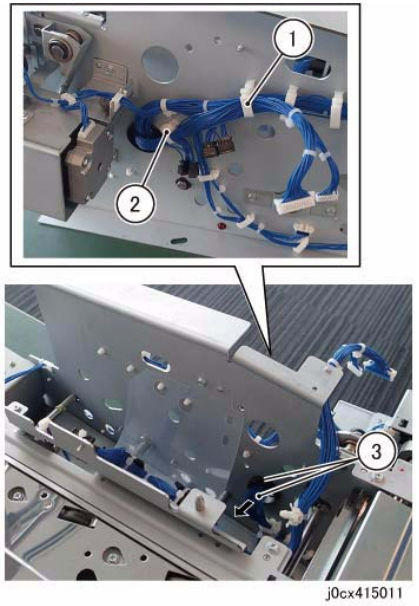


Figure 5 j0cx415011

7. Release Harness for each Harness Sheet. (Figure 6)
   (1) Remove the Screw (x2).
   (2) Remove the Harness Sheet.

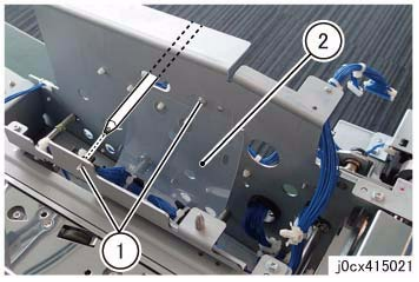


Figure 6 j0cx415021

8. Disconnect the Connector and release the Harness from the Clamp (x5). (Figure 7)
   (1) Disconnect the Connector.
   (2) Release the harness from the Clamp (x5).

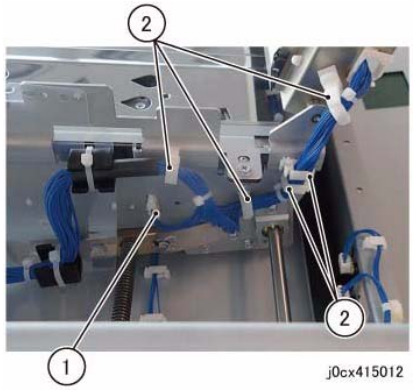


Figure 7 j0cx415012

9. Close the Upper Front/Rear Chute Assembly.
10. Remove the Upper Front/Rear Chute Assembly. (Figure 8)
    (1) Remove the KL-Clip and the washer.
    (2) Remove the Screw (x2).
    (3) Remove the Bracket.
    (4) Remove the Damper.
    (5) Remove the E-Clip.
    (6) Remove the Upper Front/Rear Chute Assembly.

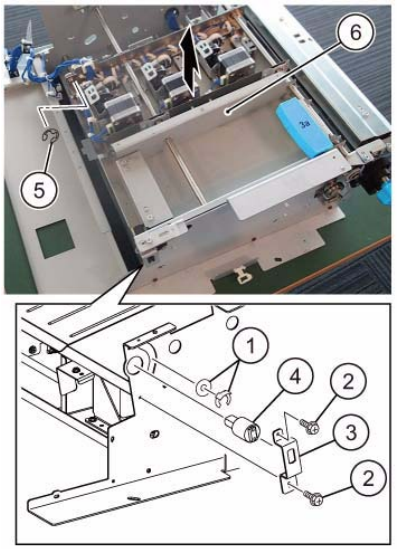


Figure 8 j0kol415011

11. Remove the Guide Support. (Figure 9)
    (1) Remove the Screw (x2).
    (2) Remove the Guide Support.

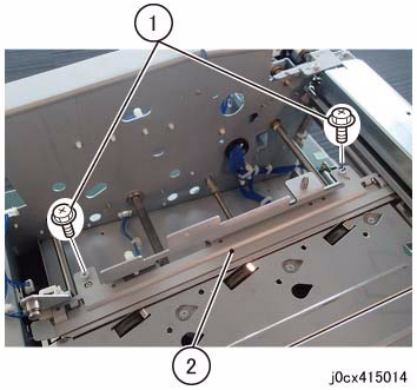


Figure 9 j0cx415014

12. Remove the Aligner Lower Rear Chute. (Figure 10)
    (1) Remove the Screw (x3).
    (2) Remove the Aligner Lower Rear Chute.

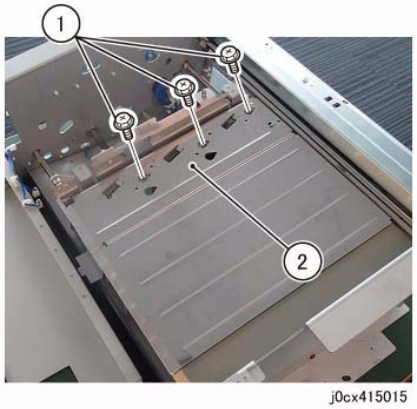


Figure 10 j0cx415015

13. Remove the Aligner Lower Middle Chute. (Figure 11)
    (1) Remove the Screw (x3).
    (2) Remove the Aligner Lower Middle Chute.

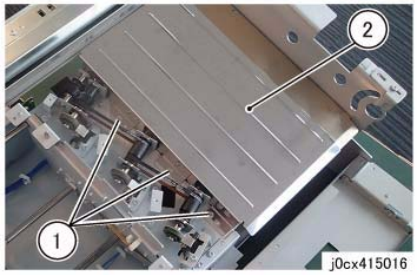


Figure 11 j0cx415016

14. Remove the Aligner Lower Front Chute. (Figure 12)
    (1) Remove the Screw (x6).
    (2) Remove the Aligner Lower Front Chute.

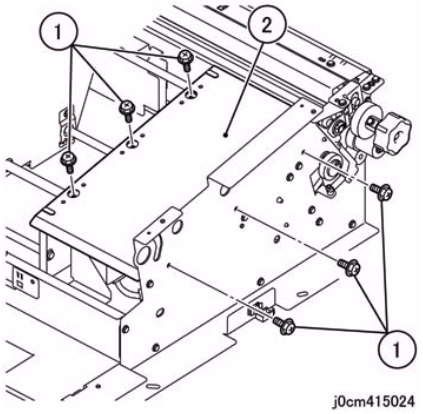


Figure 12 j0cm415024

15. Remove the Aligner Shift Motor Assembly. (Figure 13)
    (1) Disconnect the Connector.
    (2) Release the harness from the Clamp.
    (3) Remove the Screw (x2).
    (4) Remove the Aligner Shift Motor Assembly and Belt.

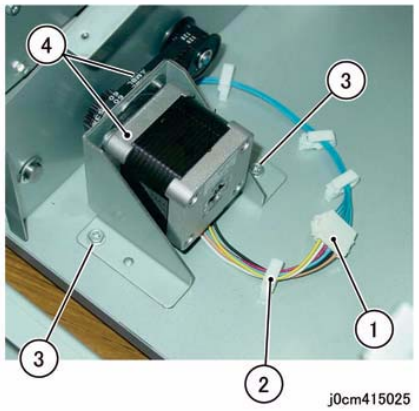


Figure 13 j0cm415025

16. Remove each part from the Rear of the Aligner Assembly. (Figure 14)
    (1) Remove the Screw (x2).
    (2) Remove the Bracket.
    (3) Remove the Screw and Washer.
    (4) Remove the bearing.

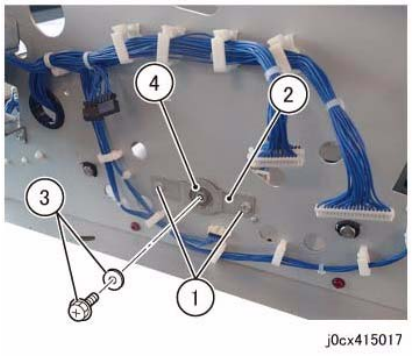


Figure 14 j0cx415017

17. Remove each part from the Aligner Move Frame Assembly. (Figure 15)
    (1) Remove the E-Clip, Pulley, Collar, and Bearing.
    (2) Remove the E-Clip (x2).
    (3) Remove the Shaft (x2) towards the Rear direction.

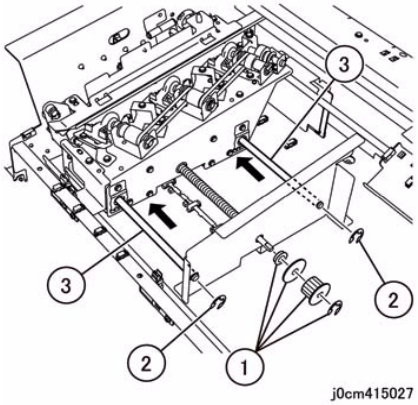


Figure 15 j0cm415027

18. Turn the Shift Screw in the direction of the arrow, and move the Aligner Move Frame Assembly to the Front, then remove it. (Figure 16)
    (1) Turn the Shift Screw in the direction of the arrow, and move the Aligner Move Frame Assembly to the Front.
    (2) Remove the Aligner Move Frame Assembly.

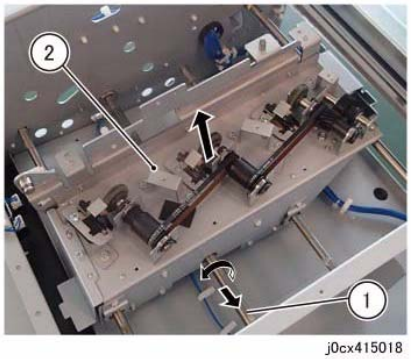


Figure 16 j0cx415018

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Aligner Move Frame Assembly, clear the following HFSI (DC135) counter.
    - Aligner Roll 1/2/3 "Chain Link: 008-821"

REP 15.12.1 Aligner Roll 1,2,3/Pad Bracket Assembly

Parts List on PL 15.12

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Pull out Big Module up to the Service Position. (REP 9.1.1)
2. Remove the Drawer Left Cover. (Figure 1)
   (1) Remove the Screw (x3).
   (2) Remove the Drawer Left Cover.

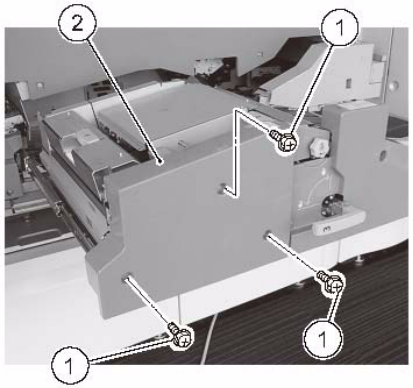


Figure 1 j0kol415005

3. Open the Upper Front/Rear Chute Assembly. (Figure 2)
   (1) Loosen the Screw.
   (2) Slide the Stopper Bracket.
   (3) Open the Upper Front/Rear Chute Assembly.

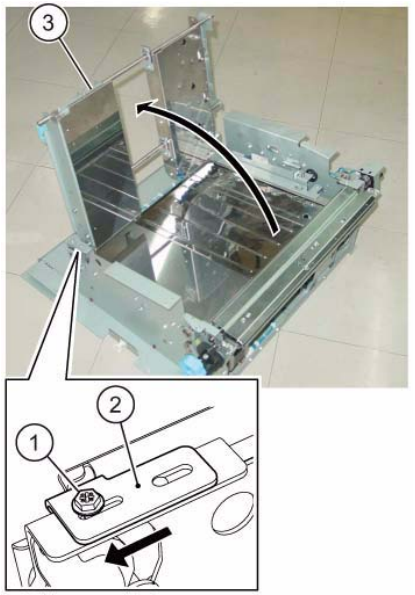


Figure 2 j0kol415012

4. Remove the Guide Support. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Guide Support.

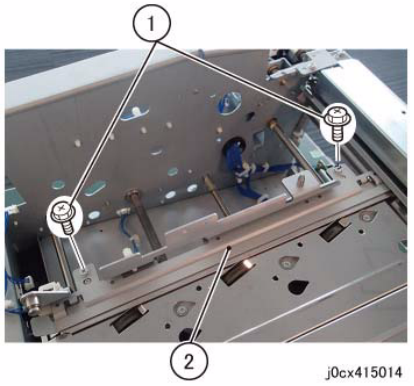


Figure 3 j0cx415014

5. Remove the Aligner Lower Rear Chute. (Figure 4)
   (1) Remove the Screw (x3).
   (2) Remove the Aligner Lower Rear Chute.

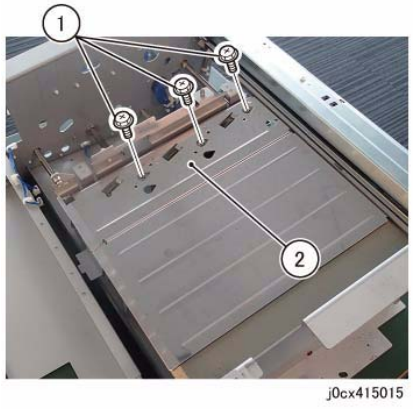


Figure 4 j0cx415015

6. Remove the Aligner Lower Middle Chute. (Figure 5)
   (1) Remove the Screw (x3).
   (2) Remove the Aligner Lower Middle Chute.

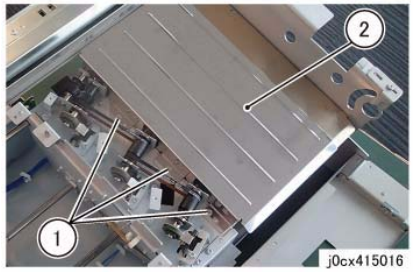


Figure 5 j0cx415016

7. Remove the Pad Bracket Assembly/Plate Spring/Bracket. (Figure 6)
   (1) Remove the Screw (x3).
   (2) Remove the Pad Bracket Assembly/Plate Spring/Bracket.

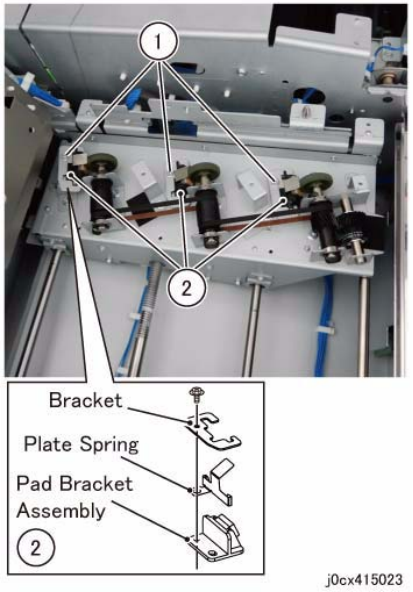


Figure 6 j0cx415023

NOTE: *If the Plate Spring deforms, it is possible that the life of Roll may be accelerated by deterioration of the cleaning capability of the surface of the Roll and accelerated wear, hence, take great care in removing the Plate Spring. (Figure 7)*

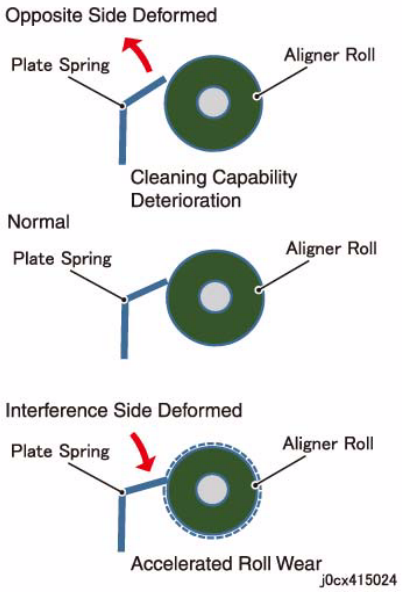


Figure 7 j0cx415024

8. Remove the Aligner Roll 1/2/3. (Figure 8)
   (1) Remove the KL-Clip, Washer, and Bearing.
   (2) Remove the KL-Clip.
   (3) Slide the bearing to the rear.
   (4) Lift the other parts upward and remove the Aligner Roll 1/2/3.

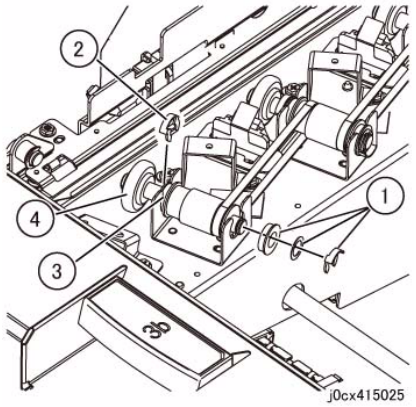


Figure 8 j0cx415025

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the Aligner Roll 1,2,3/Pad Bracket Assembly, clear the following HFSI (DC135) counter.
   - "Chain Link: 008-821"

REP 16.1.1 Exit Drawer Unit

Parts List on PL 16.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

As the Exit Drawer Unit is heavy, the work must be done by 2 persons. At that time, be careful about your posture, and position your hip lower to perform the work. (Exit Drawer Unit: 18 kg or less)

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

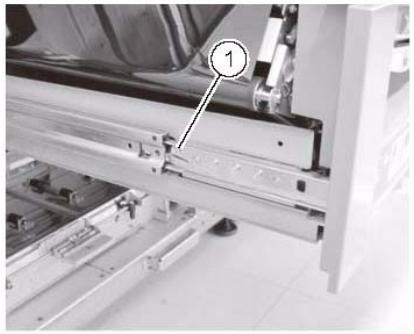


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the right and left Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

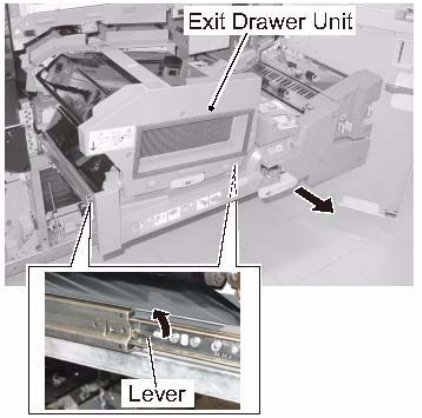


Figure 2 j0kol416002

5. As the Exit Drawer Unit is heavy, remove the following parts when the work is performed by 1 person. (15.8 kg or less)
   - Inverter 1 Transport Assembly (REP 16.1.2)
   - Decurler Assembly (REP 16.1.3)
   - Cooling Upper Belt (REP 16.5.1)
   - Remove the CLG Lower Assembly. (REP 16.1.4)
6. Close the CLG Upper Assembly.
7. Remove the Exit Drawer Unit. (Figure 3)
   (1) Remove the 2nd of the 2-tier stopper of the right and left Rail by lifting the Lever, and pull out the Exit Drawer Unit.

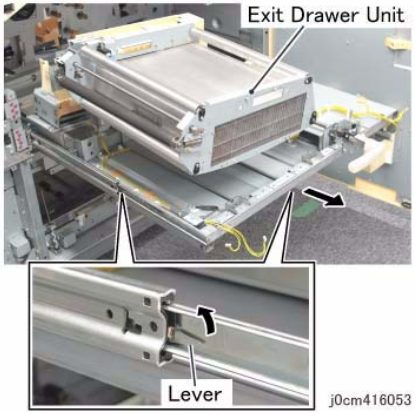


Figure 3 j0cm416053

Replacement

1. To install, carry out the removal steps in reverse order. During replacement, perform also the following procedures.

   NOTE: *As the Right/Left Rail of the Right/Left Rail Assembly remaining in the machine body cannot be removed, reuse it.*

2. Push in the Exit Drawer Unit slowly.
   [When pushed in]
   Proceed to Step 6.
   [When not pushed in]
   Perform from Steps 3 to 5, but for the Red Screw, do not loosen it if possible.
3. Remove the IOT-R Rear Right Cover. (PL 19.9)
4. Loosen the Red Screw (x2) that secures the Locate Bearing. (Figure 4)

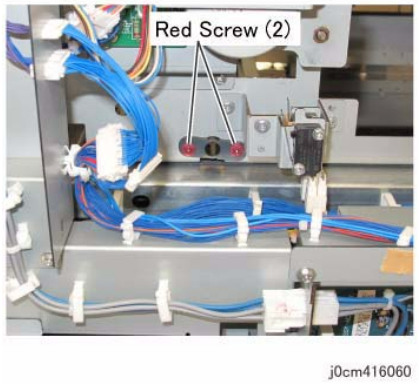


Figure 4 j0cm416060

5. Push in the Exit Drawer Unit, tighten the Red Screw (x2) that was loosened in Step 4.
6. Clear the following HFSI (DC135) counters.
   'Chain Link: 010-845'

REP 16.1.2 Inverter 1 Assembly

Parts List on PL 16.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

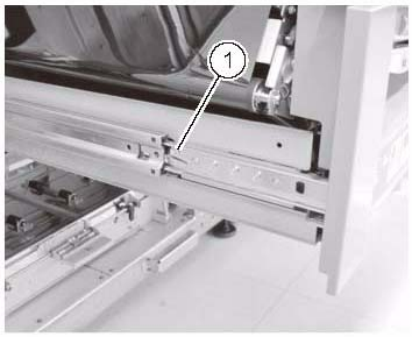


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

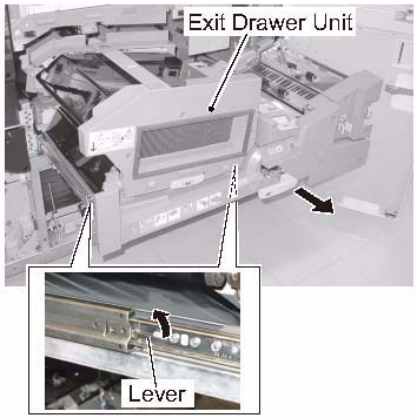


Figure 2 j0kol416002

5. Remove the Inverter 1 Front Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Inverter 1 Front Cover.

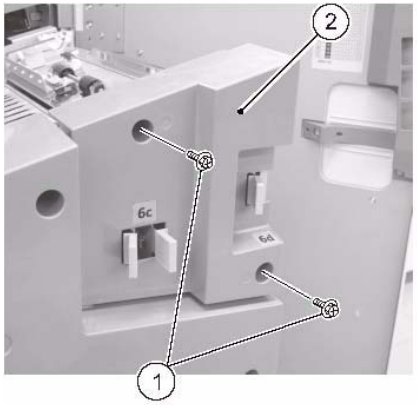


Figure 3 j0kol416003

6. Remove the Inner Right Lower Cover. (Figure 4)
   (1) Remove the Screw (x5).
   (2) Remove the Inner Right Lower Cover.

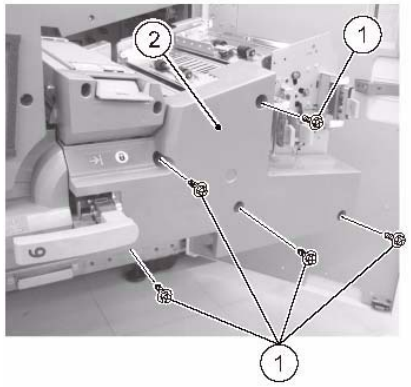


Figure 4 j0kol416004

7. Remove the WR Roll Assembly. (Figure 5)
   (1) Disconnect the Connector.
   (2) Remove the WR Roll Assembly.

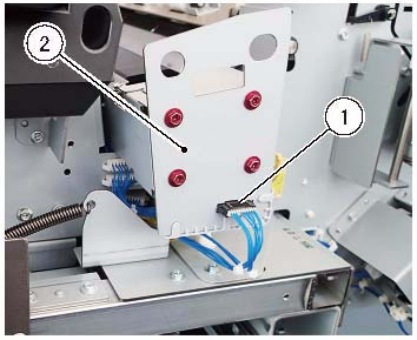


Figure 5 j0kol416019

8. Disconnect the Connector (x3). (Figure 6)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x3).

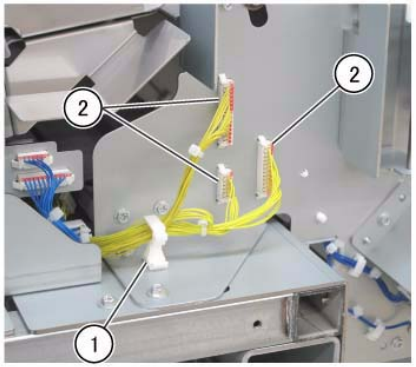


Figure 6 j0cm416004

9. Remove the Inverter 1 Assembly. (Figure 7)
   (1) Remove the Screw (x6).
   (2) Remove the Inverter 1 Assembly.

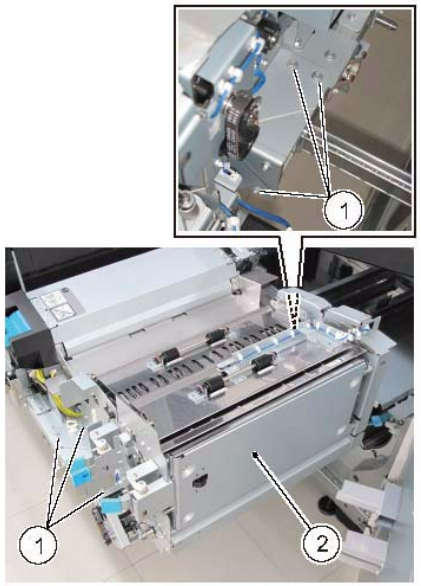


Figure 7 j0kol416005

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

   NOTE: *Inverter 1 Assembly should be secured while pressing in the direction of the arrow. (Figure 8)*

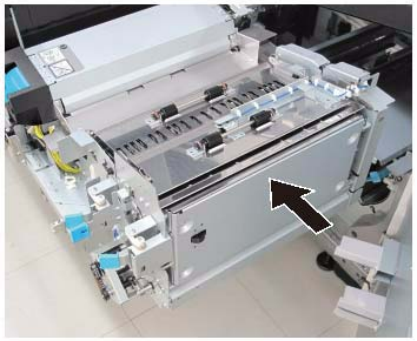


Figure 8 j0kol416006

NOTE: *When replacing to a new Inverter 1 Assembly, replace the following parts at the same time.*

- *Invert Path Roll 1 (PL 16.19)*
- *Invert Path Roll 2 (PL 16.19)*
- *Invert Path Roll 3 (PL 16.19)*

REP 16.1.3 Decurler Assembly

Parts List on PL 16.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

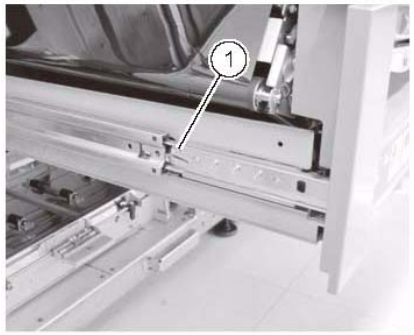


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

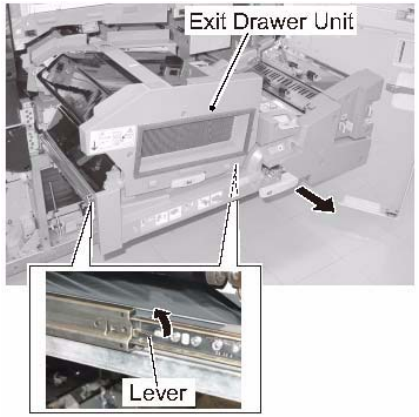


Figure 2 j0kol416002

5. Remove the Inverter 1 Front Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Inverter 1 Front Cover.

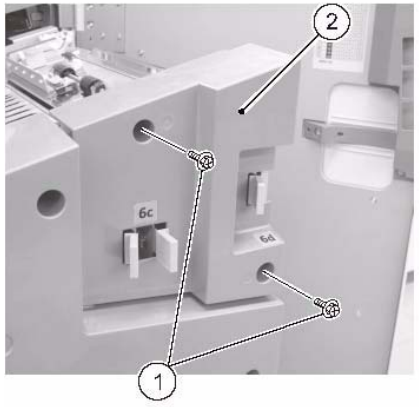


Figure 3 j0kol416003

6. Remove the Inner Right Cover. (Figure 4)
   (1) Remove the Screw (x5).
   (2) Remove the Inner Right Cover.

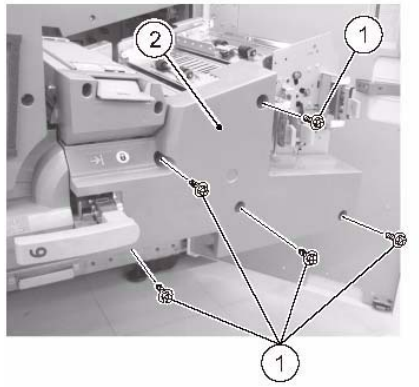


Figure 4 j0kol416004

7. Remove the WR Roll Assembly. (Figure 5)
   (1) Disconnect the Connector.
   (2) Remove the WR Roll Assembly.

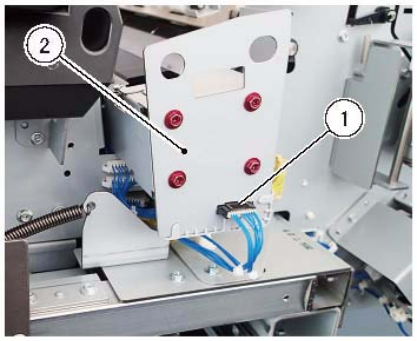


Figure 5 j0kol416019

8. Disconnect the Connector (x2). (Figure 6)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw.

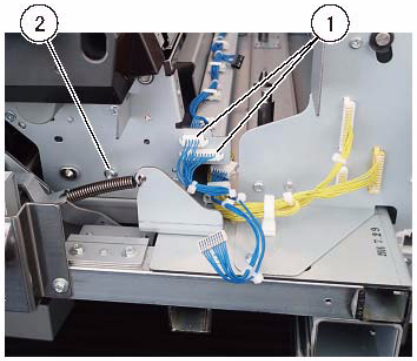


Figure 6 j0kol416020

9. Remove the Decurler Assembly. (Figure 7)
   (1) Remove the Decurler Assembly.

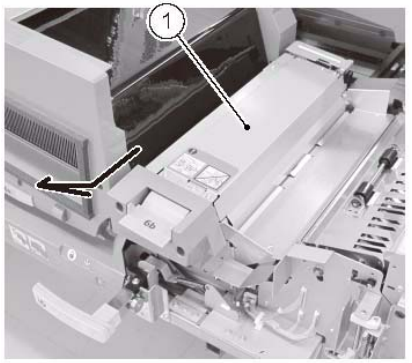


Figure 7 j0kol416007

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When replacing to a new Decurler Assembly, replace the following parts at the same time.*
   - *Wire Harness (*PL 16.3 *-19)*
   - *Wire Harness (*PL 16.3 *-20)*
   - *Wire Harness (*PL 16.3 *-21)*

2. After replacement, clear the following HFSI (DC135) counter.
   'Chain Link: 010-820'
   'Chain Link: 010-821'
   'Chain Link: 010-822'

REP 16.1.4 CLG Lower Assembly

Parts List on PL 16.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

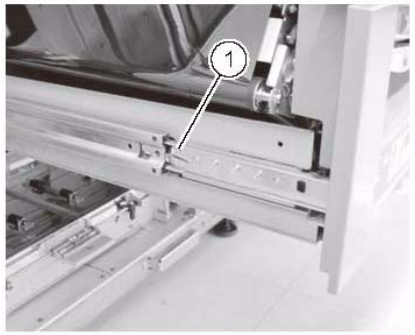


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

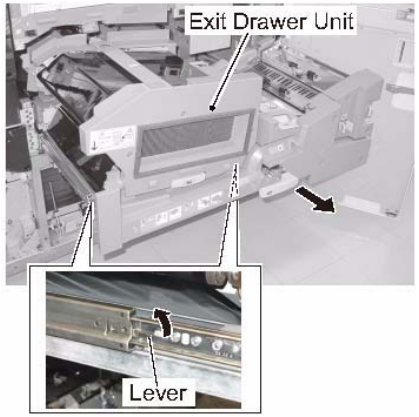


Figure 2 j0kol416002

5. Remove the Decurler Assembly. (REP 16.1.3)
6. Open the CLG Upper Assembly.
7. Remove the Inner Left Cover. (Figure 3)
   (1) Remove the Screw (x5).
   (2) Remove the Inner Left Cover.

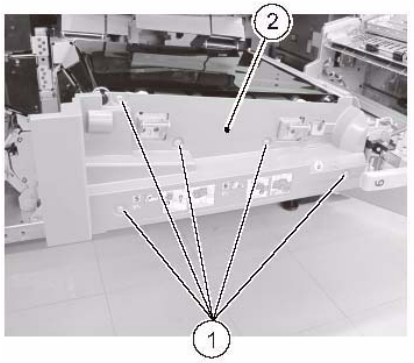


Figure 3 j0kol416008

8. Disconnect the Connector (x2). (Figure 4)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x2).

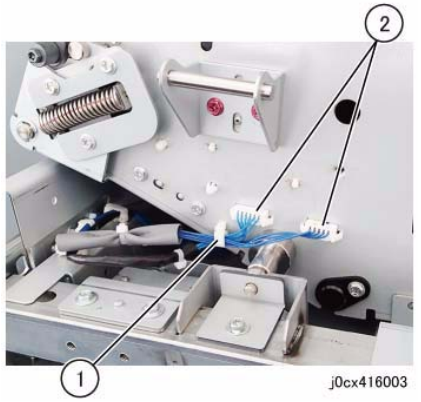


Figure 4 j0cx416003

9. Remove the Bracket (x2). (Figure 5)
   (1) Remove the Screw.
   (2) Remove the Bracket.
   (3) Remove the Screw.

(4) Remove the Bracket.

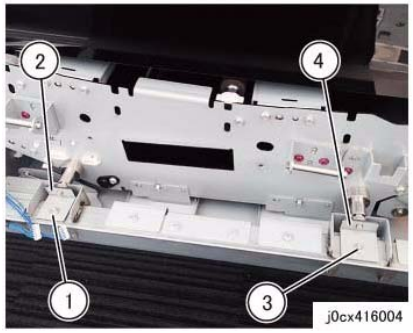


Figure 5 j0cx416004

10. Hold onto the front and rear handles of the CLG Lower Assembly, remove it, and put it upright. (Figure 6)

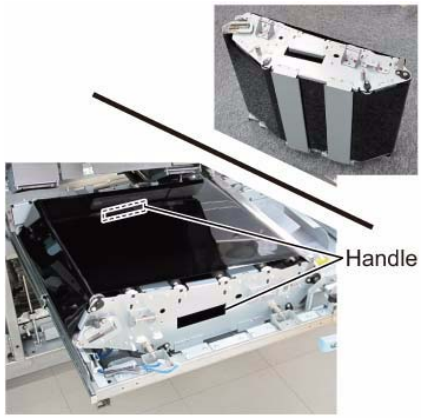


Figure 6 j0kol416017

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacement, clear the following HFSI (DC135) counter.
   'Chain Link: 010-841'
   'Chain Link: 010-842'
   'Chain Link: 010-843'
   'Chain Link: 010-844'
   'Chain Link: 010-846'

REP 16.2.1 Inverter 2 Assembly

Parts List on PL 16.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Right Cover.
2. Remove the Inverter 1 Front Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Inverter 1 Front Cover.

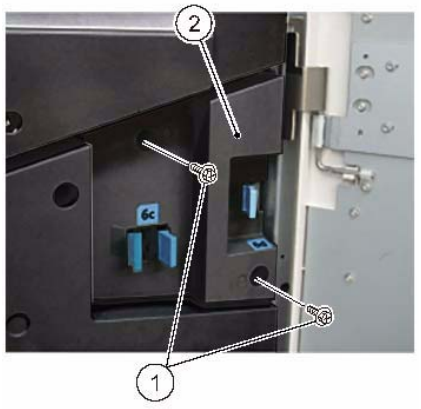


Figure 1 j0kol416018

3. Remove the Inner Right Cover. (Figure 2)
   (1) Remove the Screw (x5).
   (2) Remove the Inner Right Cover.

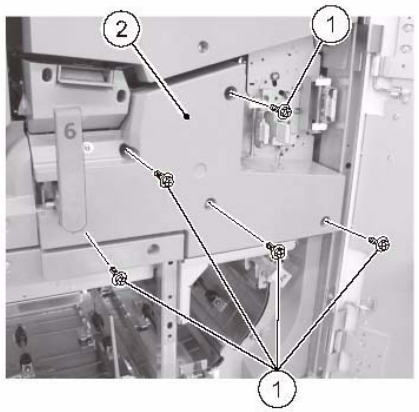


Figure 2 j0kol416009

4. Remove the Inverter 2 Front Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Inverter 2 Front Cover.

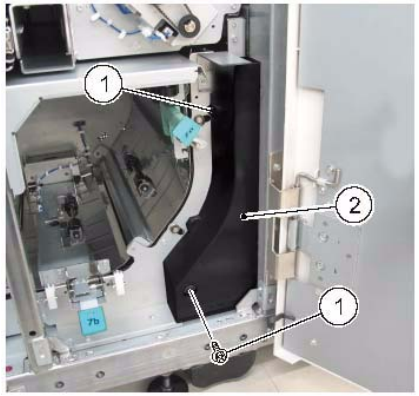


Figure 3 j0kol416010

5. Remove the Stopper Plate. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the Stopper Plate.

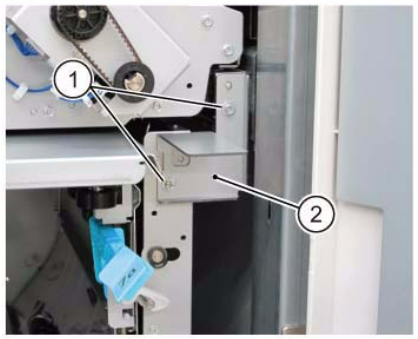


Figure 4 j0kol416011

6. Open the Chute 7b.
7. Remove the Inverter 2 Assembly. (Figure 5)
   (1) Disconnect the Connector (x3).
   (2) Remove the Screw (x2).
   (3) Remove the Inverter 2 Assembly.

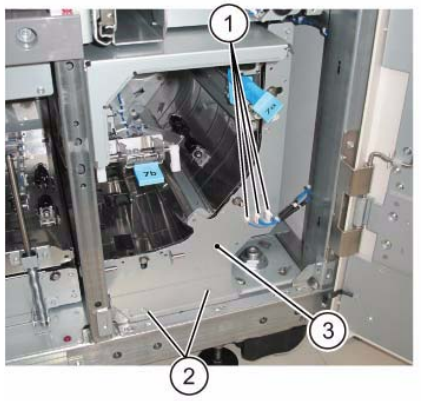


Figure 5 j0kol416012

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When replacing to a new Inverter 2 Assembly, replace the following parts at the same time.*

   - *Invert In Roll (PL 16.12)*
   - *Invert Roll (PL 16.12)*

REP 16.5.1 Upper Cooling Belt

Parts List on PL 16.5

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

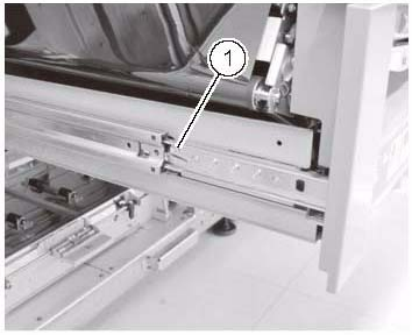


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

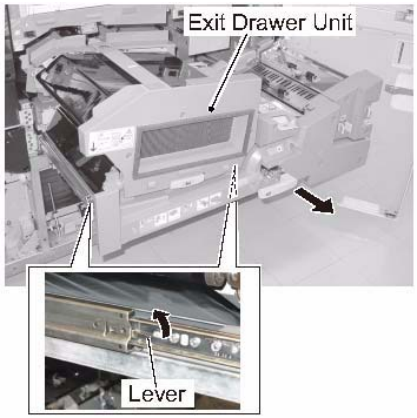


Figure 2 j0kol416002

5. Remove the CLG Upper Front Cover Assembly. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the CLG Upper Front Cover Assembly.

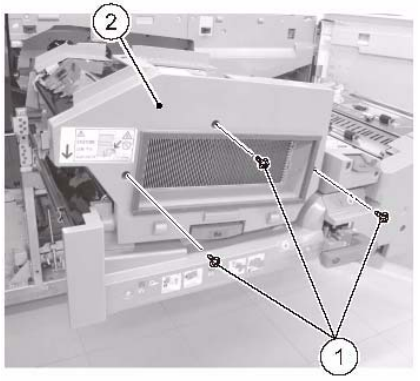


Figure 3 j0kol416013

6. Remove the CLG Rear Left/Right Cover. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the CLG Rear Left Cover.
   (3) Remove the Screw (x2).
   (4) Remove the CLG Rear Right Cover.

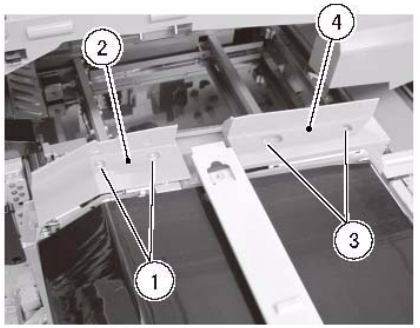


Figure 4 j0kol416021

7. Remove the Upper Plate. (Figure 5)
   (1) Loosen the Screw (x2).
   (2) Remove the Upper Plate.

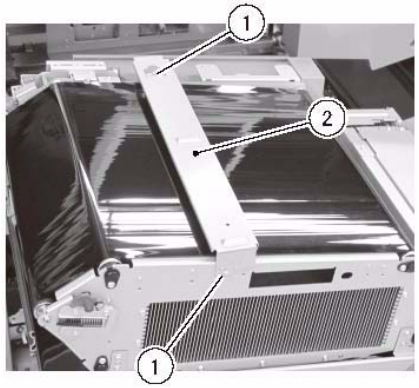


Figure 5 j0kol416022

8. Remove the Latch Assembly. (Figure 6)
   (1) Remove the Screw (x4).
   (2) Remove the Latch Assembly.

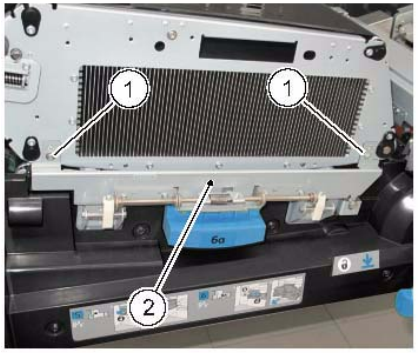


Figure 6 j0kol416014

9. Open the CLG Upper Assembly.
10. Relax the tension of the Upper Cooling Belt. (Figure 7)
    (1) Turn the Tension Retract Cam clockwise to latch it.

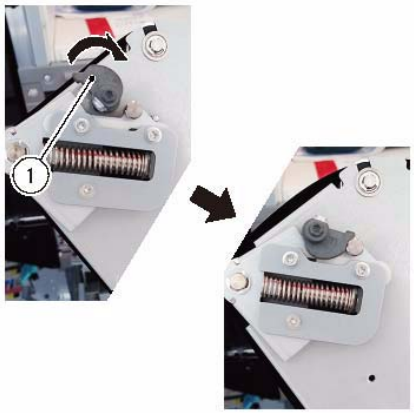


Figure 7 j0kol416023

11. Remove the Upper Cooling Belt. (Figure 8)
    (1) Remove the Upper Cooling Belt.

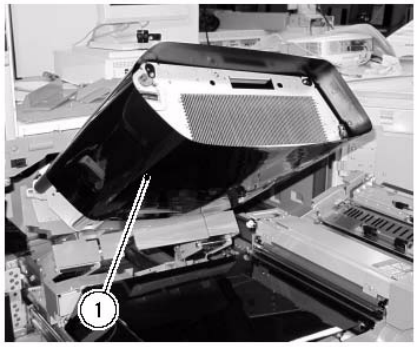


Figure 8 j0kol416024

Replacement

1. To install, carry out the removal steps in reverse order. For the installation of Upper Cooling Belt, perform the following procedures.
2. Remove the ECO Rear Lower Cover. (PL 4.9)
3. Take out the Cooling Belt Guide stored in the ECO Box Unit, and insert it onto the CLG Upper Assembly from the side with the larger diameter. (Figure 9)

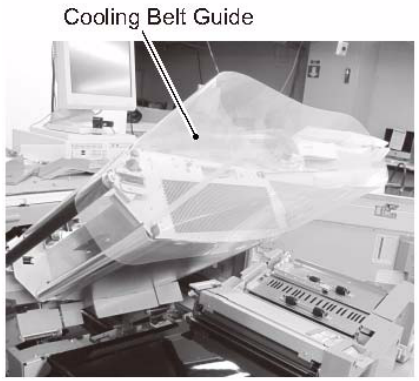


Figure 9 j0kol416015

4. Insert the Upper Cooling Belt, and pull out the Cooling Belt Guide. (Figure 10)
   (1) Insert the Upper Cooling Belt.
   (2) Pull out the Cooling Belt Guide.

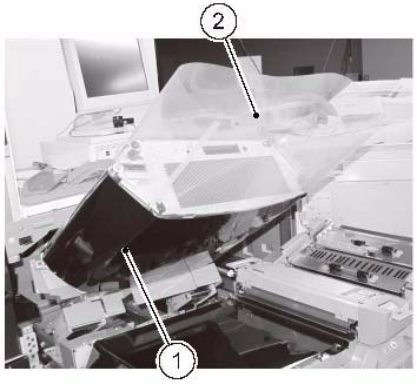


Figure 10 j0kol416016

NOTE: *The Upper Cooling Belt should be installed at the approximate center position of the CLG Upper Drive Roll.*

NOTE: *When replacing to a new Upper Cooling Belt, clean the following parts with a wet wipe.*

- *CLG Upper Drive Roll (PL 16.5)*
- *Bottom of Heat Sink*
- *Steering Roll (PL 16.6)*
- *Idler Roll (PL 16.5)*

5. After replacement, clear the following HFSI (DC135) counter.
   "Chain Link: 010-840"

REP 16.6.1 CLG Upper Walk Motor Assembly

Parts List on PL 16.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

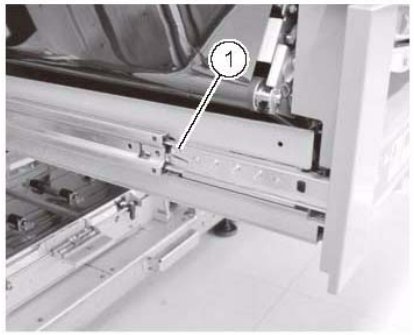


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

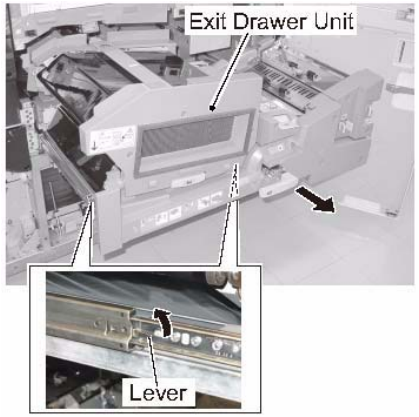


Figure 2 j0kol416002

5. Remove the CLG Rear Left/Right Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the CLG Rear Left Cover.
   (3) Remove the Screw (x2).
   (4) Remove the CLG Rear Right Cover.

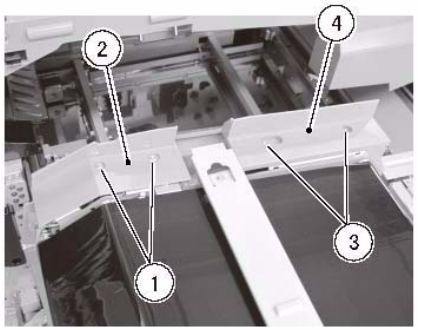


Figure 3 j0kol416021

6. Remove the Rear Duct. (Figure 4)
   (1) Remove the Screw (x3).
   (2) Remove the Rear Duct.

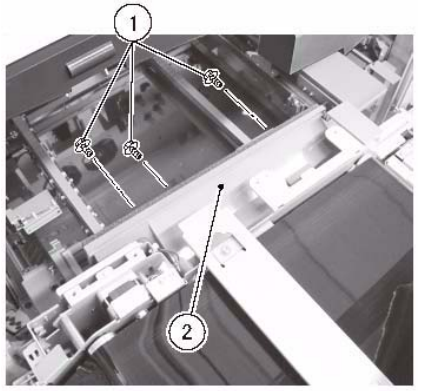


Figure 4 j0kol416025

7. Release the wire harness, and disconnect the Connector. (Figure 5)
   (1) Release the wire harness from the Clamp (x5).
   (2) Release the Clamp of the wire harness.

(3) Disconnect the Connector.

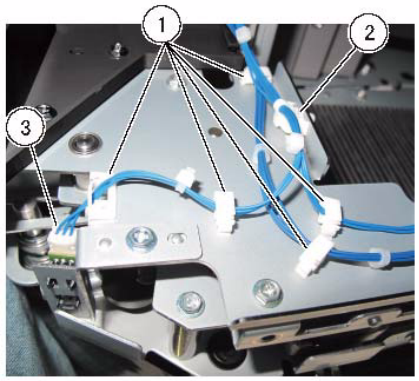


Figure 5 j0kol416026

8. Release the wire harness, and disconnect the Connector. (Figure 6)
   (1) Release the wire harness from the Clamp (x4).
   (2) Release the Clamp of the wire harness.
   (3) Disconnect the Connector.

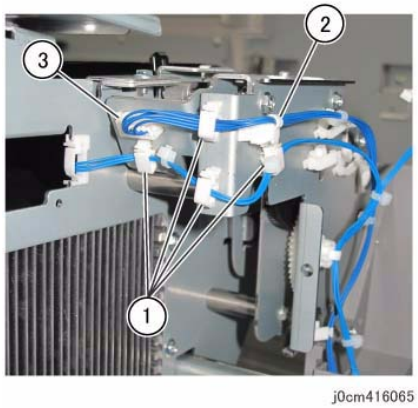


Figure 6 j0cm416065

9. Remove the CLG Upper Walk Motor Unit. (Figure 7)
   (1) Remove the Screw (x3).
   (2) Remove the CLG Upper Walk Motor Unit.

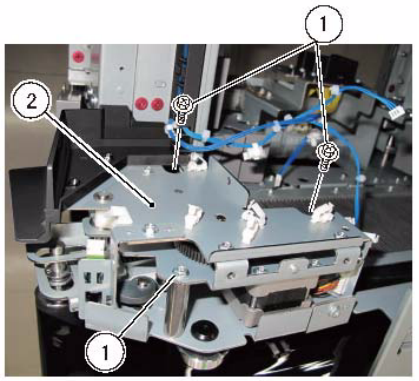


Figure 7 j0kol416027

10. Remove the Sensor Assembly and Cover from the CLG Upper Walk Motor Unit. (Figure 8)
    (1) Remove the Screw.
    (2) Remove the Sensor Assembly.
    (3) Remove the Screw (x2).
    (4) Remove the cover.

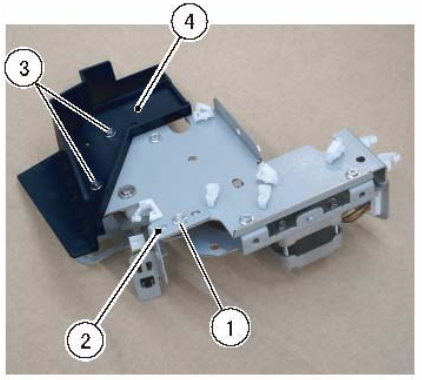


Figure 8 j0kol416028

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *Insert the Upper Steering Roll into the hole of the Lever of CLG Upper Walk Motor Assembly. (Figure 9)*

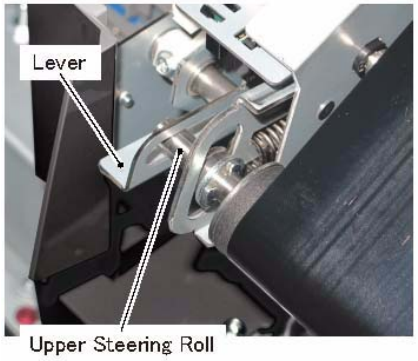


Figure 9 j0kol416029

REP 16.7.1 Lower Cooling Belt

Parts List on PL 16.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

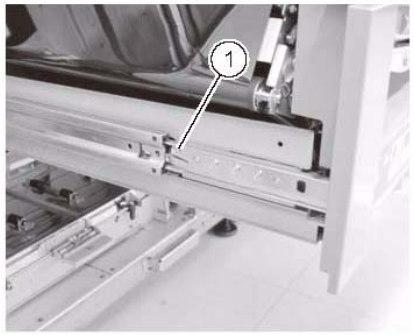


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

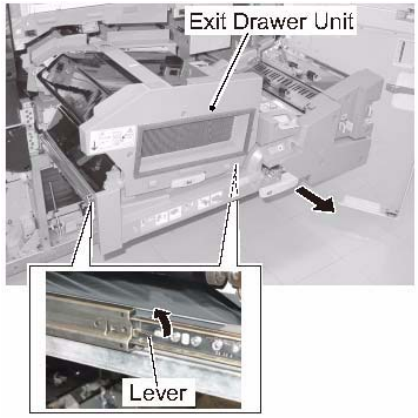


Figure 2 j0kol416002

5. Remove the Decurler Assembly. (REP 16.1.3)
6. Remove the CLG Lower Assembly. (REP 16.1.4)
7. Remove the Exit Chute. (Figure 3)
   (1) Loosen the Screw.
   (2) Loosen the Screw.
   (3) Remove the Exit Chute.

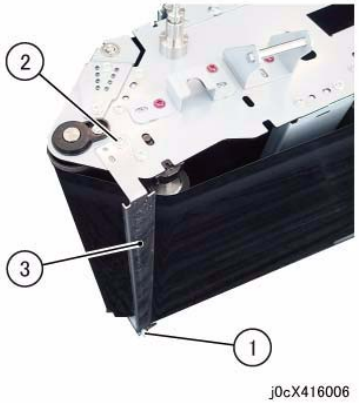


Figure 3 j0cx416006

8. Remove the Tie Bar (x2). (Figure 4)
   (1) Loosen the Screw (x2).
   (2) Remove the Tie Bar.
   (3) Loosen the Screw (x2).
   (4) Remove the Tie Bar.

Figure 4 j0cm416044

9. Relax the tension of the Lower Cooling Belt. (Figure 5)
   (1) Turn the Tension Retract Cam clockwise to latch it.

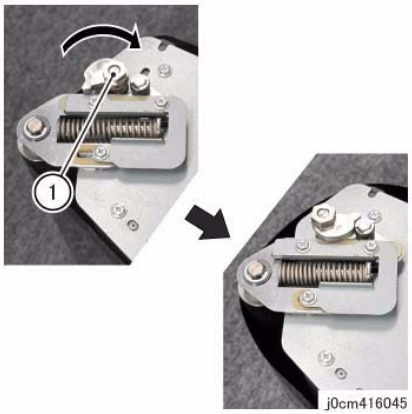


Figure 5 j0cm416045

10. Remove the Lower Cooling Belt. (Figure 6)
    (1) Remove the Cooling Lower Belt.

Figure 6 j0cm416046

Replacement

1. To install, carry out the removal steps in reverse order. For the installation of Lower Cooling Belt, perform the following procedures.
2. Remove the ECO Rear Lower Cover. (PL 4.9)
3. Take out the Cooling Belt Guide stored in the ECO Box Unit, and insert it onto the CLG Lower Assembly from the side with the larger diameter. (Figure 7)

"Chain Link: 010-841"

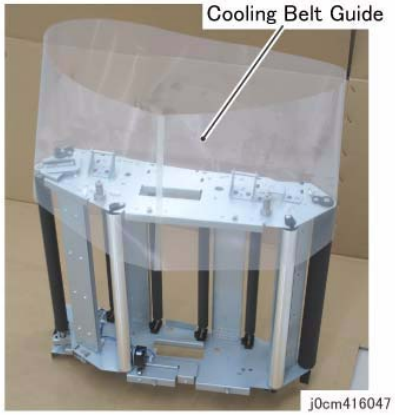


Figure 7 j0cm416047

4. Insert the Upper Cooling Belt, and pull out the Cooling Belt Guide. (Figure 8)
   (1) Insert the Lower Cooling Belt.
   (2) Pull out the Cooling Belt Guide.

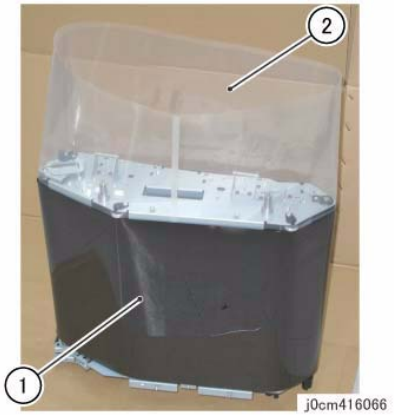


Figure 8 j0cm416066

NOTE: *The Lower Cooling Belt should be installed at the approximate center position of the CLG Lower Drive Roll.*

NOTE: *When replacing to a new Lower Cooling Belt, clean the following parts with a wet wipe.*

- *CLG Lower Drive Roll (*PL 16.9*)*
- *Steering Roll (*PL 16.9*)*
- *Idler Roll (*PL 16.8*)*

5. After replacement, clear the following HFSI (DC135) counter.

REP 16.9.1 CLG Lower Walk Motor Assembly

Parts List on PL 16.9

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

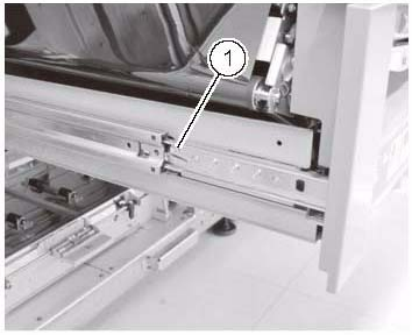


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

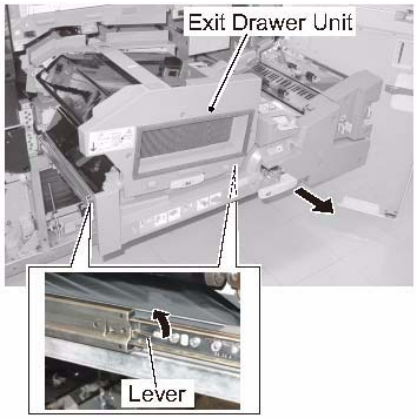


Figure 2 j0kol416002

5. Remove the Decurler Assembly. (REP 16.1.3)
6. Remove the CLG Lower Assembly. (REP 16.1.4)
7. Lower the CLG Lower Assembly by putting the Tie Bar (x2) to the bottom.
8. Remove the cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the cover.

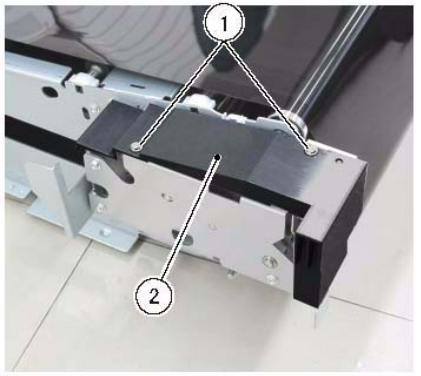


Figure 3 j0kol416030

9. Disconnect the Connector (x2). (Figure 4)
   (1) Release the wire harness from the Clamp (x4).
   (2) Release the Clamp of the wire harness.
   (3) Disconnect the Connector (x2).

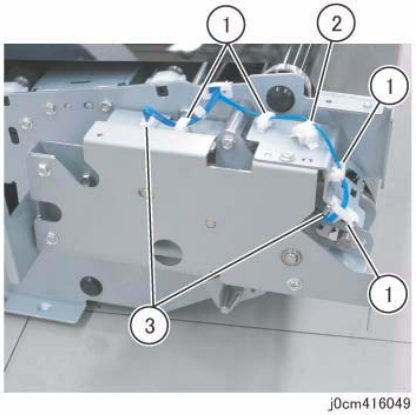
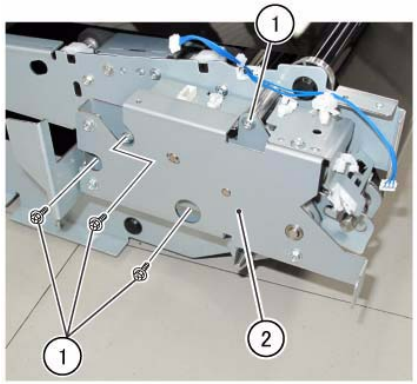


Figure 4 j0cm416049

10. Remove the CLG Lower Walk Motor Unit. (Figure 5)

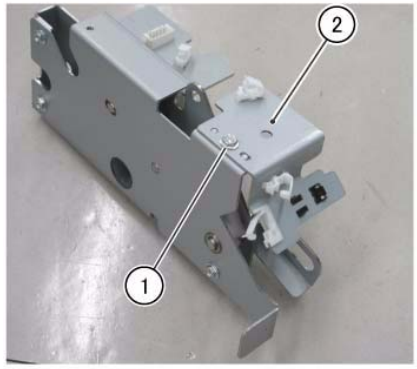
(1) Remove the Screw (x4).
(2) Remove the CLG Lower Walk Motor Unit.



j0cm416050

Figure 5 j0cm416050

11. Remove the Sensor Assembly and Cover from the CLG Lower Walk Motor Unit. (Figure 6)
(1) Remove the Screw.
(2) Remove the Sensor Assembly.



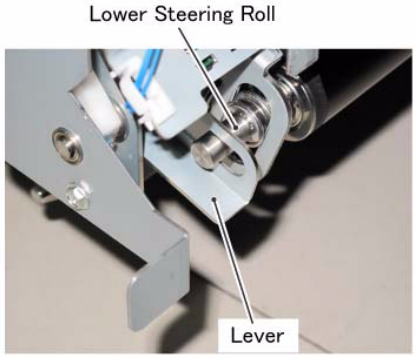
j0cm416051

Figure 6 j0cm416051

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *Insert the Lower Steering Roll into the hole of the Lever of CLG Lower Walk Motor Assembly. (Figure 7)*



j0cm416052

Figure 7 j0cm416052

REP 16.13.1 (SCC) Invert Motor

Parts List on PL 16.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

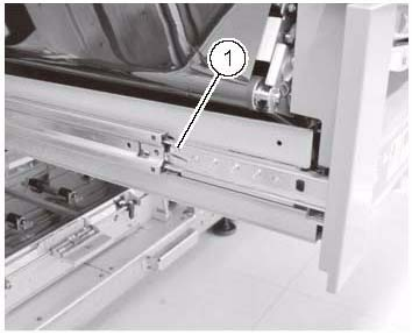


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

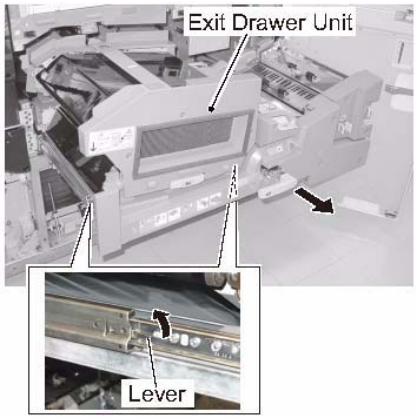


Figure 2 j0kol416002

5. Remove the Inverter 1 Assembly. (REP 16.1.2)
6. Remove the Invert Motor. (Figure 3)
   (1) Release the wire harness from the Clamp (x2).
   (2) Disconnect the Connector.
   (3) Remove the Screw (x3).
   (4) Remove the Invert Motor.

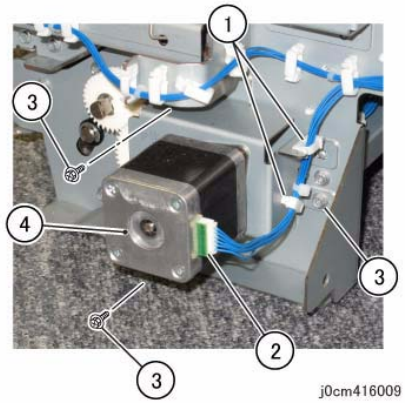


Figure 3 j0cm416009

Replacement

1. To install, carry out the removal steps in reverse order.

REP 16.13.2 Invert Gate Motor Assembly

Parts List on PL 16.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

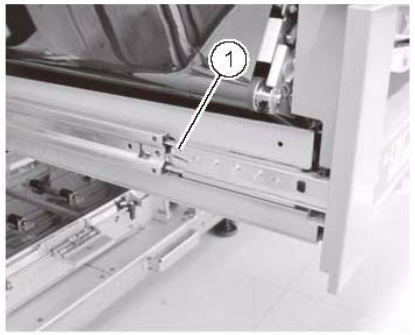


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

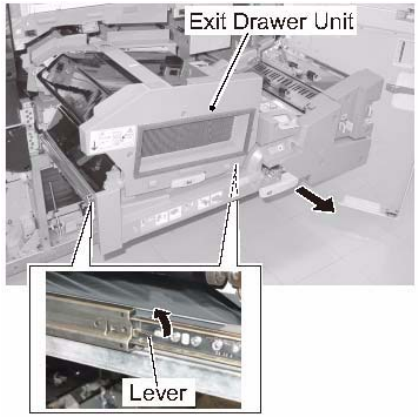


Figure 2 j0kol416002

5. Remove the Inverter 1 Assembly. (REP 16.1.2)
6. Disconnect the Connector. (Figure 3)
   (1) Disconnect the Connector.

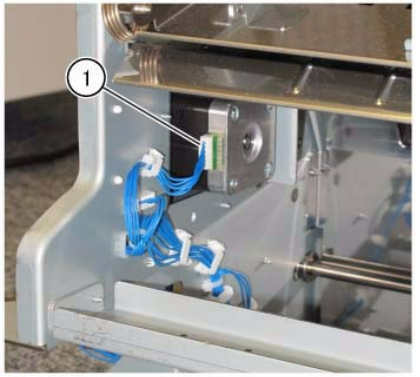


Figure 3 j0cm416007

7. Remove the Invert Gate Motor Assembly. (Figure 4)
   (1) Release the wire harness from the Clamp (x3).
   (2) Disconnect the Connector.
   (3) Remove the Screw (x3).
   (4) Remove the Invert Gate Motor Assembly.

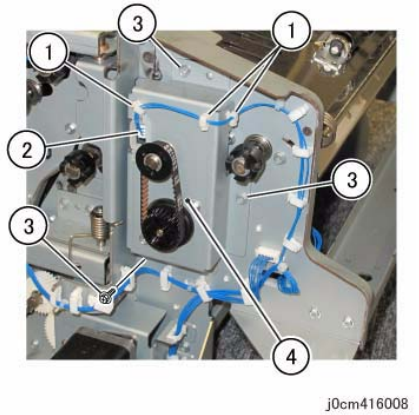


Figure 4 j0cm416008

Replacement

1. To install, carry out the removal steps in reverse order.

REP 16.14.1 Invert Upper/Out Roll

Parts List on PL 16.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

Note: Because the removal procedures of Invert Upper Roll and Invert Out Roll are the same, only the removal procedures of Invert Upper Roll are described here.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

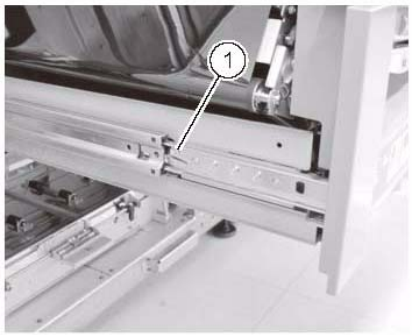


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

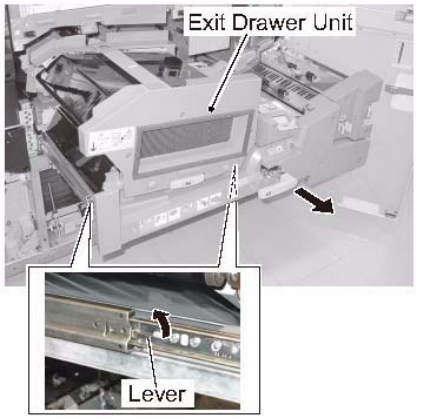


Figure 2 j0kol416002

5. Remove the Inverter 1 Assembly. (REP 16.1.2)
6. Disconnect the Connector. (Figure 3)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector.

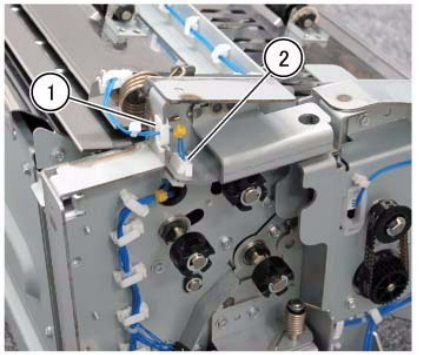


Figure 3 j0cm416015

7. Remove the Upper Chute Assembly. (Figure 4)
   (1) Unhook the Spring (Front/Rear).
   (2) Remove the E-Clip.
   (3) Remove the Upper Chute Assembly.

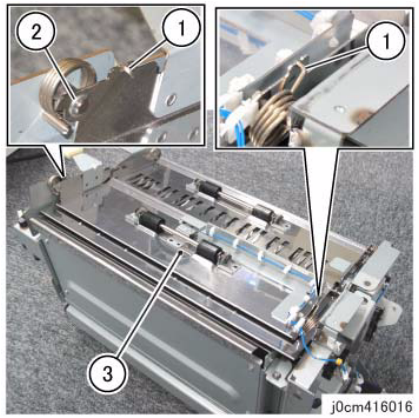


Figure 4 j0cm416016

8. Remove the Low Chute. (Figure 5)
   (1) Remove the Round Screw (x4).
   (2) Remove the Low Chute.

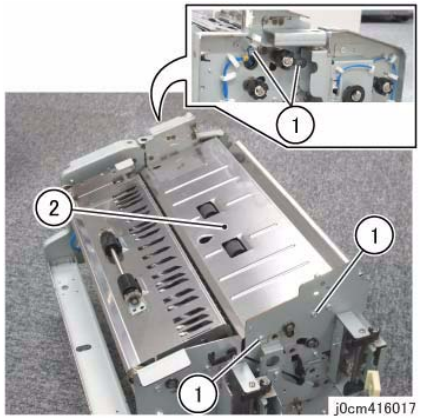


Figure 5 j0cm416017

9. Remove the coupling of Invert Upper Roll. (Figure 6)
   (1) Remove the E-Clip.
   (2) Remove the Coupling.

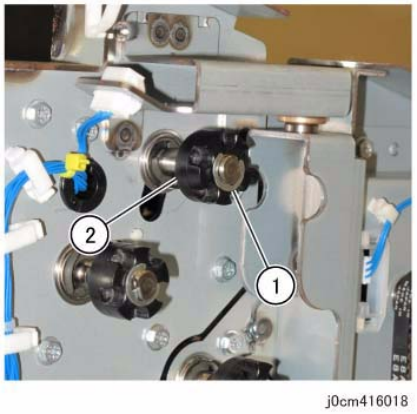


Figure 6 j0cm416018

10. Remove the Bearing. (Figure 7)
    (1) Remove the E-Clip.
    (2) Remove the KL-Clip.
    (3) Remove the Nylon Washer.
    (4) Remove the bearing.

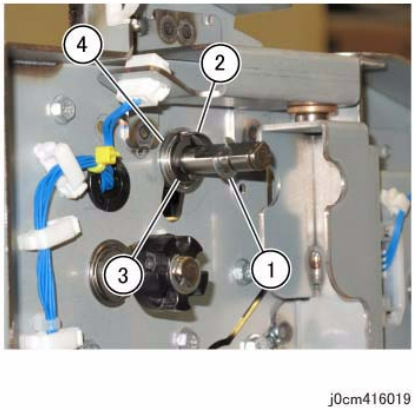


Figure 7 j0cm416019

11. Remove the Invert Upper Roll. (Figure 8)
    (1) Remove the KL-Clip.
    (2) Remove the Nylon Washer.
    (3) Remove the bearing.
    (4) Remove the Invert Upper Roll.

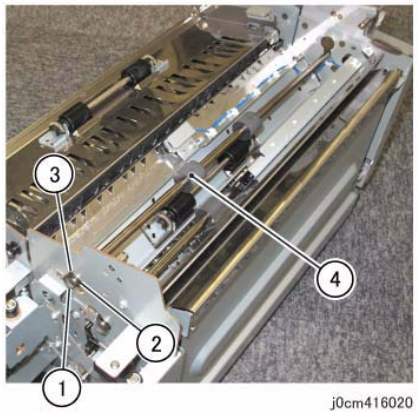


Figure 8 j0cm416020

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When replacing the Invert Upper Roll or Invert Out Roll with a new part, replace the 2 parts at the same time.*

REP 16.19.1 Invert Path Motor Assembly

Parts List on PL 16.19

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Right Cover.
2. Remove the Inverter 2 Assembly. (REP 16.2.1)
3. Relax the Belt tension. (Figure 1)
   (1) Loosen the Screw.
   (2) Slide the Tension Bracket in the direction of the arrow.
   (3) Tighten the Screw.

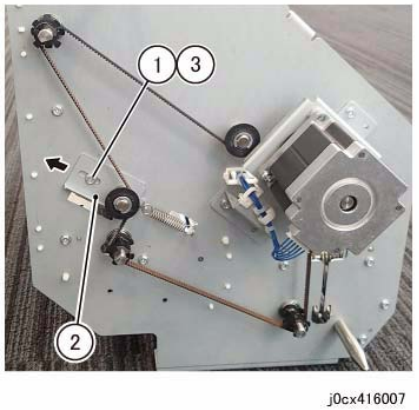
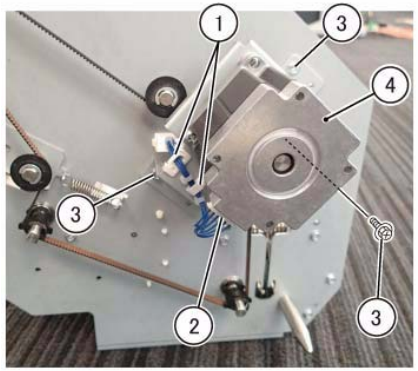


Figure 1 j0cx416007

4. Remove the Invert Path Motor Assembly. (Figure 2)
   (1) Remove the Clamp of the wire harness from the Bracket.
   (2) Disconnect the Connector.
   (3) Remove the Screw (x3).
   (4) Remove the Invert Path Motor Assembly.



j0cx416008

Figure 2 j0cx416008

Replacement

1. To install, carry out the removal steps in reverse order.

REP 16.20.1 Invert Entrance Motor Unit

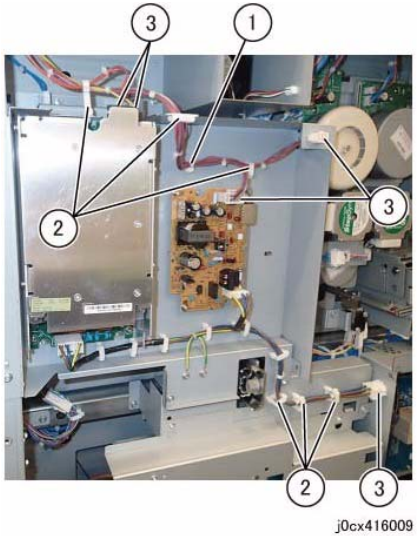
Parts List on PL 16.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the IOT-R Rear Right Cover. (PL 19.9)
2. Disconnect the Connector (x5) of the LVPS Chassis Assembly. (Figure 1)
   (1) Release the Push Tie.
   (2) Release the wire harness from the Clamps (x6).
   (3) Disconnect the Connector (x5).



j0cx416009

Figure 1 j0cx416009

3. Remove the LVPS Chassis Assembly. (Figure 2)
   (1) Remove the Screw (x6).
   (2) Remove the LVPS Chassis Assembly.

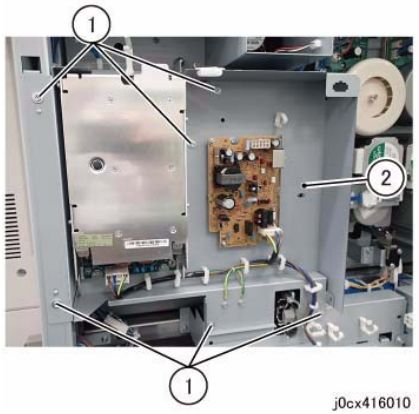


Figure 2 j0cx416010

4. Remove the Invert Entrance Motor Unit. (Figure 3)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x3).
   (3) Remove the Invert Entrance Motor Unit.

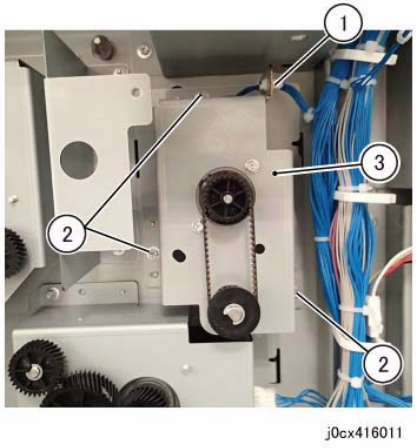


Figure 3 j0cx416011

Replacement

1. To install, carry out the removal steps in reverse order.

REP 16.20.2 Invert Upper Motor Unit

Parts List on PL 16.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the IOT-R Rear Right Cover. (PL 19.9)
2. Disconnect the Connector (x5) of the LVPS Chassis Assembly. (Figure 1)
   (1) Release the Push Tie.
   (2) Release the wire harness from the Clamps (x6).
   (3) Disconnect the Connector (x5).

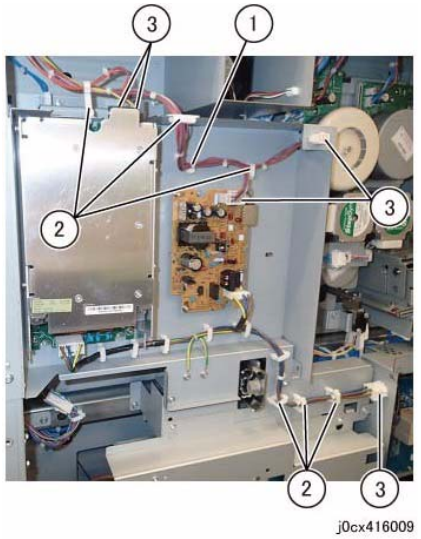


Figure 1 j0cx416009

3. Remove the LVPS Chassis Assembly. (Figure 2)
   (1) Remove the Screw (x6).
   (2) Remove the LVPS Chassis Assembly.

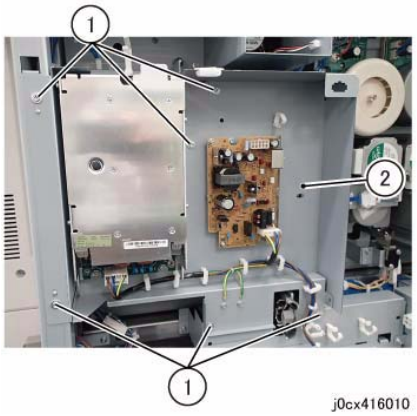


Figure 2 j0cx416010

4. Remove the Invert Upper Motor Unit. (Figure 3)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x3).
   (3) Remove the Invert Upper Motor Unit.

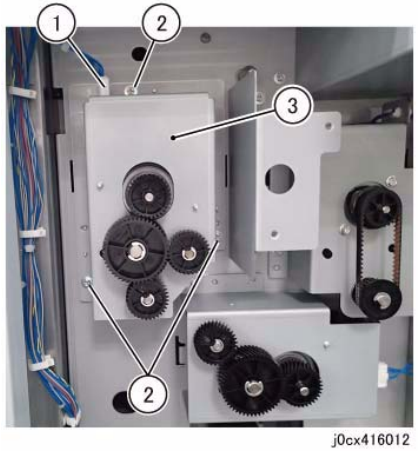


Figure 3 j0cx416012

Replacement

1. To install, carry out the removal steps in reverse order.

REP 16.20.3 Invert In Motor Unit

Parts List on PL 16.20

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the IOT-R Rear Right Cover. (PL 19.9)
2. Disconnect the Connector (x5) of the LVPS Chassis Assembly. (Figure 1)
   (1) Release the Push Tie.
   (2) Release the wire harness from the Clamps (x6).
   (3) Disconnect the Connector (x5).

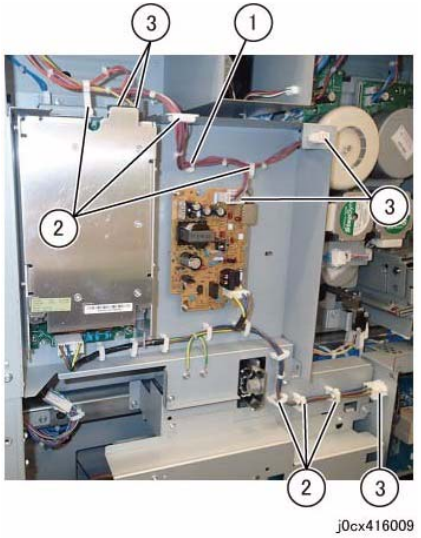


Figure 1 j0cx416009

3. Remove the LVPS Chassis Assembly. (Figure 2)
   (1) Remove the Screw (x6).
   (2) Remove the LVPS Chassis Assembly.

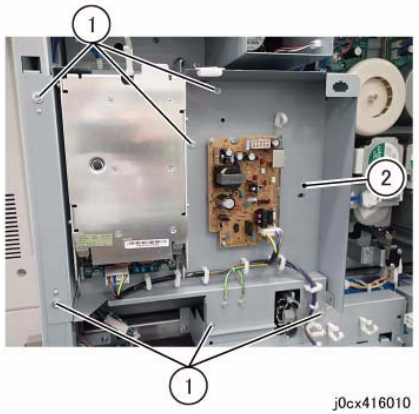


Figure 2 j0cx416010

4. Remove the Invert In Motor Unit. (Figure 3)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x3).
   (3) Remove the Invert In Motor Unit.

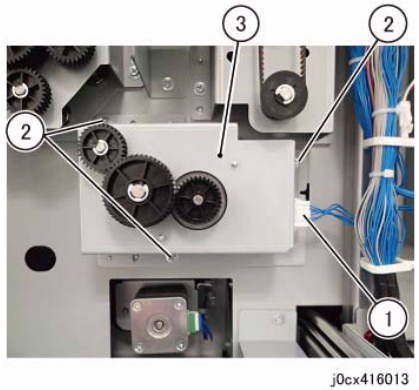


Figure 3 j0cx416013

Replacement

1. To install, carry out the removal steps in reverse order.

REP 16.24.1 Decurler Belt

Parts List on PL 16.24

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *When replacing Decurler Belt, replace all 5 at the same time.*

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Pull out the Exit Drawer Unit up to the service position. (Figure 1)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

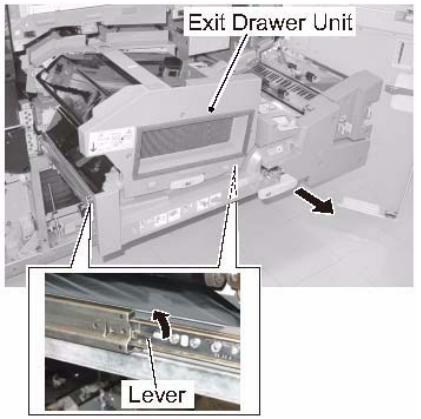
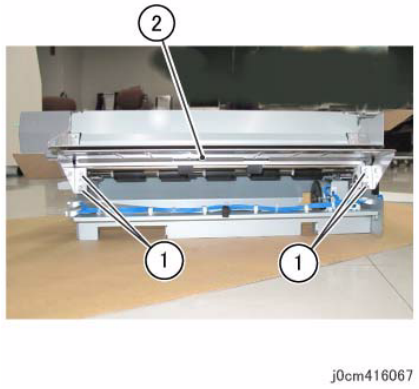


Figure 1 j0kol416002

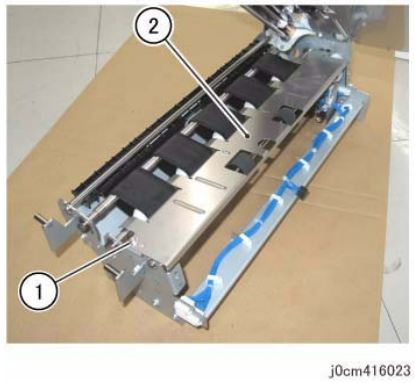
4. Remove the Decurler Assembly. (REP 16.1.3)
5. Remove the Lower Exit Chute. (Figure 2)
   (1) Remove the Screw (x4).
   (2) Remove the Lower Exit Chute.



j0cm416067

Figure 2 j0cm416067

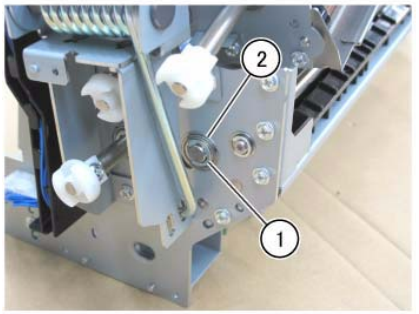
6. Open the Decurler Assembly.
7. Remove the Lower Exit Chute. (Figure 3)
   (1) Remove the Screw.
   (2) Remove the Lower Exit Chute.



j0cm416023

Figure 3 j0cm416023

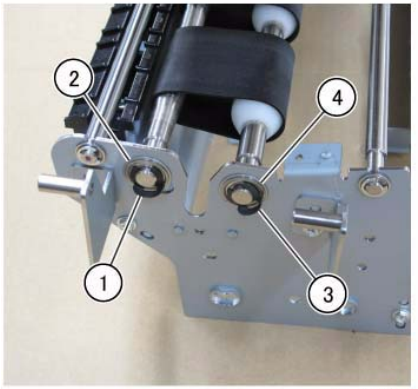
8. Remove the bearing at the rear. (Figure 4)
   (1) Remove the E-Clip.
   (2) Remove the bearing.



j0cm416068

Figure 4 j0cm416068

9. Remove the Bearing (x2). (Figure 5)
   (1) Remove the E-Clip.
   (2) Remove the bearing.
   (3) Remove the E-Clip.
   (4) Remove the bearing.



j0cm416024

Figure 5 j0cm416024

10. Slide the Belt Entrance Roll and Belt Drive Roll towards the Rear to release, and remove the Decurler Belt (x5). (Figure 6)
    (1) Slide the Belt Drive Roll to the rear.
    (2) Pull out the Belt Entrance Roll.
    (3) Remove the Decurler Belt (x5).

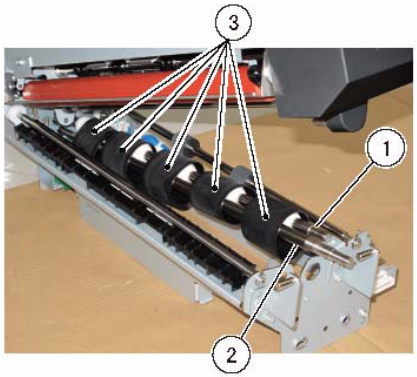


Figure 6 j0kol416031

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

   NOTE: *Decurler Belt should be install with the rough surface in front. (Figure 7)*

Figure 7 j0cm416026

2. After replacement, clear the following HFSI (DC135) counter.
   'Chain Link: 010-820'

REP 16.25.1 DCR Roll Drive Motor Assembly

Parts List on PL 16.25

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Pull out the Exit Drawer Unit up to the service position. (Figure 1)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

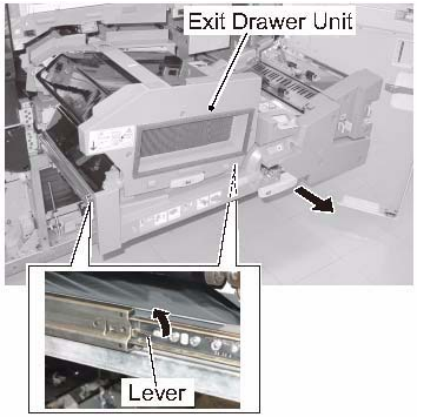
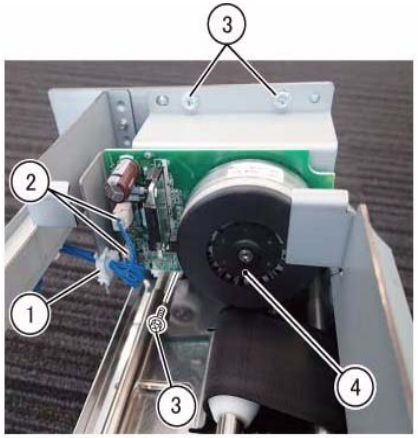


Figure 1 j0kol416002

4. Remove the Decurler Assembly. (REP 16.1.3)
5. Remove the DCR Roll Drive Motor Assembly. (Figure 2)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x2).
   (3) Remove the Screw (x3).
   (4) Remove the DCR Roll Drive Motor Assembly.



j0cx416014

Figure 2 j0cx416014

Replacement

1. To install, carry out the removal steps in reverse order.

REP 17.1.1 EXIT Assembly

Parts List on PL 17.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Inner Right Upper Cover. (Figure 1)
   (1) Remove the Screw of the Stopper Wire.
   (2) Remove the Screw (x4).
   (3) Remove the Inner Right Upper Cover.

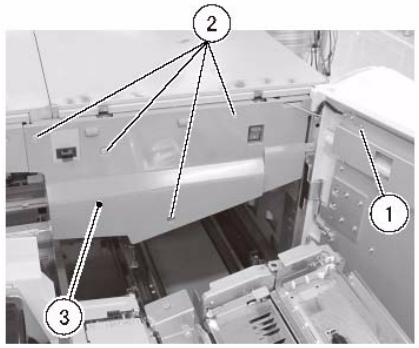


Figure 1 j0kol417001

4. Remove the Screw from the Left Rail Assembly. (Figure 2)
   (1) Remove the Screw, Nylon Washer, and Washer.

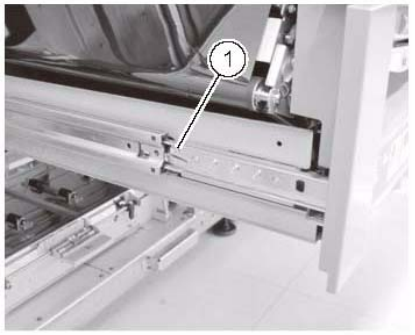


Figure 2 j0kol416001

5. Pull out the Exit Drawer Unit up to the service position. (Figure 3)
   (1) Remove the 1st of the 2-tier Stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

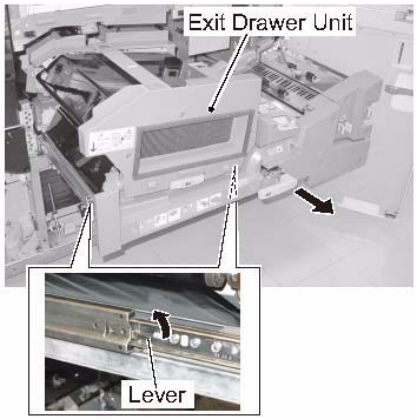
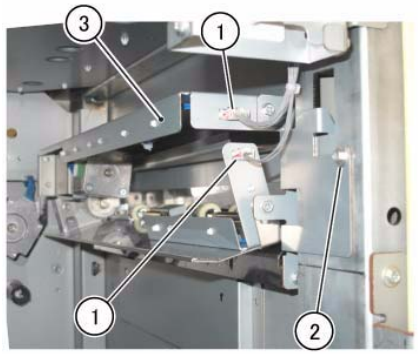


Figure 3 j0kol416002

6. Remove the EXIT Assembly. (Figure 4)
   (1) Disconnect the Connector (x2).
   (2) Remove the Screw.
   (3) Remove the EXIT Assembly.



j0cm417001

Figure 4 j0cm417001

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.1.1 Drive Fan Assembly

Parts List on PL 18.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Left Cover. (REP 19.5.1)
3. Remove the IOT-L Rear Mid Cover. (PL 19.5)
4. Open the Right PWB Chassis. (Figure 1)
   (1) Free the Clamp and release the harness.
   (2) Free the Clamp (x2) and release the harness.
   (3) Remove the Screw (x6).
   (4) Open the Right PWB Chassis.

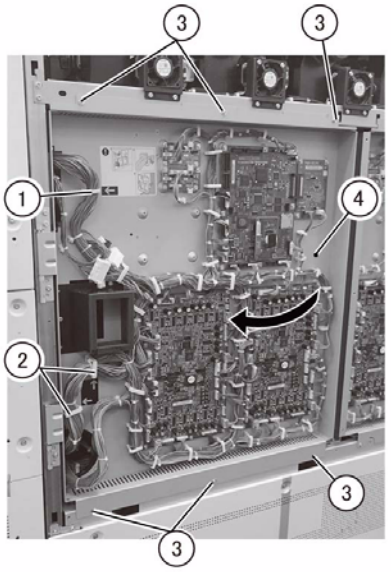


Figure 1 dar404001

5. Open the Left PWB Chassis. (Figure 2)
   (1) Remove the Screw (x8).
   (2) Open the Left PWB Chassis.
   (3) Release the Clamp.
   (4) Lift the Stopper and insert it in the hole of the Bracket.

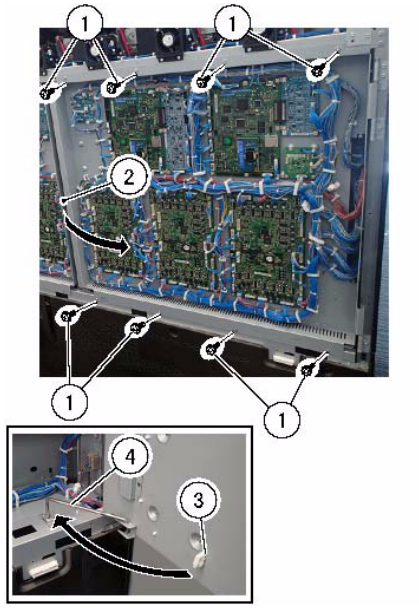


Figure 2 j0kol408001

6. Remove the Drive Fan Assembly. (Figure 3)
   (1) Remove the Screw and rotate the Plate.
   (2) Disconnect the Connector.
   (3) Remove the Screw (x4).
   (4) Remove the Drive Fan Assembly.

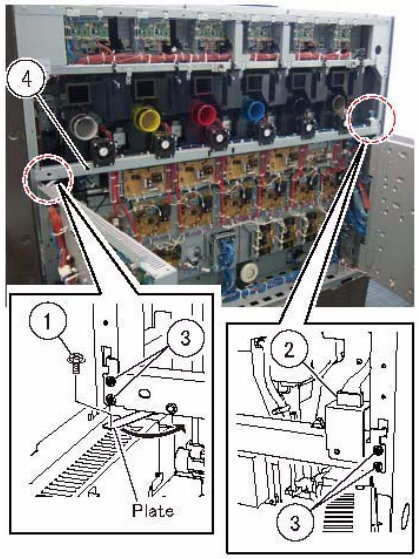


Figure 3 j0cx418003

Replacement

1. To install, carry out the removal steps in reverse order. However, take note of the following points.

   NOTE: *When closing the Right PWB Chassis, be careful of pinching the Harness.*

REP 18.2.1 (SCC) PH CORE PWB Assembly

Parts List on PL 18.2

Replacement

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

NOTE: *When replacing the (SCC) PH CORE PWB, remove the NVM PWB from the old (SCC) PH CORE PWB, and install it to the new one.*

REP 18.2.2 NVM PWB (PH CORE PWB)

Parts List on PL 18.2

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

NOTE: *When removing the NVM PWB of the (SCC) PH CORE PWB Assembly, do not replace with the following NVM PWB at the same time. Make sure to leave 2 pieces of NVM PWBs, then remove.*

- NVM PWB of (SCC) MK DRV CORE PWB (REP 18.3.2)
- NVM PWB of (SCC) MK EPG CORE PWB (REP 18.3.4)

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the PWB, turn ON the power, and the following Fault Code will be displayed.
   Enter DC132 with PSW, and ensure data consistency.
   - 124-315 (Billing Fail)
   - 124-316 (Serial No Fail)

REP 18.3.1 (SCC) MK DRV CORE PWB Assembly

Parts List on PL 18.3

Replacement

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

NOTE: *When replacing the (SCC) MK DRV CORE PWB, remove the NVM PWB from the old (SCC) PH CORE PWB, and install it to the new one.*

REP 18.3.2 NVM PWB (MK DRV CORE PWB)

Parts List on PL 18.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

NOTE: *When removing the NVM PWB of the (SCC) MK DRV CORE PWB Assembly, do not replace with the following NVM PWB at the same time. Make sure to leave 2 pieces of NVM PWBs, then remove.*

- NVM PWB of (SCC) PH CORE PWB Assembly (REP 18.2.2)
- NVM PWB of (SCC) MK EPG CORE PWB (REP 18.3.4)

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the PWB, turn ON the power, and the following Fault Code will be displayed.
   Enter DC132 with PSW, and ensure data consistency.
   - 124-315 (Billing Fail)
   - 124-316 (Serial No Fail)

REP 18.3.3 (SCC) MK EPG CORE PWB Assembly

Parts List on PL 18.3

Replacement

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

NOTE: *When replacing the (SCC) MK EPG CORE PWB, remove the NVM PWB from the old (SCC) MK EPG CORE PWB, and install it to the new one.*

REP 18.3.4 NVM PWB (MK EPG CORE PWB)

Parts List on PL 18.3

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

***NOTE:** When removing the NVM PWB of the (SCC) MK EPG CORE PWB Assembly, do not replace with the following NVM PWB at the same time. Make sure to leave 2 pieces of NVM PWBs, then remove.*

- NVM PWB (SCC) PH CORE PWB (REP 18.2.2)
- NVM PWB of (SCC) MK EPG CORE PWB (REP 18.3.2)

Replacement

1. To install, carry out the removal steps in reverse order.
2. After replacing the PWB, turn ON the power, and the following Fault Code will be displayed.
   Enter DC132 with PSW, and ensure data consistency.
   - 124-315 (Billing Fail)
   - 124-316 (Serial No Fail)

REP 18.6.1 ReC ADC Sensor Assembly

Parts List on PL 18.6

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-L Front Left/Right Door.
2. Remove the Developer Inner Cover and the IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x8).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

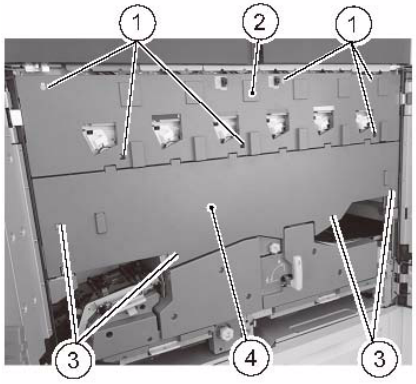


Figure 1 j0kol405001

3. Remove the Wheel Assembly from the IBT Module. (Figure 2)
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

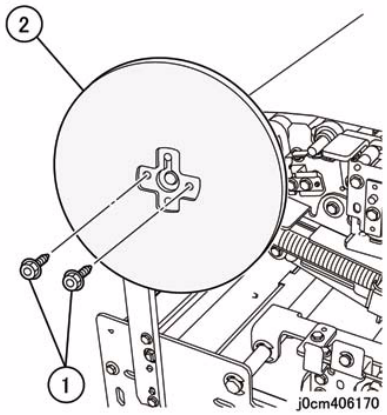


Figure 2 j0cm406170

4. Remove the ReC ADC Sensor Assembly. (Figure 3)
   (1) Disconnect the Connector.
   (2) Remove the Screw (x2).
   (3) Remove the ReC ADC Sensor Assembly.

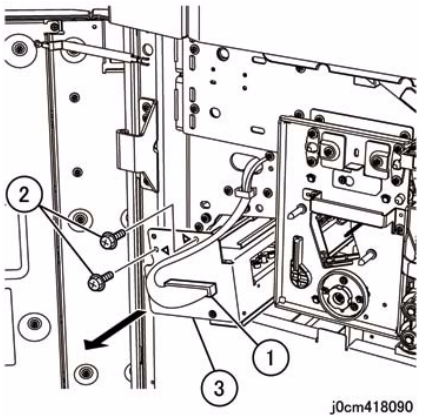


Figure 3 j0cm418090

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.7.1 (SCC) FSR/INV 1 MD PWB

Parts List on PL 18.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Location of the Connector (x23). (Figure 1)

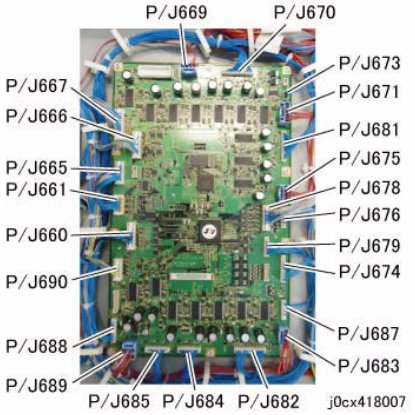


Figure 1 j0cx418007

REP 18.7.2 (SCC) FSR/INV 2 MD PWB

Parts List on PL 18.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Location of the Connector (x22). (Figure 1)

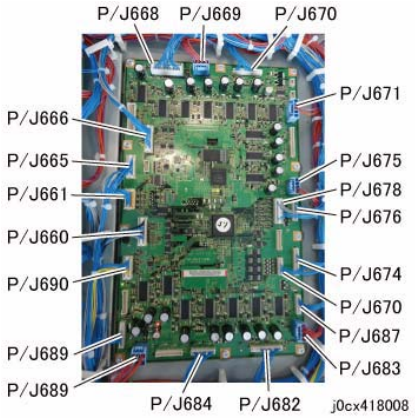


Figure 1 j0cx418008

REP 18.9.1 (SCC) Inlet GFI Chassis Assembly

Parts List on PL 18.9

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Remove the IOT-R Rear Right Cover. (PL 19.9)
2. Remove the IOT-R Rear Right Lower Cover. (PL 19.9)
3. Remove the Plate. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the Plate.

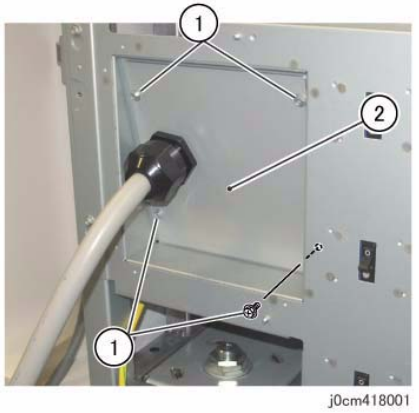


Figure 1 j0cm418001

4. Unplug the Power Cord. (Figure 2)
   (1) Remove the Screw.
   (2) Remove the Screw.
   (3) Remove the Screw.
   (4) Remove the Power Cord.

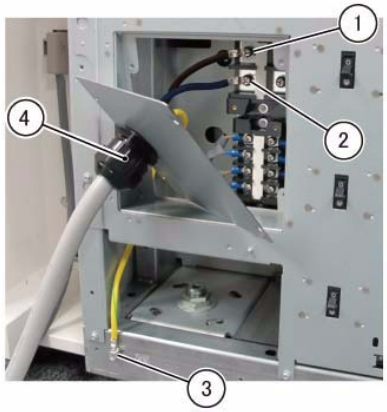


Figure 2 dar418001

5. Disconnect the Connector (x5). (Figure 3)
   (1) Disconnect the Connector (x2).
   (2) Release the wire harness from the Clamp (x3).
   (3) Disconnect the Connector (x2).
   (4) Disconnect the Connector to the Transformer.

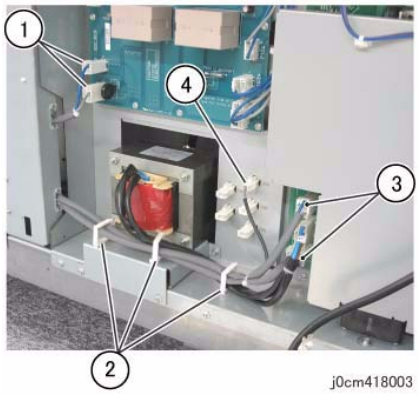


Figure 3 j0cm418003

6. Remove the Inlet GFI Chassis Assembly. (Figure 4)
   (1) Loosen the Screw (x6).
   (2) Remove the Inlet GFI Chassis Assembly.

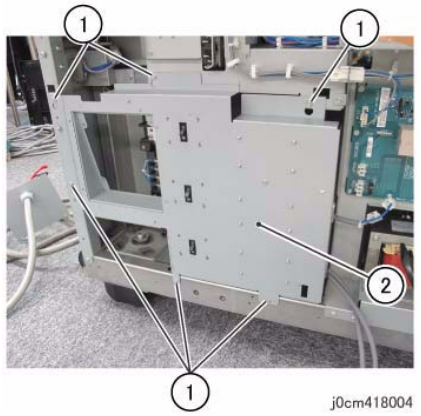


Figure 4 j0cm418004

Replacement

1. To install, carry out the removal steps in reverse order taking note of the following:

NOTE: *Location of the Wire Harness connection when installing the Power Cord. (Figure 5)*

A: BLACK 2

B: BLACK 1

C: Y/G

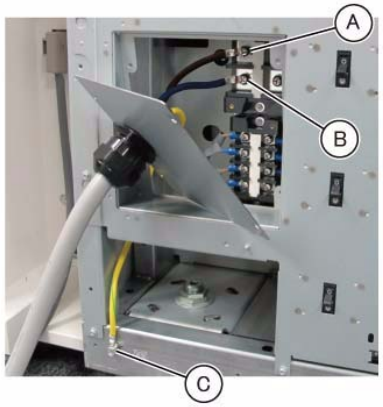


Figure 5 dar418002

REP 18.11.1 DST 1 PWB Assembly

Parts List on PL 18.11

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Remove the ELEC Box Side Cover. (PL 19.8)
4. Open the IOT-R Front Left Cover Assembly.
5. Remove the ELEC Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

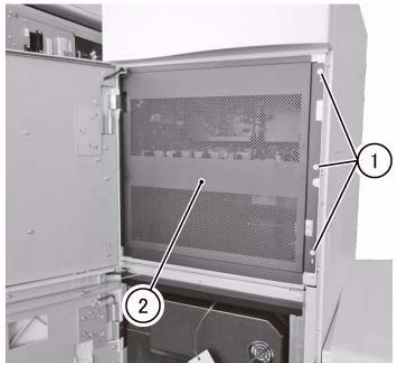


Figure 1 dar418003

6. Disconnect the Connector (x21) connected to the DST 1 PWB. (Figure 2)
   (1) Release the wire harness from the Clamp (x7).
   (2) Release the Push Tie (x2).
   (3) Disconnect the Connector (x21).

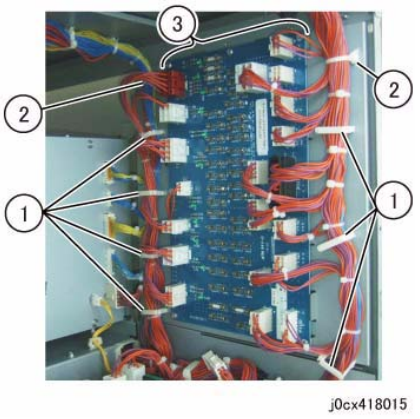


Figure 2 j0cx418015

7. Remove the DST 1 PWB Assembly. (Figure 3)
   (1) Remove the Screw (x4).
   (2) Remove the DST 1 PWB Assembly.

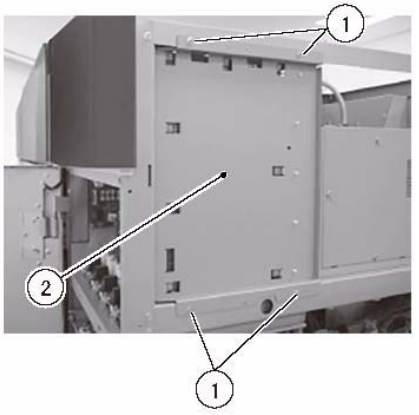


Figure 3 j0kol418002

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.11.2 DST 2 PWB

Parts List on PL 18.7

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Open the IOT-R Front Right Cover Assembly. (Figure 1)
4. Remove the Top Cover. (PL 19.8)
   (1) Remove the Cap (x2).
   (2) Remove the Screw (x4).
   (3) Remove the Top Cover.

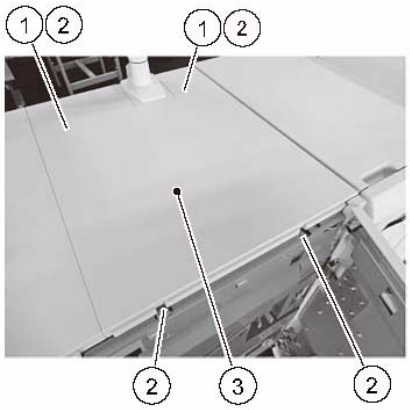


Figure 1 j0kol418003

5. Disconnect the Connector (x17) connected to the DST 2 PWB. (Figure 2)
   (1) Disconnect the Connector (x17).

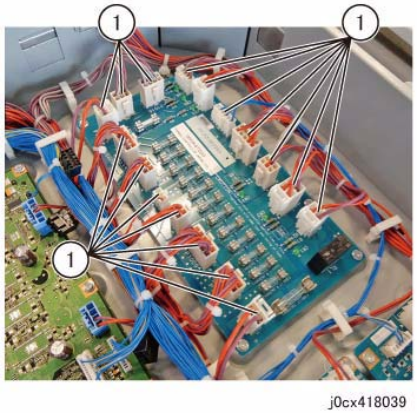


Figure 2 j0cx418039

6. Remove the DST 2 PWB. (Figure 3)
   (1) Remove the Screw (x8).
   (2) Remove the DST 2 PWB.

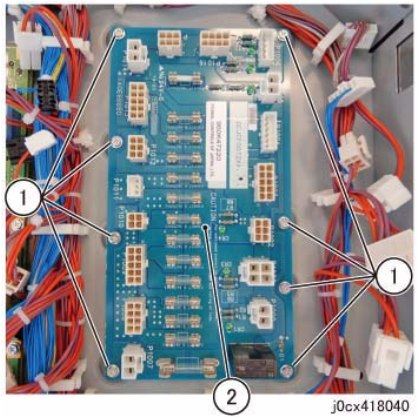


Figure 3 j0cx418040

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.11.3 DST 3 PWB

Parts List on PL 18.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Open the IOT-R Front Left Cover Assembly.
4. Remove the ELEC Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

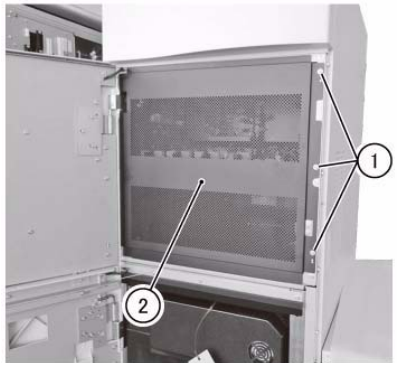


Figure 1 dar418003

5. Disconnect the Connector (x13) connected to the DST 3 PWB. (Figure 2)
   (1) Disconnect the Connector (x13).

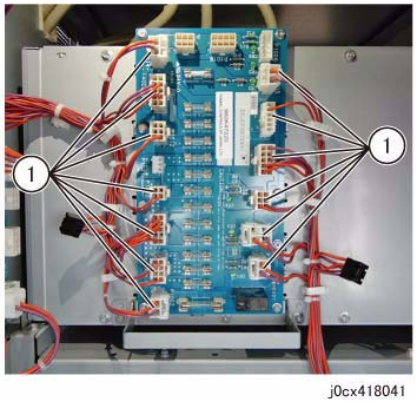


Figure 2 j0cx418041

6. Remove the DST 3 PWB. (Figure 3)
   (1) Remove the Screw (x8).
   (2) Remove the DST 3 PWB.

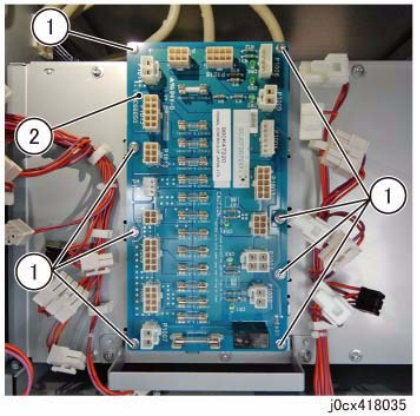


Figure 3 j0cx418035

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.11.4 DST 4 PWB

Parts List on PL 18.11

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Open the IOT-R Front Left Cover Assembly.
4. Remove the ELEC Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

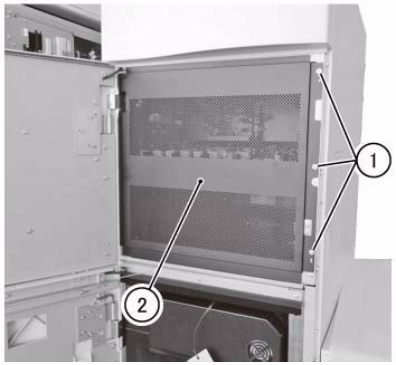


Figure 1 dar418003

5. Disconnect the Connector (x10) connected to the DST 4 PWB. (Figure 2)
   (1) Disconnect the Connector (x10).

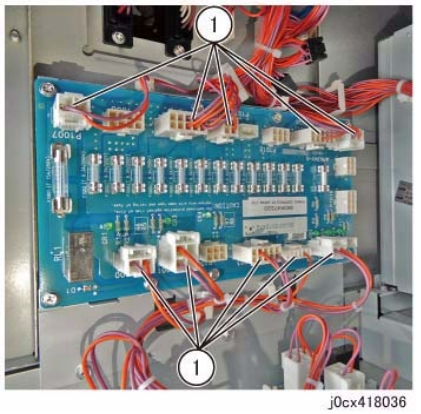


Figure 2 j0cx418036

6. Remove the DST 4 PWB. (Figure 3)
   (1) Remove the Screw (x8).
   (2) Remove the DST 4 PWB.

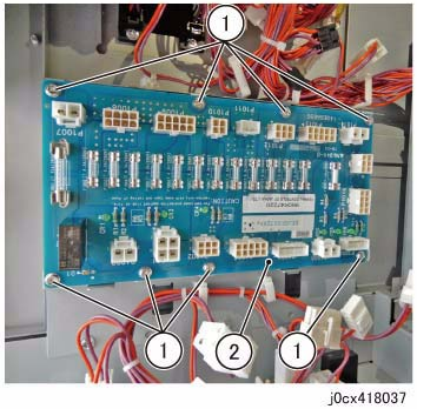


Figure 3 j0cx418037

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.12.1 LVPS H1U Chassis Assembly

Parts List on PL 18.12

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Remove the ELEC Box Rear Cover. (PL 19.9)
4. Open the IOT-R Front Left Cover Assembly.
5. Remove the ELEC Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

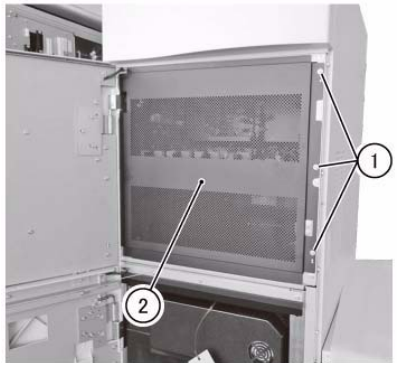


Figure 1 dar418003

6. Remove the Screw (x2). (Figure 2)
   (1) Remove the Screw (x2).

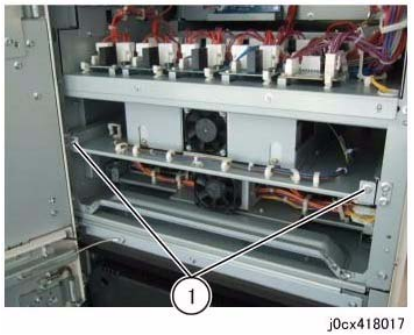


Figure 2 j0cx418017

7. Disconnect the Connector (x5). (Figure 3)
   (1) Disconnect the Connector (x4).
   (2) Disconnect the Connector.
   (3) Release the wire harness from the Clamp.

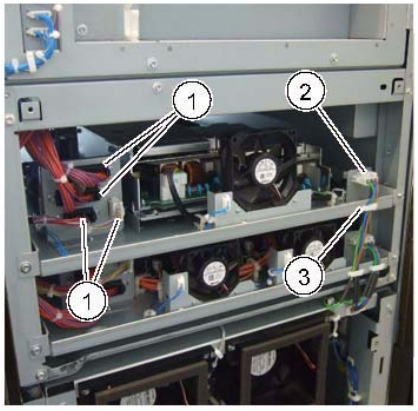


Figure 3 j0kol418005

8. Pull out the LVPS H1U Chassis Assembly. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Pull out the LVPS H1U Chassis Assembly.

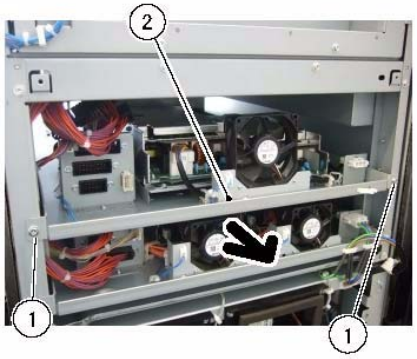


Figure 4 j0cx418019

9. Lift the LVPS H1U Chassis Assembly, remove the Stopper, then pull it out further, and lift to remove it. (Figure 5)
   (1) Remove the LVPS H1U Chassis Assembly.

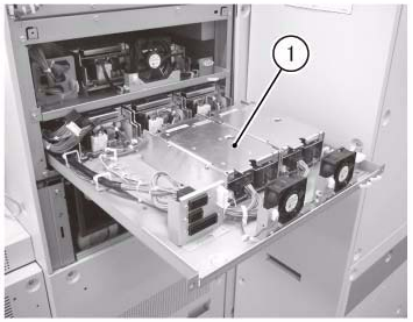


Figure 5 dar418004

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When installing the ELEC Box Rear Cover, in order to prevent bulging, install while holding down the center part of the Cover.*

REP 18.12.2 LVPS S24 Chassis Assembly

Parts List on PL 18.12

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Remove the ELEC Box Rear Cover. (PL 19.9)
4. Open the IOT-R Front Left Cover Assembly.
5. Remove the ELEC Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

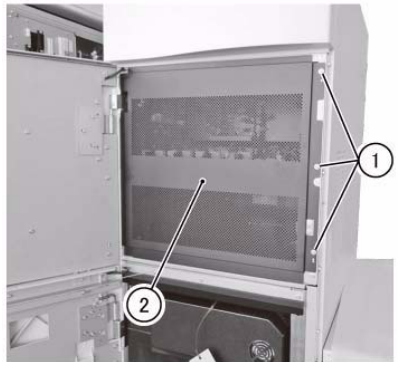


Figure 1 dar418003

6. Remove the Screw (x2). (Figure 2)
   (1) Remove the Screw (x2).

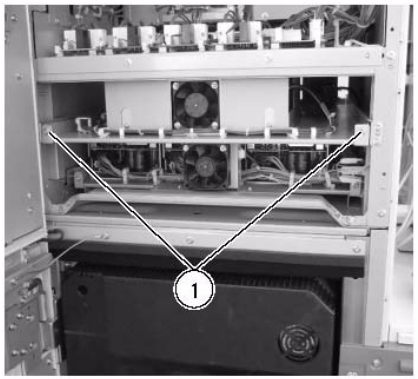


Figure 2 j0kol418008

7. Disconnect the Connector (x5). (Figure 3)
   (1) Disconnect the Connector (x3).
   (2) Release the wire harness from the Clamp (x3).
   (3) Disconnect the Connector (x2).

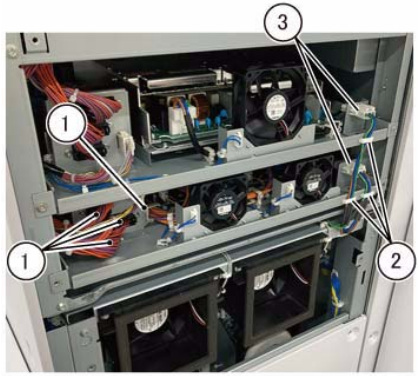


Figure 3 dar418005

8. Pull out the LVPS S24 Chassis Assembly. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Pull out the LVPS S24 Chassis Assembly.

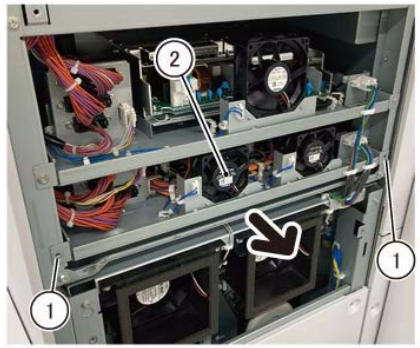


Figure 4 dar418006

9. Lift the LVPS S24 Chassis Assembly, remove the Stopper, then pull it out further, and lift to remove it. (Figure 5)
   (1) Remove the LVPS S24 Chassis Assembly.

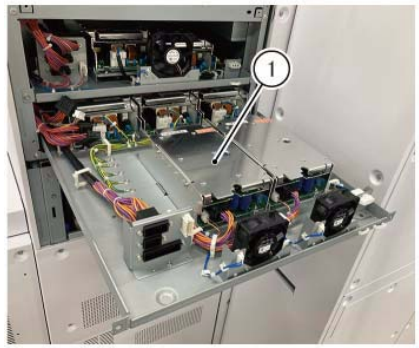


Figure 5 dar418007

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When installing the ELEC Box Rear Cover, in order to prevent bulging, install while holding down the center part of the Cover.*

REP 18.13.1 Video Box Unit

Parts List on PL 18.13

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Remove the IOT-R Top Cover. (PL 19.8)
4. Remove the ELEC Box Rear Cover. (PL 19.9)
5. Open the IOT-R Front Left Cover Assembly.
6. Remove the ELEC Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

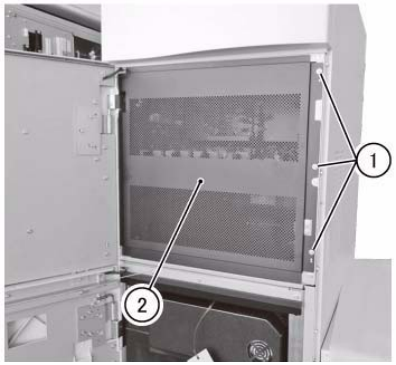


Figure 1 dar418003

7. Disconnect the Connector (x19) that is connected from the front of the Video Box Unit. (Figure 2)

   NOTE: *For Clear Toner Kit Expansion machine, Connector (x10).*

   (1) Disconnect the Connector (x13).
   (2) Disconnect the Connector (x6).
   (3) Release the wire harness from the Clamps (x6).
   (4) Release the Push Tie (x1).

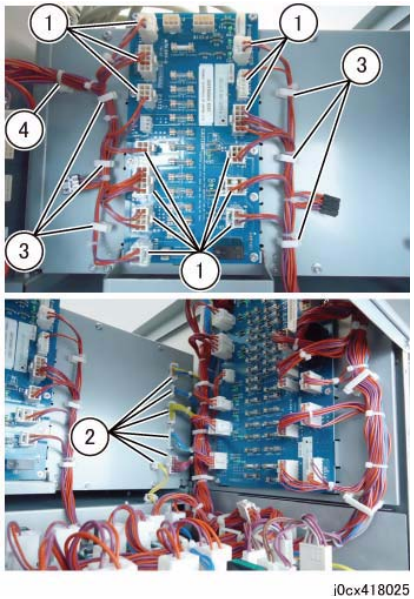


Figure 2 j0cx418025

8. Disconnect the ROS Cable (x4) that is connected to the top of the Video Box Unit. (Figure 3)

   NOTE: *In the case of 5-color machine, ROS Cable (x5). In the case of 6-color machine, ROS Cable (x6).*

   (1) Disconnect the ROS Cable (x4).
   (2) Release the ROS Cable from the Clamp (x2).

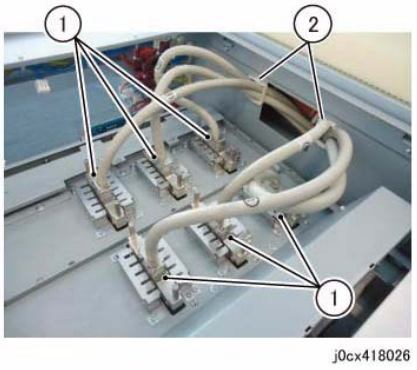


Figure 3 j0cx418026

9. Disconnect the Connector (x3). (Figure 4)

(1) Release the wire harness from the Clamp.
(2) Disconnect the Connector (x3).

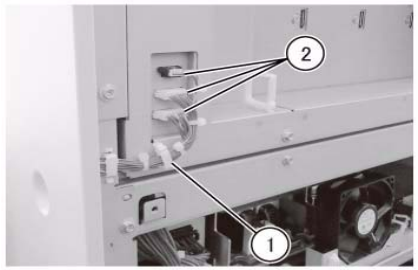


Figure 4 dar418008

10. Remove the Video Box Unit. (Figure 5)
    (1) Remove the Screw (x4).
    (2) Remove the Video Box Unit.

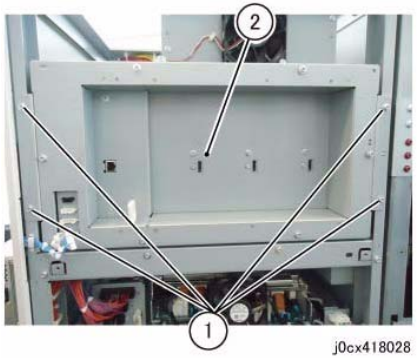


Figure 5 j0cx418028

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When installing the ELEC Box Rear Cover, in order to prevent bulging, install while holding down the center part of the Cover.*

REP 18.13.2 HALFTONE PWB

Parts List on PL 18.13, PL 18.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Remove the IOT-R Top Cover. (PL 19.8)
4. Disconnect the ROS Cable (x4) that is connected to the top of the Video Box Unit. (Figure 1)

   NOTE: *In the case of 5-color machine, ROS Cable (x5). In the case of 6-color machine, ROS Cable (x6).*

   (1) Disconnect the ROS Cable (x4).
   (2) Release the ROS Cable from the Clamp (x2).

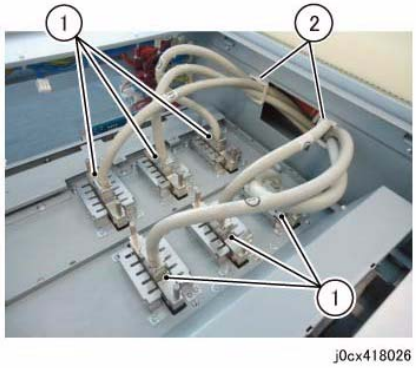


Figure 1 j0cx418026

5. Disconnect the Connector (x3). (Figure 2)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x3).

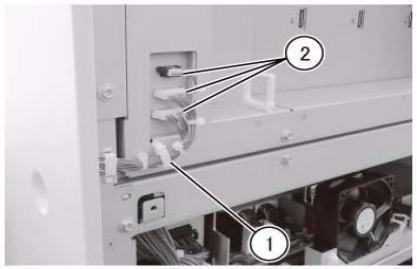


Figure 2 dar418008

6. Remove the Video Box Rear Cover. (Figure 3)
   (1) Remove the Screw (x9).
   (2) Remove the Video Box Rear Cover.

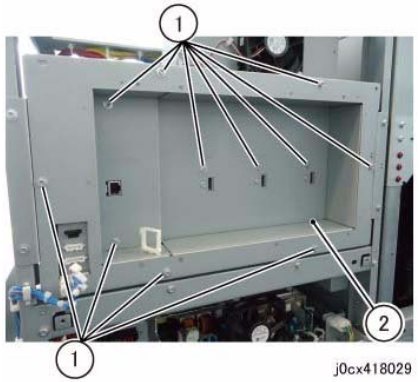


Figure 3 j0cx418029

7. Remove the Halftone PWB (x3). (Figure 4)
   (1) Remove the Screw (x6).
   (2) Remove the Halftone PWB SS.
   (3) Remove the Halftone PWB YM.
   (4) Remove the Halftone PWB CK.

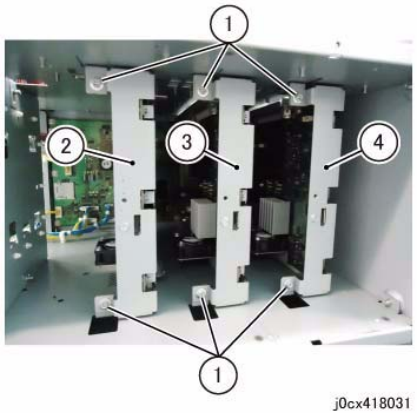


Figure 4 j0cx418031

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.13.3 IOT MAIN PWB

Parts List on PL 18.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Halftone PWB. (REP 18.13.2)
2. Disconnect the Connector (x7). (Figure 1)
   (1) Disconnect the Connector (x7).

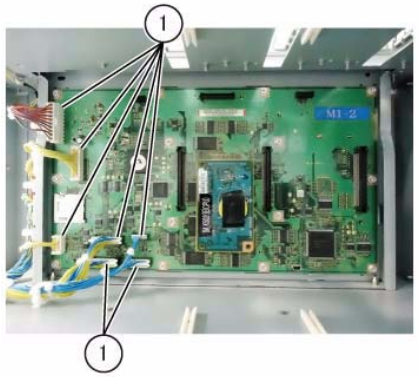


Figure 1 j0cx418032

3. Remove the IOT MAIN PWB Upper Plate. (Figure 2)
   (1) Remove the Screw (x9).
   (2) Remove the IOT MAIN PWB Upper Plate.

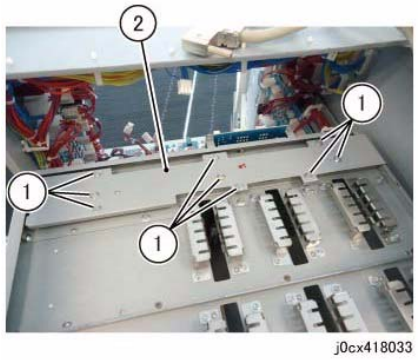


Figure 2 j0cx418033

4. Remove the IOT Main PWB. (Figure 3)
   (1) Remove the IOT Main PWB.

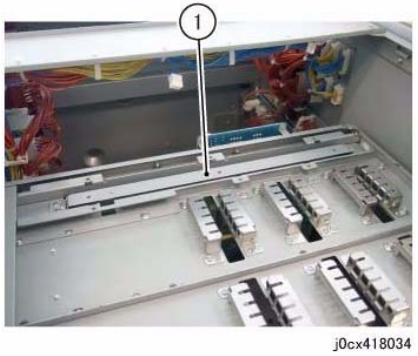


Figure 3 j0cx418034

Replacement

1. To install, carry out the removal steps in reverse order.

REP 18.14.1 SYS PWB Assembly

Parts List on PL 18.14

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

1. Remove the Print Server Support Cover. (PL 19.9)
2. Disconnect all cables that are connected externally to the Video Box Unit.
3. Remove the ELEC Box Side Cover. (PL 19.8)
4. Remove the ELEC Box Rear Cover. (PL 19.9)
5. Disconnect the Connector (x3). (Figure 1)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector (x3).

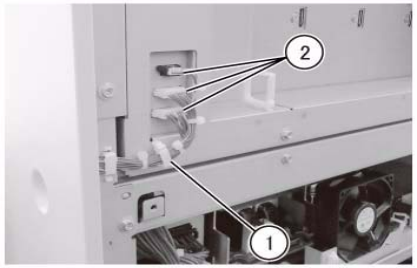


Figure 1 dar418008

6. Remove the Video Box Rear Cover. (Figure 2)
   (1) Remove the Screw (x9).
   (2) Remove the Video Box Rear Cover.

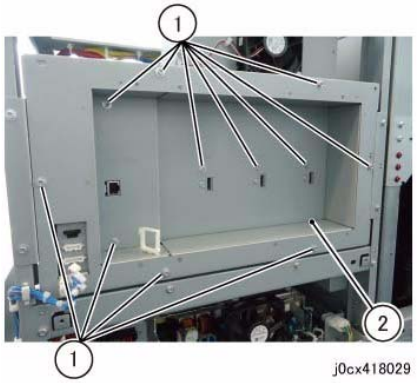


Figure 2 j0cx418029

7. Remove the Side Cover. (Figure 3)
   (1) Loosen the Screw (x6).
   (2) Remove the Side Cover.

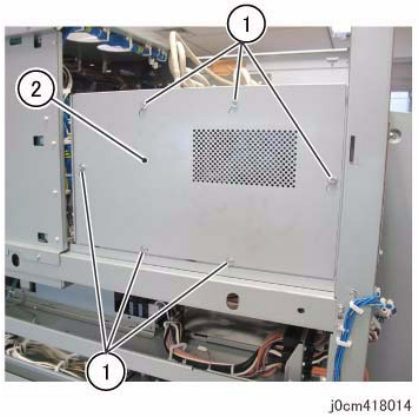


Figure 3 j0cm418014

8. Remove the SYS PWB Assembly. (Figure 4)
   (1) Disconnect the Connector (x5).
   (2) Release the Wire Harness from the Clamp (x9).
   (3) Remove the Screw (x4).

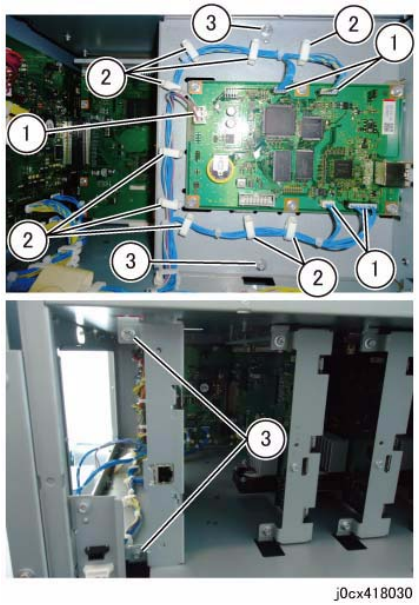


Figure 4 j0cx418030

Replacement

1. To install, carry out the removal steps in reverse order.

   NOTE: *When installing the ELEC Box Rear Cover, in order to prevent bulging, install while holding down the center part of the Cover.*

REP 19.1.1 IOT-L Front Left Door Assembly

Parts List on PL 19.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the IOT-L Front Left Door Assembly is very heavy, work with sufficient care.*

1. Open the IOT-L Front Left Door.
2. Remove the IOT-L Front Left Door Assembly. (Figure 1)
   (1) Remove the Screw and remove the Stopper Wire.
   (2) Remove the Tapping Screw and remove the Clamp from the Pin.
   (3) Lift the Pin up, and secure it to the U groove above.
   (4) Remove the Tapping Screw and remove the Clamp from the Pin.
   (5) Remove the Pin.
   (6) Remove the IOT-L Front Left Door Assembly.

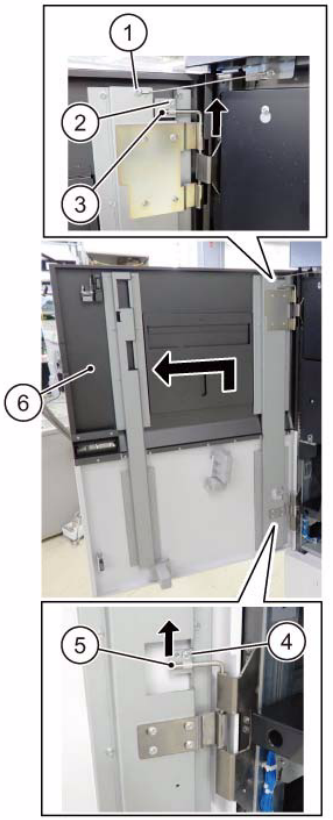


Figure 1 j0kol419001

Replacement

1. To install, carry out the removal steps in reverse order.

REP 19.1.2 IOT-L Front Right Door Assembly

Parts List on PL 19.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *As the IOT-L Front Right Door Assembly is very heavy, work with sufficient care.*

1. Open the IOT-L Front Right Door.
2. Remove the IOT-L Front Right Door Assembly. (Figure 1)
   (1) Remove the Screw and remove the Stopper Wire.
   (2) Remove the Tapping Screw and remove the Clamp from the Pin.
   (3) Lift the Pin up, and secure it to the U groove above.
   (4) Remove the Tapping Screw and remove the Clamp from the Pin.
   (5) Remove the Pin.
   (6) Remove the IOT-L Front Right Door Assembly.

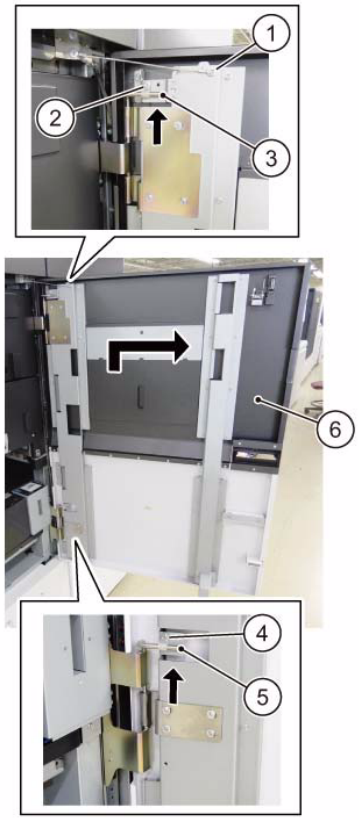


Figure 1 j0kol419002

Replacement

1. To install, carry out the removal steps in reverse order.

REP 19.5.1 IOT-L Rear Left Cover

Parts List on PL 19.5

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Detach the ECO Box Unit. (REP 4.9.1)
2. Remove the IOT-L Rear Right Cover. (Figure 1)
   (1) Loosen the Screw (x2).
   (2) Remove the Screw (x2).
   (3) Remove the IOT-L Rear Right Cover.

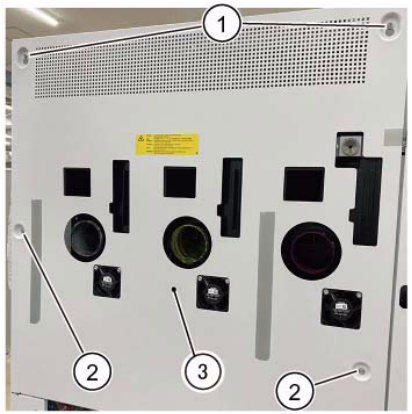


Figure 1 dar419001

3. Remove the IOT-L Rear Left Cover. (Figure 2)
   (1) Loosen the Screw (x2).
   (2) Remove the Screw.
   (3) Remove the IOT-L Rear Left Cover.

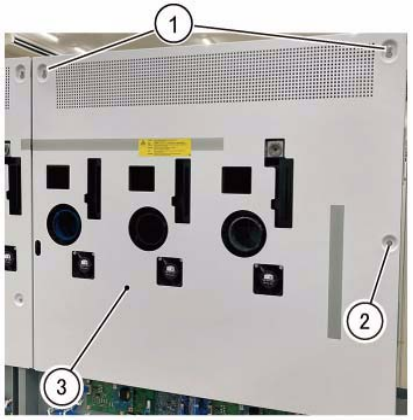


Figure 2 dar419002

Replacement

1. To install, carry out the removal steps in reverse order.

REP 19.8.1 Attention Light Assembly

Parts List on PL 19.8

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left Cover Assembly.
2. Remove the Elect Box Front Plate. (Figure 1)

   NOTE: *When attaching or removing ELEC Box Front Plate, ensure that Stopper Wire does not get entangled.*

   (1) Remove the Screw (x3).
   (2) Remove the Elect Box Front Plate.

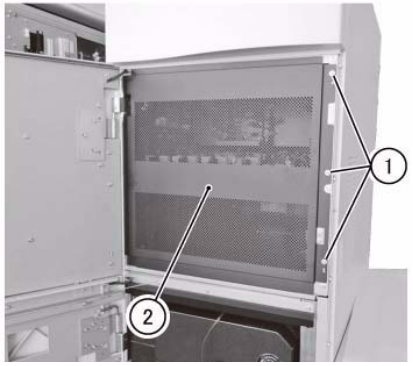


Figure 1 dar418003

3. Disconnect the Connector. (Figure 2)
   (1) Release the wire harness from the Clamp.
   (2) Disconnect the Connector.

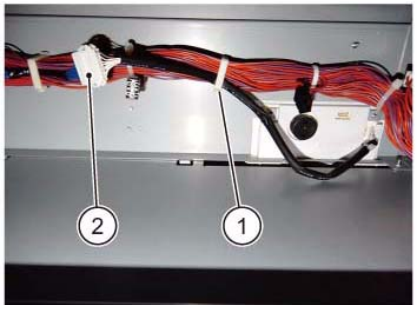


Figure 2 j0kol419003

4. Remove the Top Corner Cover. (PL 19.2)
5. Remove the Light Cover. (Figure 3)
   (1) Remove the Screw (x3).
   (2) Remove the Light Cover.

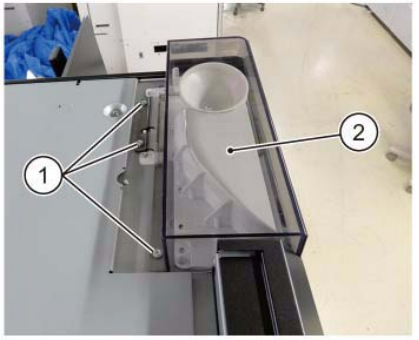


Figure 3 j0kol419004

6. Remove the Attention Light Assembly. (Figure 4)
   (1) Remove the Screw (x6).
   (2) Remove the Attention Light Assembly.

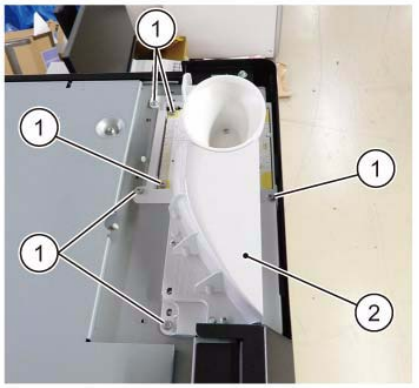


Figure 4 j0kol419005

Replacement

1. To install, carry out the removal steps in reverse order.

REP 20.1.1 ILS Assembly

Parts List on PL 20.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the WR Roll Assembly. (REP 20.1.3)
3. Remove the Lamp Assembly. (REP 20.1.2)
4. Remove the Inner Left Upper Cover. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Inner Left Upper Cover.

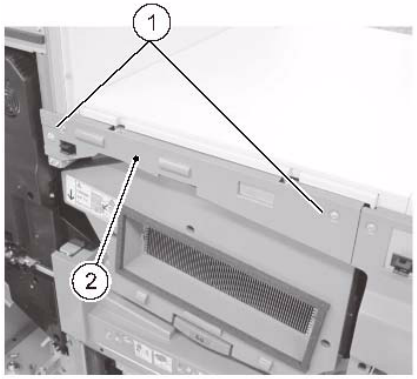


Figure 1 j0kol420001

5. Remove the Bracket. (Figure 2)
   (1) Remove the Screw.
   (2) Remove the Bracket.

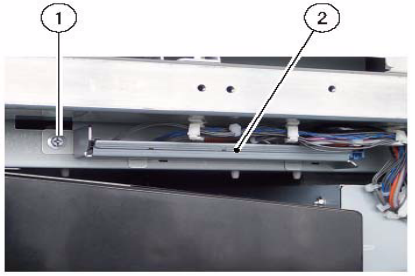


Figure 2 j0kol420009

6. Disconnect the Connector (x4). (Figure 3)
   (1) Disconnect the Connector (x5).
   (2) Release the wire harness from the Clamp (x3).

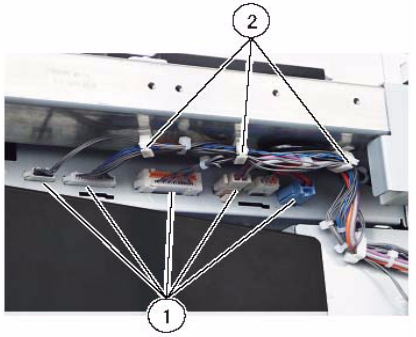


Figure 3 j0kol420010

7. Loosen the Unit Screw (x2) that secures the ILS Assembly and remove the Screw (x2). (Figure 4)
   (1) Remove the Machine Screw (x2).
   (2) Loosen the Unit Screw (x2).

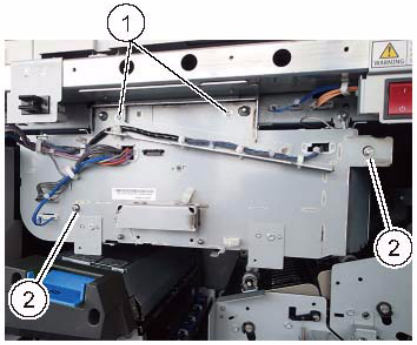


Figure 4 j0kol420002

8. Pull out the ILS Assembly by 10 cm along the ILS Left/Right, and remove it by removing the Screw of the Stopper Wire. (Figure 5)
   (1) Pull out the ILS Assembly by 10 cm.
   (2) Remove the Screw of the Stopper Wire.
   (3) Remove the ILS Assembly.

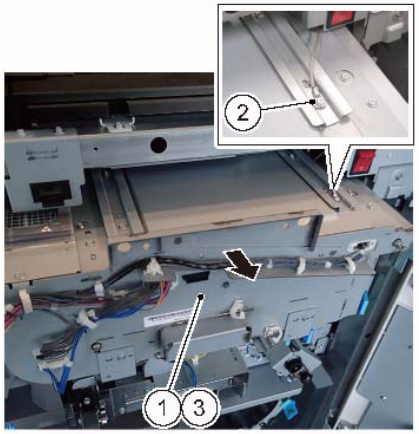


Figure 5 j0kol420003

9. When attaching the Stopper Wire to the ILS Assembly, hook it and insert into the hole of the Frame so that it will not be damaged. (Figure 6)

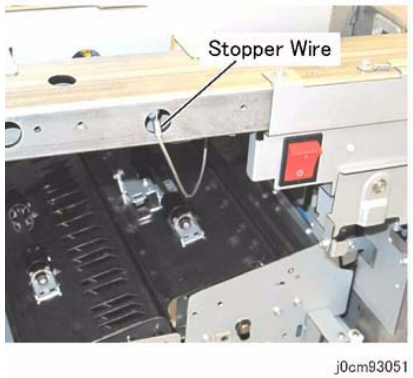


Figure 6 j0cm93051

Replacement

1. To install, carry out the removal steps in reverse order.
2. Perform the ILS installation adjustment procedure flow when replacement is done. (ADJ 20.1.7)

REP 20.1.2 Lamp Assembly

Parts List on PL 20.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the WR Roll Assembly. (REP 20.1.3)
3. Push in the Exit Drawer Unit.
4. Remove the Inner Right Upper Cover. (Figure 1)
   (1) Remove the Screw of the Stopper Wire.
   (2) Remove the Screw (x4).
   (3) Remove the Inner Right Upper Cover.

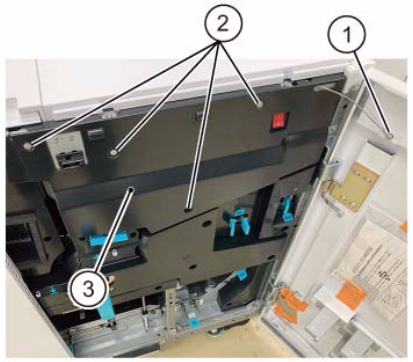


Figure 1 dar420001

5. Remove the Plate Bracket. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Plate Bracket.

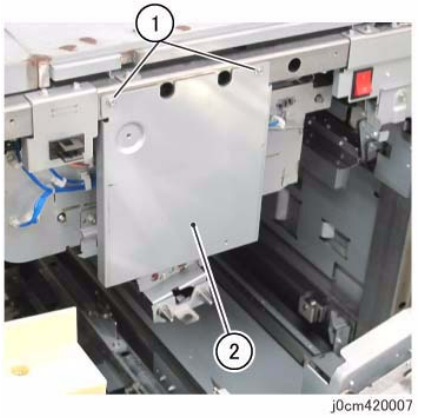


Figure 2 j0cm420007

6. Pull out the Lamp Assembly along the Left-Right Rail. (Figure 3)

   NOTE: *Support with your hand while pulling out the Lamp Assembly to prevent it from dropping.*

   (1) Disconnect the Connector.
   (2) Release the wire harness from the Clamp (x2).
   (3) Remove the Machine Screw (x2).
   (4) Pull out the Lamp Assembly.

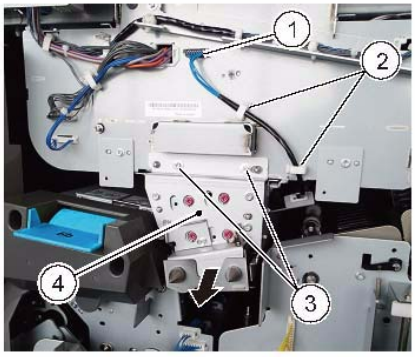


Figure 3 j0kol420005

Replacement

1. To install, carry out the removal steps in reverse order.
   Reference: Insert the Lamp Assembly along the Left and Right Rail.

Reference: When performing removal, do not touch the bottom base of the window glass with your bare hands. If there is anything adhered to it, such as fingerprints, clean it by using dry cloth, etc.

2. When replacing, write down the NVM value listed on the label that is pasted on the new Lamp Assembly and perform the ILS Installation Adjustment Procedure Flow. (ADJ 20.1.7)

REP 20.1.3 WR Roll Assembly

Parts List on PL 20.1

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Pull out the Exit Drawer Unit.
3. Remove the Screw from the Left Rail Assembly. (Figure 1)
   (1) Remove the Screw, Nylon Washer, and Washer.

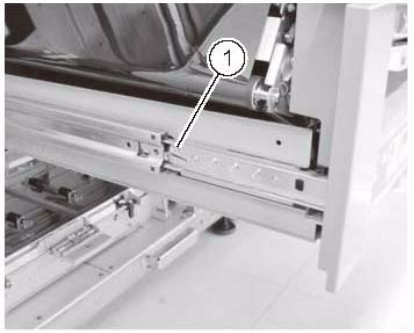


Figure 1 j0kol416001

4. Pull out the Exit Drawer Unit up to the service position. (Figure 2)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

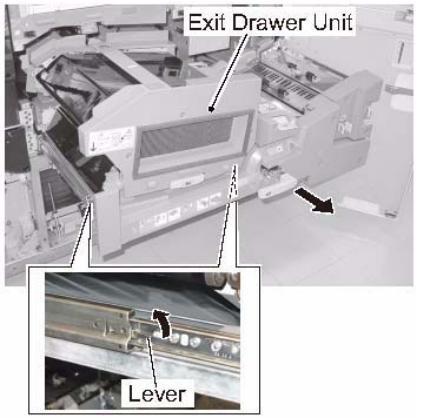


Figure 2 j0kol416002

5. Remove the Inverter 1 Front Cover. (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Inverter 1 Front Cover.

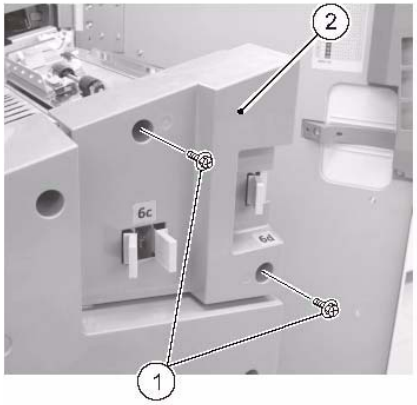


Figure 3 j0kol416003

6. Remove the Inner Right Cover. (Figure 4)
   (1) Remove the Screw (x5).
   (2) Remove the Inner Right Cover.

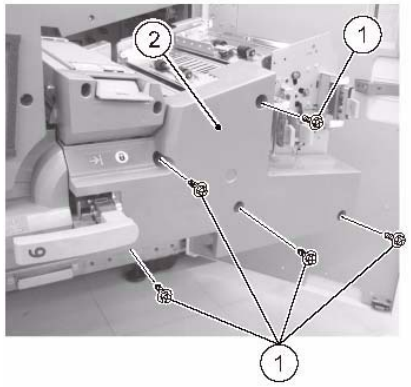


Figure 4 j0kol416004

7. Remove the WR Roll Assembly. (Figure 5)
   (1) Disconnect the Connector.
   (2) Remove the WR Roll Assembly.

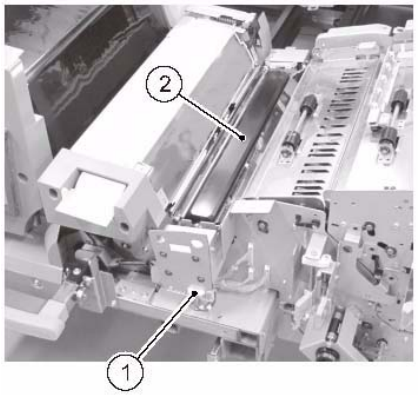


Figure 5 j0kol420008

Replacement

1. To install, carry out the removal steps in reverse order.
2. When inserting the Exit Drawer Unit, check whether the shelter face of the WR Roll is facing up. If it is not facing up, rotate the WR Roll with your hands so that it faces up.
3. When replacing the WR Roll Assembly, write down the NVM value listed on the label (3) that is attached to the new WR Roll Assembly and perform the ILS Installation Adjustment Procedure Flow. (ADJ 20.1.7)

REP 20.4.1 No.1 Window Case Assembly

Parts List on PL 20.4

Removal

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

1. Open the IOT-R Front Left/Right Cover.
2. Remove the WR Roll Assembly. (REP 20.1.3)
3. Push in the Exit Drawer Unit.
4. Remove the Inner Right Upper Cover. (Figure 1)
   (1) Remove the Screw of the Stopper Wire.
   (2) Remove the Screw (x4).
   (3) Remove the Inner Right Upper Cover.

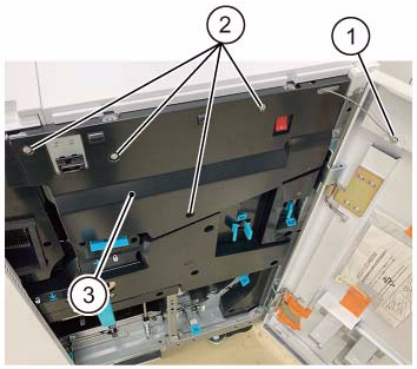


Figure 1 dar420001

5. Remove the Plate Bracket. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Plate Bracket.

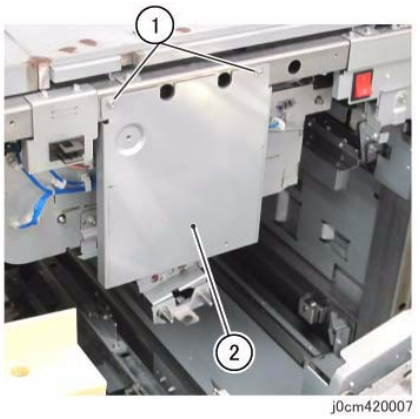


Figure 2 j0cm420007

6. Move the Plate. (Figure 3)
   (1) Loosen the Screw.
   (2) Move the Plate.
   (3) Tighten the Screw.

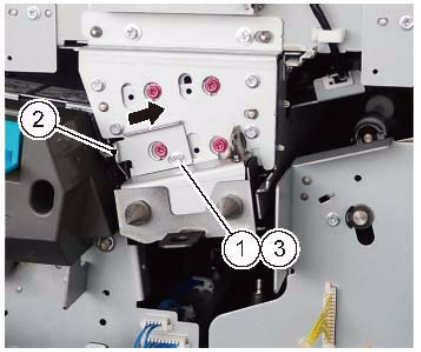


Figure 3 j0kol420006

7. Pull out the No.1 Window Case Assembly. (Figure 4)
   (1) Pull out the No.1 Window Case Assembly.

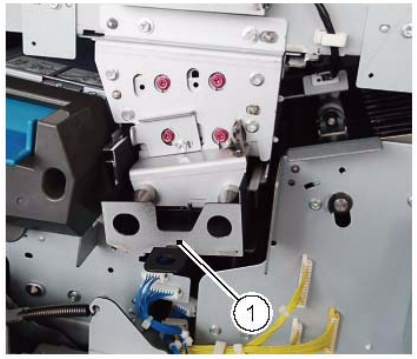


Figure 4 j0kol420007

Replacement

1. To install, carry out the removal steps in reverse order.

REP 99.1.1 (SCC) Safety Critical Components

Removal

WARNING

Any part marked with SCC is a Safety Critical Component. As to replacement of any SCC, the complete component unit must be replaced. It must never be disassembled or no individual internal parts of it must be replaced.

Further, when a spare part is provided with the instructions, the CEs are required to follow them.

Installation of any part other than the ones designated by our company shall be strictly prohibited because it cannot be guaranteed in quality and safety.

ADJ 5.1.1 DC802 Deve Mixing

Purpose

- It is a feature to be executed by a service personnel during installation or Deve Motor Fail in order to eliminate the increase in development stirring load due to developing powder condensation as a result of vibration during transportation of the device. By executing Diag, stirring of the developing powder in the Developer is executed to avoid occurrence of Deve Motor Fail.

Overview

- Simultaneously with the execution of Diag, the Transfer Unit is retracted, and then the normal rotation/reverse rotation of the Developer drive is repeated a predetermined number of times.

Procedure

1. Launch PC-Diag, select [Subsystem Check], and click the DC802 Deve Mixing button.
2. When the DC802 screen is opened, a selection screen for the toner color (engine) to be executed is displayed.

   NOTE: *A toner color (engine) which is not installed cannot be selected.*

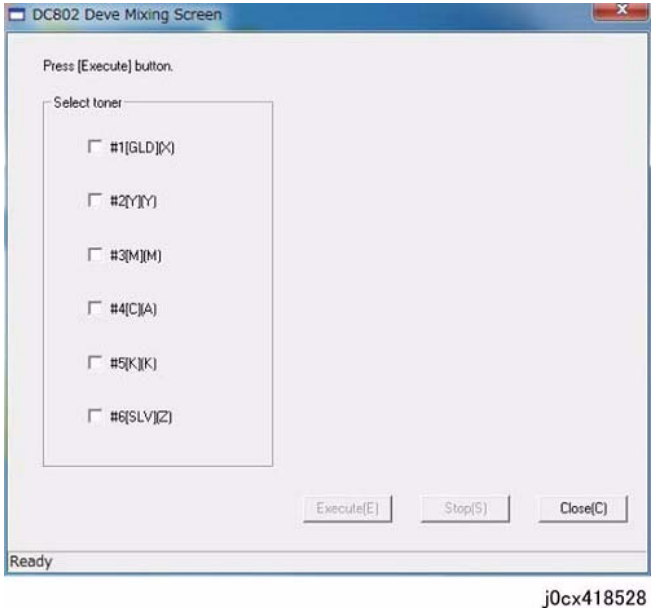


Figure 1 j0cx418528

3. Select the target toner color (engine), and select [Start].

   NOTE: *Selection of multiple toner colors (engines) is possible.*

4. After the operation is done, and when the display shows that the task is completed, press [Close].

ADJ 6.1.1 DC803 Xfer 2ndBTB InOut Nip adjustment

Purpose

- To correct the In/Out difference of 2nd BTB Nip.
- Perform during M/C manufacturing, or Backup Roll Assembly, IBT Drawer Assembly replacement.

Overview

- Starting this Diag performs printing up to the designated number of sheets while reducing the 2nd BTB bite amount (Nip). Check the printed samples and enter the number of prints directly before the appearance of uneven density at In and Out respectively to have the appropriate In/Out correction amount calculated and set to the adjustment NVM.

Procedure

1. Load A3 or 11x17 (Ledger) in Tray 1.
2. Execute DC957 X'FER Monitor (Vmoni change detection).
   (Color Mode: 4C)
3. Close DC957, and start DC803 Xfer 2ndBTB InOut Nip Adjustment.
4. Click [Print Execute].
   "In progress" is displayed and 8 sheets of samples are printed while reducing the bite amount (Nip).
5. Visually check the print condition at the In/Out sides of the 8 sheets of samples that were output.

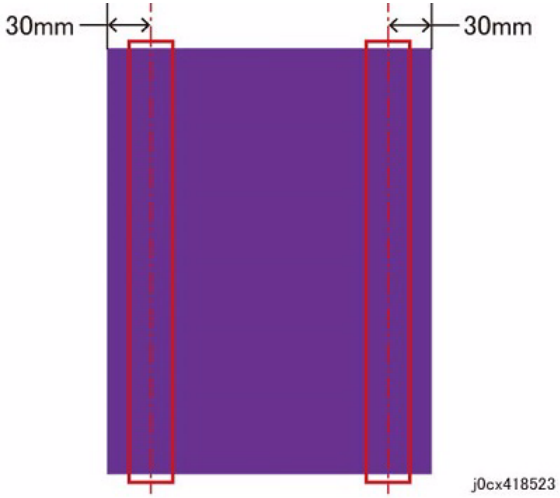


Figure 1 j0cx418523

6. Decide at which page (Xth sheet) the density starts lightening at the following evaluation positions.
   Example

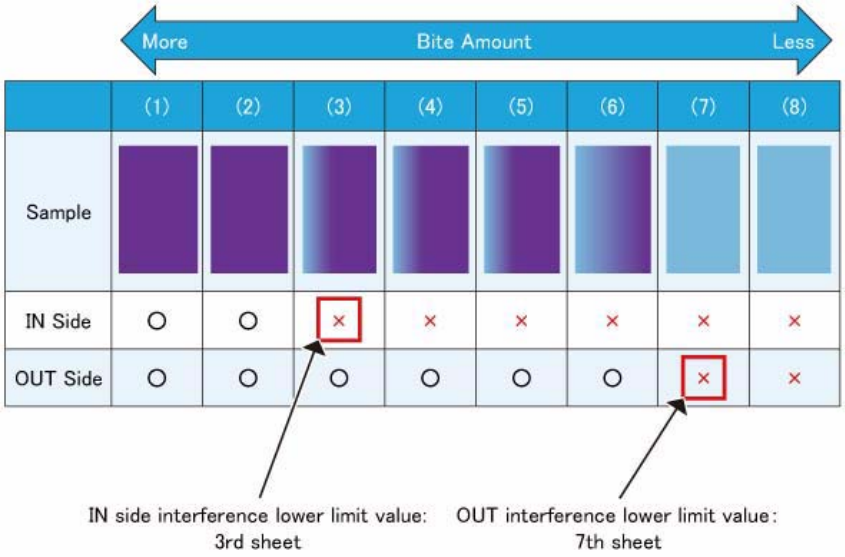


Figure 2 e0cx406502

Example (Actual Samples)

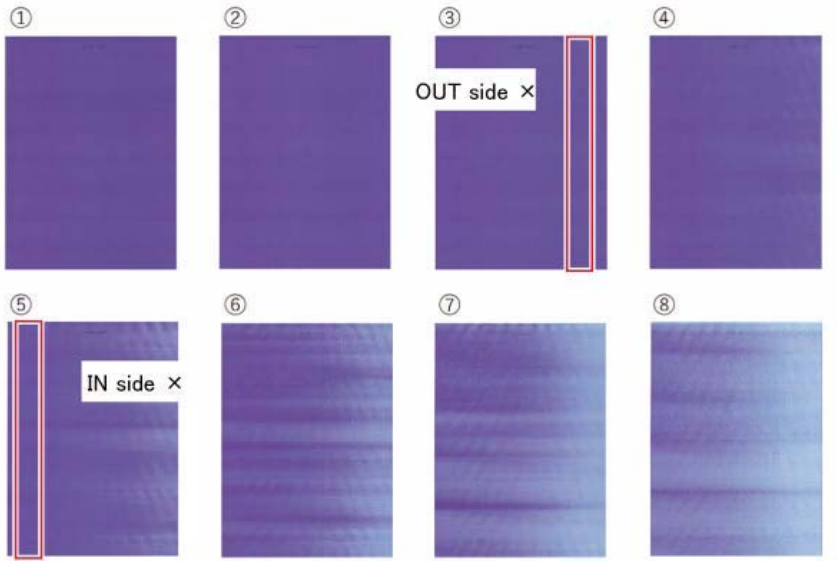


Figure 3 e0cx406501

7. Enter the following values that were decided by looking at the samples into the DC803 screen.

- [IN side interference lower limit value] (No. of sheets) Chain-Link (746-642)--(5)
- [OUT side interference lower limit value] (No. of sheets) Chain-Link (746-643)--(6)

8. By pressing the [NVM SET] button, the appropriate value is calculated and automatically set in [Bite Amount Adjustment Cam Out Position Correction Value] (IN-OUT Correction Amount) 746-572: =[(6)-(5)]*D.

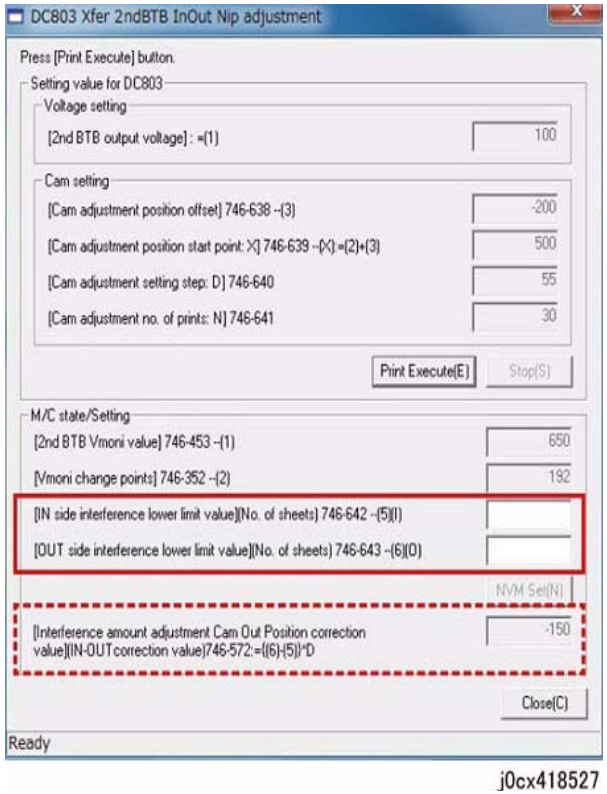


Figure 4 j0cx418527

9. Close DC803, and execute DC957 X'FER Monitor (Vmoni change detection). (Color Mode: 4C)
10. Close DC957, perform DC612 Color Test Pattern Print with the following settings, and check the sample.

Table 1

	Setting Value	Remarks
Contact Engine	4C	
Test pattern selection	Half Tone	Cin Settings: #2/#3/#4/#5 = 0%/60%/60%/0%
Printing sides	1 Sided	
Tray	Tray1	Loaded with A3, J paper

Table 1

	Setting Value	Remarks
Procon TRC	ON	
Object	200C	
No. of prints	1 sheets	

11. Finish if there is no problem with image quality. Contact the Support Department for instructions if there is a problem.

    NOTE: *When Bite Amount Adjustment Cam Out Position Correction Value > |88|*

    (1) If there is no problem in image quality when Bite Amount Adjustment Cam Out Position Correction Value is |110|, adjust [OUT side interference lower limit value] (Sheet No.) Chain - Link (746-643)--(6) so that it becomes |88|. (Be careful not to change the symbol)

    (Reference sample)

    - *In the case of -110: Correct it from -110 to -88.*
    - *In the case of 110: Correct it from 110 to 88.*

    (2) When Bite Amount Adjustment Cam Out Position Correction Value > |132| (Investigation required)

    - *Contact the Support Department for instructions.*

12. (When transfer failure has not occurred)
    (1) Enter DC131 NVM Read / Write and change the following NVM value.
    - Change NVM [746-638] (Cam adjustment position offset) (Default value: -66) to a value that is [-20] of its current value.

    (2) Enter DC803, and click [Print Execute].
    (3) By looking at the printed 8 samples, determine the page (Xth sheet) where the density of [IN side interference lower limit value] (Sheet No.) and [OUT side interference lower limit value] (Sheet No.) starts decreasing.
    (4) Repeat Steps 1 to 3 until IN side and OUT side changes occur in the 8 samples.

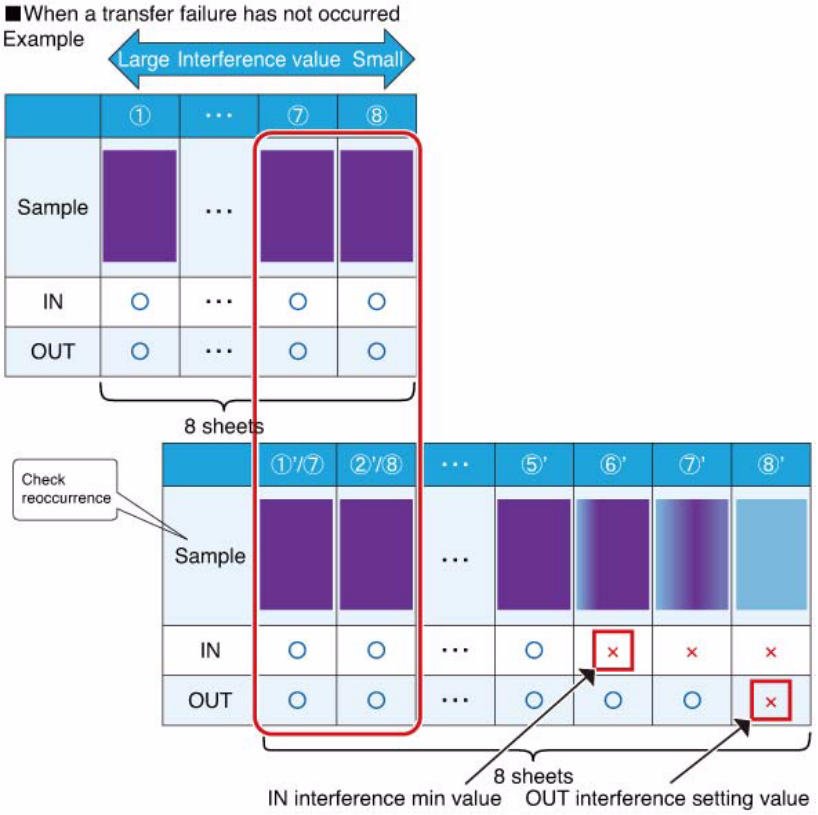


Figure 5 e0cx406503

Example (Actual Samples)

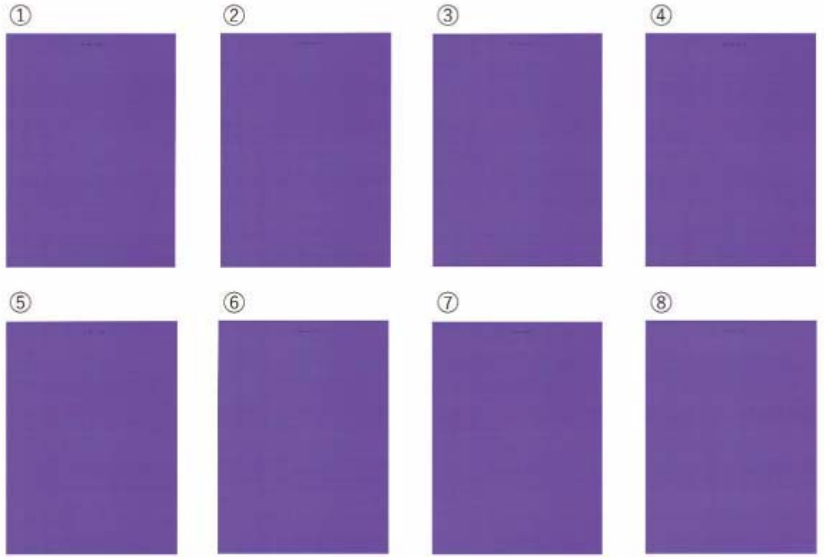


Figure 6 j0cx406504

(5) Enter the values of [IN side interference lower limit value] (Sheet No.) and [OUT side interference lower limit value] (Sheet No.) determined by looking at the samples, and press the [NVM SET] button.

(6) Close DC803, enter DC131 NVM Read / Write and change the following NVM value.

- Return NVM [746-638] (Cam adjustment position offset) (Default value: -66) to [-66].

(7) Execute DC957 X'FER MONITOR (Vmoni change detection). (Color Mode: 4C)

(8) Perform Steps 10 to 11.

13. (When transfer failure occurs from the 1st sheet)

(1) Enter DC131 NVM Read / Write and change the following NVM value.

- Change NVM [746-638] (Cam adjustment position offset) (Default value: -66) to a value that is [+20] of its current value.

(2) Enter DC803, and click [Print Execute].

(3) By looking at the printed 8 samples, determine the page (Xth sheet) where the density of [IN side interference lower limit value] (Sheet No.) and [OUT side interference lower limit value] (Sheet No.) starts decreasing.

(4) Repeat Steps 1 to 3 until IN side and OUT side changes occur in the 8 samples.

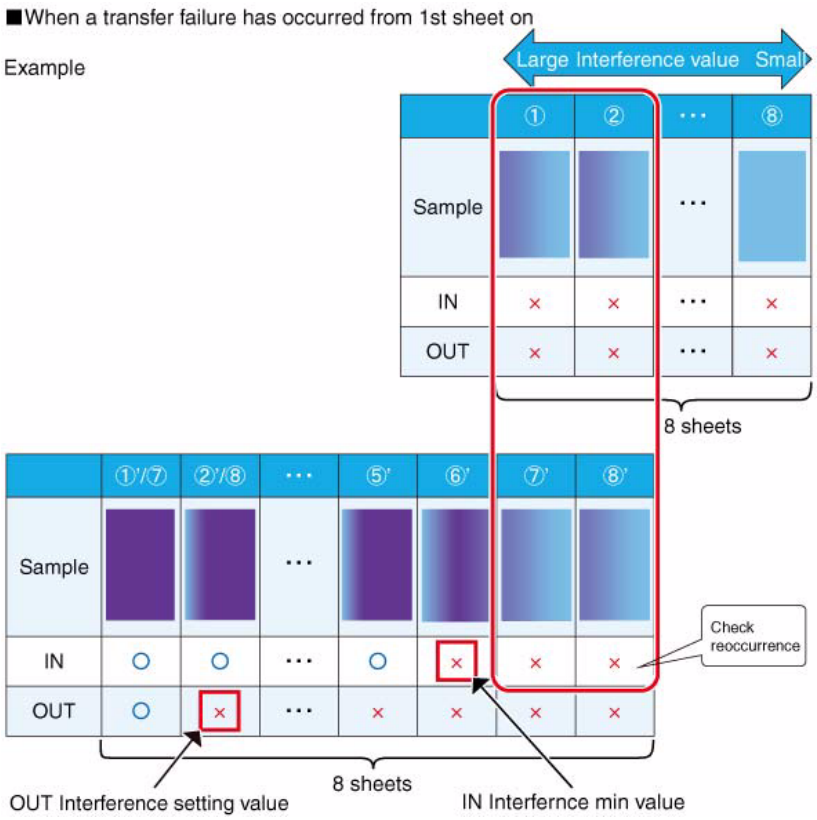


Figure 7 e0cx406505

Example (Actual Samples)

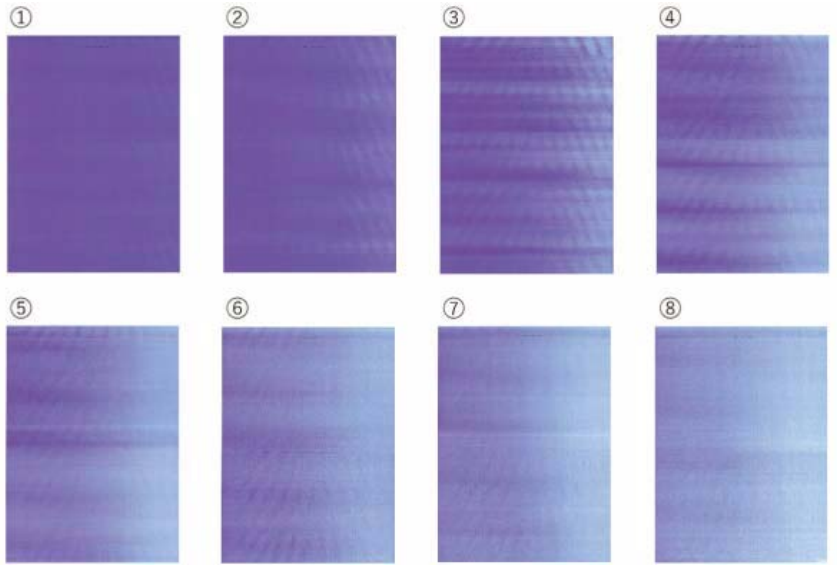


Figure 8 j0cx406506

(5) Enter the values of [IN side interference lower limit value] (Sheet No.) and [OUT side interference lower limit value] (Sheet No.) determined by looking at the samples, and press the [NVM SET] button.

(6) Close DC803, enter DC131 NVM Read / Write and change the following NVM value.

- Return NVM [746-638] (Cam adjustment position offset) (Default value: -66) to [-66].

(7) Execute DC957 X'FER MONITOR (Vmoni change detection). (Color Mode: 4C)

(8) Perform Steps 10 to 11.

ADJ 6.1.2 DC804 Xfer BeltRun

Purpose

- Set 2nd BTB drive mode to adjust BTB Walk during factory shipment and 2nd BTB replacement.

Overview

- Drive 2nd BTB/IBT to adjust BTB Walk.

Procedure

1. Launch PC-Diag, select [Subsystem Check], and click the DC804 Xfer Belt Run button.
2. Display Xfer Belt Run screen. (Figure 1)
3. Select [Execute].

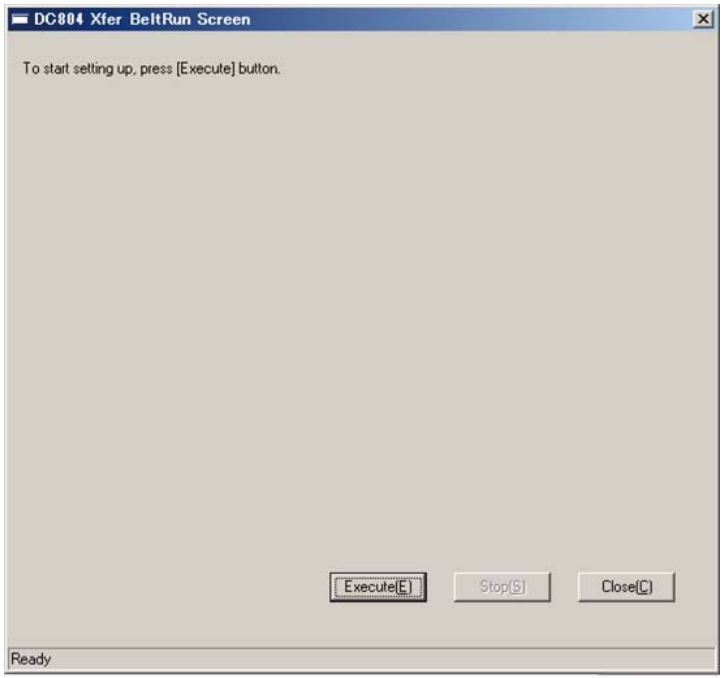


Figure 1 j0cx640028

4. After the operation is done, and when the display shows that the task is completed, press [Close].

ADJ 7.1.1 DC701 Fusing Nip Measurement

Parts List on PL 7.3

Purpose

Make a copy for Fusing Nip width measurement in order to obtain a proper fusing level.

Caution As the Fusing Unit works at high temperature, be careful not to burn yourself.

NOTE: *For paper to be used for adjustment, all paper types for which Duplex Mode is available can be used, and the paper size is decided by the specified tray (Recommended paper is J Paper, A4 LEF). The number of sheets cannot be specified (1 sheet).*

Procedure

1. From the PC Diag screen, select [Sub-System Check], and enter [DC701] Mode.
2. The Fusing Nip Measurement screen will appear.
   - Specify the Tray.
   - Click the [Execute] button.
   - Duplex Mode print of 1 sheet starts.
   - Side 1: Output the Nip measurement pattern.
   - Side 2: Transported without placing any image, and automatically output after stopping for 10 seconds at Fusing Nip section.
3. Check the Nip width of the Nip width measurement pattern which is output. (Figure 1)
   - Measure 15 mm from both sides and Nip width at the center.
   - Check that the Nip width is about 25 mm at the front.
   - Check that the Nip width is about 25 mm at the rear.
   - Check that the Nip width is about 24 mm at the center.

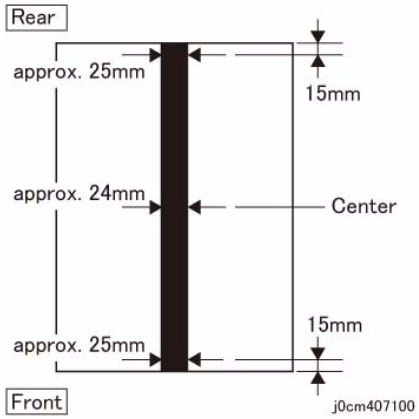


Figure 1 j0cm407100

ADJ 15.6.1 Alignment Adjustment Procedure Flow

Overview

This is the alignment adjustment overview. (Figure 1)

The adjustment need not be performed for everything. Use the following to determine whether the adjustment is needed and perform the required items.

Situations where the adjustment is deemed to be necessary is as follows:

- When installing the M/C
- When replacing parts (paper transportation related parts, transfer related parts, Fusing Unit)
- When removing and re-installing replacement-relevant parts
- When using a paper type (size included) that is different from the one that was used at the last adjustment
- When the temperature and humidity has changed significantly since the last adjustment

NOTE: *Perform only checking of trapezoid correction as it is not an adjustment item.*

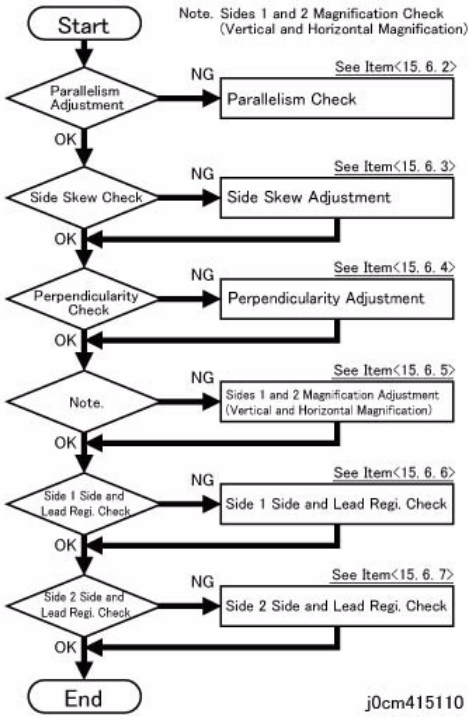


Figure 1 j0cm415110

Alignment is checked all at once by the following procedure, and if there is an item not specified, proceed to the corresponding adjustment item, and then make the necessary adjustments in sequence according to the above flow.

Alignment Total Check

1. Select [Subsystem Check] from the PC-Diag screen, select DC612 Color Test Pattern Print, and obtain the following test pattern.

   NOTE: *The output sample of DC 612 reflects the alignment correction value allocated to the tray. Execute tray alignment adjustment value as initial value on PC-UI.*

   - Contact Engine: 4C
   - Select Test Pattern: Grid (90 degrees) - Front and Back
   - Select Color: K
   - Printed Side: 2 Sided
   - Tray: A3 size paper storage tray
   - Procon TRC: ON
   - Object (screen): 600C
   - Transparent HT: OFF
   - No. of Prints: 3 sheets
2. On the 3rd print, measure a total of 22 locations from 1a to 6dd as shown below. (Figure 2)

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*

   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*

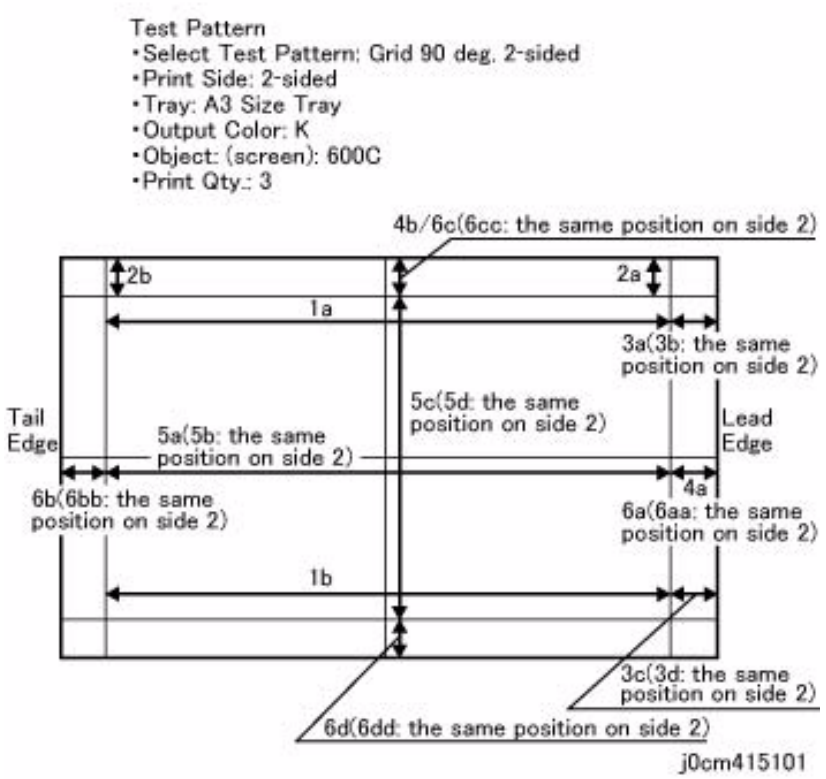

Test Pattern
•Select Test Pattern: Grid 90 deg. 2-sided
•Print Side: 2-sided
•Tray: A3 Size Tray
•Output Color: K
•Object: (screen): 600C
•Print Qty.: 3
4b/6c(6cc: the same position on side 2)
2b
2a
1a
3a(3b: the same position on side 2)
5c(5d: the same position on side 2)
Tail Edge
Lead Edge
5a(5b: the same position on side 2)
4a
6b(6bb: the same position on side 2)
6a(6aa: the same position on side 2)
1b
3c(3d: the same position on side 2)
6d(6dd: the same position on side 2)
j0cm415101

Figure 2 j0cm415101

3. Using the measured value, obtain the value according to the formula in [Specified Value] in Table 1 below, and check that it is the prescribed value.
   If it is not the prescribed value, proceed to the applicable procedure and make adjustment.

Table 1

Order	Check Item	Measurement Point	Prescribed value	Non-prescribed value
1	Parallelism	1a, 1b	(1b-1a)<+/-0.4 mm	ADJ 15.6.2
2	Side skew	2a, 2b	(2a-2b)<+/-0.4 mm	ADJ 15.6.3
3	Perpendicularity	3a, 3b, 3c, 3d	3a-3b=A When 3c-3d=B 1.444x(A-B)/2<+/-0.3 mm	ADJ 15.6.4

Table 1

Order	Check Item	Measurement Point	Prescribed value	Non-prescribed value
4	Side 1/Side 2 Reduce/ Enlarge Ratio Difference	5a (Vertical Ratio) 5b (Vertical Ratio) 5c (Horizontal Ratio) 5d (Horizontal Ratio)	[(5a/400)-1]x100=A [(5b/400)-1]x100=B B-A<0.3% [(5c/277)-1]x100=C [(5d/277)-1]x100=D C-D<0.3%	ADJ 15.6.5
5	Front Side Lead Regi	4a, 4b	(10-4a)<+/-0.5 mm (10-4b)<+/-0.5 mm	ADJ 15.6.6
6	Back Side Lead Regi (Amount of grid position deviation of front and back when looking through paper)	6a, 6b, 6c, 6d, 6aa,6bb, 6cc, 6dd	6a-6aa=A 6b-6bb=B 6c-6cc=C 6d-6dd=D (B-A)/2<+/-0.5 mm* (D-C)/2<+/-0.5 mm* *J/JD Paper is 0.7 mm	ADJ 15.15.2

ADJ 15.6.2 Trapezoid Correction Check

Purpose

Make the lengths of In/Out images equal.

NOTE: *When the BTB Unit is replaced, perform this check procedure. Do not perform adjustment.*

Check

1. Enter DC 612 Color Test Pattern Print and obtain the following test pattern.
   - Contact Engine: 4C
   - Select Test Pattern: Grid (90 degrees) - Front and Back
   - Select Color: K
   - Printed Side: 2 Sided
   - Tray: A3 size paper storage tray
   - Procon TRC: ON
   - Object (screen): 600C
   - Transparent HT: OFF
   - No. of Prints: 3 sheets
2. Check all 3 of the prints.

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*
3. Check trapezoid correction with the following procedure.

   Measure IB image length (1a) and OB image length (1b) in the figure, and check that (1b - 1a) is within +/-0.4 mm of the target value. (Figure 1) The procedure is complete when all of the prints are within the specified values. If the measured value is larger than the specified value even if measurement or sampling is repeated, contact Support to receive instructions.

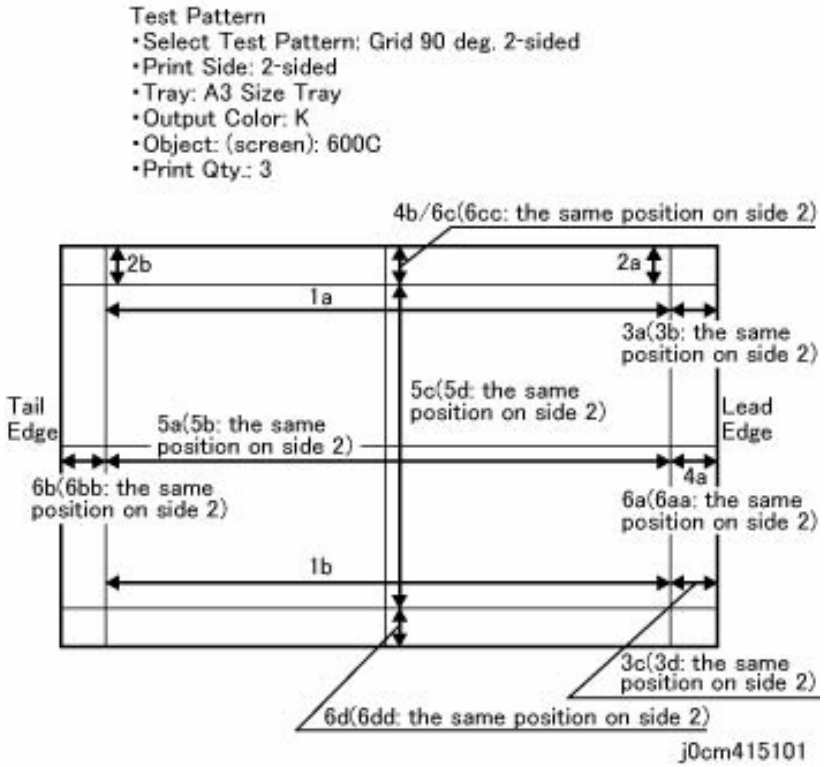

Test Pattern
•Select Test Pattern: Grid 90 deg. 2-sided
•Print Side: 2-sided
•Tray: A3 Size Tray
•Output Color: K
•Object: (screen): 600C
•Print Qty.: 3
4b/6c(6cc: the same position on side 2)
2b
2a
1a
3a(3b: the same position on side 2)
5c(5d: the same position on side 2)
Tail Edge
Lead Edge
5a(5b: the same position on side 2)
4a
6b(6bb: the same position on side 2)
6a(6aa: the same position on side 2)
1b
3c(3d: the same position on side 2)
6d(6dd: the same position on side 2)
j0cm415101

Figure 1 j0cm415101

ADJ 15.6.3 Side Skew Adjustment

Purpose

Correct the skew of the InBoard side.

NOTE: *When the Aligner Unit is replaced, perform this adjustment procedure.*

Adjustment

1. Enter DC129 System Registration Setup, set the following items, and print.
   - Tray: A3 size paper storage tray
   - Printed Side: Duplex
   - Test Pattern: Grid (90 degrees) - Front and Back
   - No. of Prints: 3 sheets
2. Check the 3rd printed sheet.

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*
3. Adjust the front side skew.

   Measure the distance between LE IB Side Regi and TE IB Side Regi. (Figure 1)

   Check whether the difference in measured values of LE IB Side Regi and TE IB Side Regi is within +/-0.4 mm of the target adjustment value. If it is within the target values, proceed to Step 8.

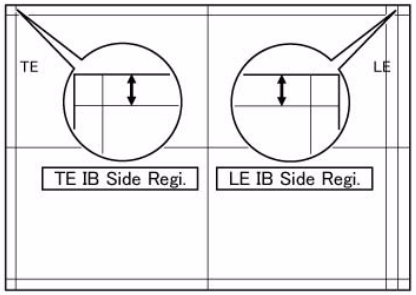


Figure 1 j0cm415106

4. When the target adjustment value is exceeded, the side skew adjustment amount is obtained by the following formula.

   [LE IB Side Regi Length] - [TE IB Side Regi Length] = Side Skew Amount

   [Side Skew Amount] / 0.1 = Front Skew Adjustment Amount (Unit movement amount)

   The skew adjustment amount is rounded off to an integer.
5. If the target adjustment value is out of specifications and does not exceed +/-1 mm, specify the adjustment item as FS Skew in DC129 Ajustment item(K), select Front, and adjust by increasing/decreasing the adjustment step. Repeat printing after adjustment, and if the result is within the target adjustment values, proceed to Step 8.

   NOTE: *When the amount of deviation exceeds +/-1 mm, do not use it because the adjustment range with DC129 is not enough.*
6. When the amount of deviation exceeds +/-1 mm and when adjusting with NVM, enter DC131 NVM Read/Write, and adjust the value of Unit Skew Adjustment Value DC131 NVM [742-294].

   In the case of minus, subtract the adjustment amount calculated from the current value, and in the case of positive, add it instead.

   NOTE: *When the setting range is exceeded, adjust the maximum and minimum values to the limit. (Setting Range: -30 to +30)*
7. Go back to Step 1, check the setting item, print, and check the 3rd printed sheet. If it is out of specifications, repeat Steps 1 to 7.
8. Adjust the back side skew. Check Side 2 of the 3rd printed sheet.

   Measure the distance between LE IB Side Regi and TE IB Side Regi. (Figure 2)

   Check whether the difference in measured values of LE IB Side Regi and TE IB Side Regi is within +/-0.4 mm of the target adjustment value. If it is within the target values, adjustment is complete.

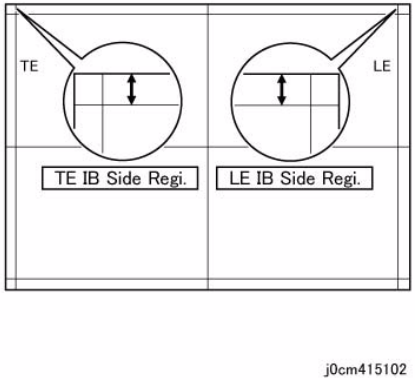


Figure 2 j0cm415102

9. When the target adjustment value is exceeded, the back side skew adjustment amount is obtained by the following formula.

   [LE IB Side Regi Length] - [TE IB Side Regi Length] = Side Skew Amount

   When adjusting only the back side: [Side Skew Amount] / 0.1 = Back Side Skew Adjustment Amount

   When adjusting the front side simultaneously: ([Side Skew Amount] / 0.1) - Front Skew Adjustment Amount* = Back Side Skew Adjustment Amount

   The skew adjustment amount is rounded off to an integer.

   NOTE: *The Front Skew Adjustment Amount* uses the value of DC131 NVM [742-294].*

10. Specify the adjustment item as FS Skew in DC129 Ajustment item(K), select Back, and adjust by increasing/decreasing the adjustment step. Repeat printing after adjustment, and if the result is within the target adjustment values, the procedure is complete.

    NOTE: *When the amount of deviation exceeds +/-1 mm, do not use it because the adjustment range with DC129 is not enough.*

11. When adjusting with NVM, enter DC131 NVM Read/Write, and adjust the value of DC131 NVM [508-086]. In the case of plus, subtract the adjustment amount calculated from the current value, and in the case of minus, add it instead.

    Side 2 Fast Scan Skew Offset = DC131 NVM [508-086] +/- Back Side Skew Adjustment Amount

    NVM adjustment maximum/minimum value

    Check that the calculated offset value is within the following range, and set the Side 2 Fast Scan Skew Offset in DC131 NVM [508-086]. If it is out of range, set it to the maximum or minimum value.

Table 1

NVM Name	Minimum Value	Maximum Value
Side 2 Fast Scan Skew Offset	-10	10

12. After adjustment, print again, and check that the specified value has been obtained. If not, perform Steps 8 to 12 again.

ADJ 15.6.4 Perpendicularity Adjustment

Purpose

To correct the image skew at the leading edge.

NOTE: *Before this task, perform ADJ 15.6.3 Side Skew Adjustment.*

NOTE: *When ROS, EPG/Deve, IBT Belt, Drive Shaft is replaced, perform this adjustment.*

Check

1. Enter DC129 System Registration Setup, set the following items, and print.
    - Tray: A3 size paper storage tray
    - Printed Side: Duplex
    - Test Pattern: Grid (90 degrees) - Front and Back
    - No. of Prints: 3 sheets
2. Check the 3rd printed sheet.

    NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
    - *Example 1. <1-01>: Side 1 - Page 1*
    - *Example 2. <2-02>: Side 2 - Page 2*
3. Measure the following items, and check the specified value. (Figure 1)
    - Measure 3a and 3c in the figure (Side 1).
    - Measure 3b and 3d in the figure (Side 2).
    - Calculate A and B according to the following formula.

      3a-3b=A

      3c-3d=B
    - Using calculated A and B, calculate the perpendicularity deviation amount by the following formula.

      1.444x(A-B)/2 = Perpendicularity Deviation Amount
    - Specified Value: Perpendicularity < +/-0.3 mm

      Check if the above value is within +/-0.3 mm.
    - If it is not within the specified values, proceed to the adjustment procedure.

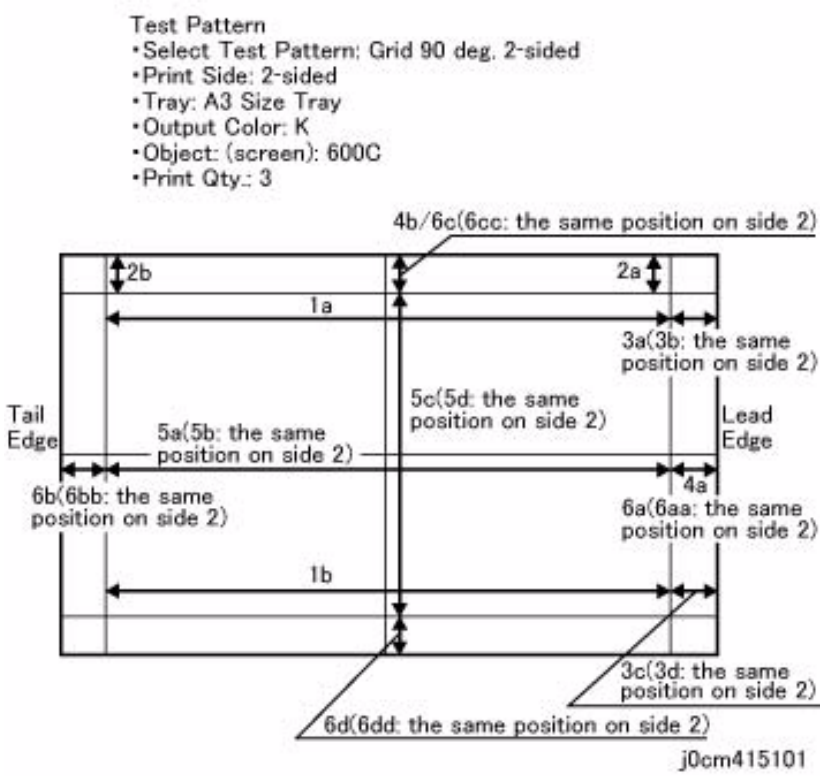

Test Pattern
•Select Test Pattern: Grid 90 deg. 2-sided
•Print Side: 2-sided
•Tray: A3 Size Tray
•Output Color: K
•Object: (screen): 600C
•Print Qty.: 3
4b/6c(6cc: the same position on side 2)
2b
2a
1a
3a(3b: the same position on side 2)
5c(5d: the same position on side 2)
Tail Edge
Lead Edge
5a(5b: the same position on side 2)
4a
6b(6bb: the same position on side 2)
6a(6aa: the same position on side 2)
1b
3c(3d: the same position on side 2)
6d(6dd: the same position on side 2)
j0cm415101

Figure 1 j0cm415101

Adjustment

1. The perpendicularity correction amount is calculated using the perpendicularity deviation amount measured in the check procedure.

   Perpendicularity correction amount = [Perpendicularity deviation amount] / 0.05

   The perpendicularity correction amount is rounded off to an integer.
2. Specify the adjustment item as Perpendicularity (parallelogram deviation) in DC129, select Front and Back, and adjust by increasing/decreasing the adjustment step. After performing the test print, recheck, and if the result is within the target adjustment values, the procedure is complete.
3. To adjust from NVM, perform the following steps.

   Enter DC131 NVM Read/Write, and add the perpendicularity correction amount to the following NVM.

   Side 1 Slow Scan Skew Offset = DC131 NVM [753-243] + Perpendicularity Correction Amount

   NVM adjustment maximum/minimum value

   Check that the calculated offset value is within the following range, and set the Side 1 Slow Scan Skew Offset in DC131 NVM [753-243]. If it is out of range, set it to the maximum or minimum value.

Table 1

NVM Name	Minimum Value	Maximum Value
Side 1 Slow Scan Skew Offset	-20	20

4. Likewise for Back, add the current value of DC131 NVM [753-244] and the perpendicularity correction amount, and set the Side 2 Slow Scan Skew Offset.

   Side 2 Slow Scan Skew Offset = DC131 NVM [753-244] + Perpendicularity Correction Amount

   NVM adjustment maximum/minimum value

   Check that the calculated offset value is within the following range, and set the Side 2 Slow Scan Skew Offset in DC131 NVM [753-244]. If it is out of range, set it to the maximum or minimum value.

Table 2

NVM Name	Minimum Value	Maximum Value
Side 2 Slow Scan Skew Offset	-40	40

5. After adjustment, print again, and check that the specified value has been obtained. If not, perform Steps 1 to 5 again.

ADJ 15.6.5 Front and Back Magnification (Vertical and Horizontal Magnification)

Purpose

Optimize the vertical/horizontal magnification.

NOTE: *Since the stretch amount varies depending on the paper type, it may be adjusted with paper frequently used by customers.*

NOTE: *When the following parts are replaced, perform this adjustment procedure.*

- *2nd BTB Unit*
- *Backup Roll*
- *IBT Belt*
- *Fusing*

Adjustment

1. Enter DC129 System Registration Setup, set the following items, and print.
   - Tray: A3 size paper storage tray
   - Printed Side: Duplex
   - Test Pattern: Grid (90 degrees) - Front and Back
   - No. of Prints: 3 sheets
2. Check the 3rd printed sheet.

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*
3. Measure between the LE (Leading Edge) registration and the TE (Trailing Edge) registration on the Front and Back, and obtain the Vertical Reduce/Enlarge Shift Amount by the following formula. (Figure 1)
   - Side 1 (Front): {([Measured Length mm]/[400])-1} x 100 = [Front Vertical Reduce/Enlarge Shift Amount]
   - Side 2 (Back): {([Measured Length mm]/[400])-1} x 100 = [Back Vertical Reduce/Enlarge Shift Amount]

NOTE: *The figure shows the measurement position of the Front (Side 1).*

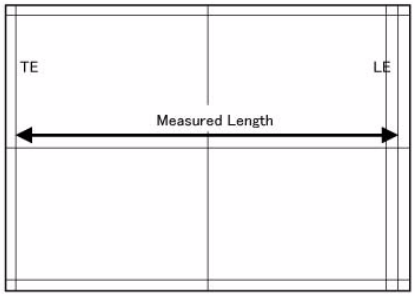


Figure 1 j0cm415108

Calculate the difference between the Reduce/Enlarge Ratio of Side 1 and Side 2 by using the following formula and check whether the difference is within +/-0.3%. If it is within the target values, go to Step 6.

If it is other than the target value, calculate the correction value.

[Side 2 Vertical Reduce/Enlarge Shift Amount] - [Side 1 Vertical Reduce/Enlarge Shift Amount] = [Difference in Reduce/Enlarge Ratio]

Adjust the Front magnification according to the Back magnification.

[Difference in Reduce/Enlarge Ratio] / 0.025 = [Dual Slow Scan Adjustment Amount]

NOTE: *The calculated result is rounded off to an integer.*

4. Specify the adjustment item as Axial magnification (SS Magnification Ratio) in DC129 Ajustment item(K), select Front, and adjust by increasing/decreasing the adjustment step. After performing the test print, recheck, enter the target adjustment value to finish the procedure, and proceed to Step 6.
5. When adjusting with NVM, enter DC131 NVM Read/Write, and add the correction value to the following NVM.

   Side 1 Slow Scan % Offset = DC131 NVM [753-241] + Dual Slow Scan Correction Amount

   NVM adjustment maximum/minimum value

   Check that the calculated offset value is within the following range, and set the Side 1 Slow Scan % Offset in DC131 NVM [753-241]. If it is out of range, set it to the maximum or minimum value.

Table 1

NVM Name	Minimum Value	Maximum Value
Side 1 Slow Scan % Offset	-20	20

NOTE: *The remainder of this adjustment amount is an adjustable amount for user adjustment.*

6. Measure between IB registration and OB registration, and obtain the Horizontal Reduce/Enlarge Shift Amount by the following formula. (Figure 2)
   - Side 1 (Front): {([Measured Length mm]/[277])-1} x 100 = [Front Horizontal Reduce/Enlarge Shift Amount]
   - Side 2 (Back): {([Measured Length mm]/[277])-1} x 100 = [Back Horizontal Reduce/Enlarge Shift Amount]

   NOTE: *The figure shows the measurement position of the Front (Side 1).*

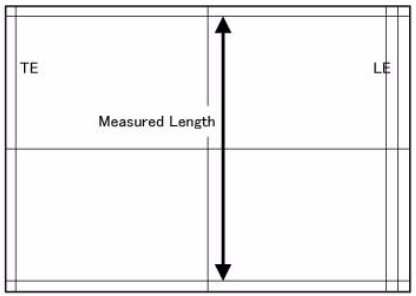


Figure 2 j0cm415109

   Calculate the difference between the Reduce/Enlarge Ratio of Side 1 and Side 2 by using the following formula and check whether the difference is within +/-0.3%. If it is within the target values, adjustment is complete. If it is other than the target value, calculate the correction value.

   [Side 2 Horizontal Reduce/Enlarge Shift Amount] - [Side 1 Horizontal Reduce/Enlarge Shift Amount] = [Difference in Reduce/Enlarge Ratio]

   Adjust the Front magnification according to the Back magnification.

   [Difference in Reduce/Enlarge Ratio] / 0.025 = [Dual Fast Scan Adjustment Amount]

   NOTE: *The calculated result is rounded off to an integer.*

7. Specify the adjustment item as Lateral magnification (FS Magnification Ratio) in DC129 Ajustment item(K), select Front, and adjust by increasing/decreasing the adjustment step. After performing the test print, recheck, and if the result is within the target adjustment values, the procedure is complete.
8. When adjusting with NVM, enter DC131 NVM Read/Write, and add the correction value to the following NVM.

   Side 1 Fast Scan % Offset = DC131 NVM [508-077] + Dual Fast Scan Correction Amount

   NVM adjustment maximum/minimum value

   Check that the calculated offset value is within the following range, and set the Side 1 Fast Scan % Offset in DC131 NVM [508-077]. If it is out of range, set it to the maximum or minimum value.

Table 2

NVM Name	Minimum Value	Maximum Value
Side 1 Fast Scan % Offset	-8	8

9. Go back to Step 1, check the setting item, print, and check the 3rd printed sheet.
10. Check whether the difference in Reduce/Enlarge ratios for Side 1 and 2 is within +/-0.3% for both vertical and horizontal magnification. Repeat Steps 1 to 10 until the check result is within the target values.

    NOTE:

    The differences in Reduce/Enlarge Ratio of both Side 1 and Side 2 are caused by the elongation or shrinkage of paper at the fusing stage. As the amount of change at Side 1 is larger compared to Side 2, it creates a difference in the Reduce/Enlarge Ratio. Although the adjustment method is a relative correction method only corrects the Reduce/Enlarge Ratio of Side 1, it is also possible to perform an absolute correction method in which both sides are independently adjusted.

    At that time, divide the Difference in Reduce/Enlarge Ratios for each of Side 1 and Side 2 (that were obtained at Step 3 and 6) by 0.025 (which is the adjustment unit) and calculate the respective adjustment amounts.

    The NVM to be adjusted are as follows. Perform the adjustment to get the Difference in Reduce/Enlarge Ratios for each side to be as close to '0' as possible. Since the corrected value is limited by the NVM of the maximum and minimum values, perform correction with the value within the range, and enter it in the target NVM.

    - *Side 1 Fast Scan % Offset NVM: 508-077: (Minimum -8, Maximum 8)*
    - *Side 2 Fast Scan % Offset NVM: 508-078: (Minimum -8, Maximum 8)*
    - *Side 1 Slow Scan % Offset NVM: 753-241: (Minimum -20, Maximum 20)*
    - *Side 2 Slow Scan % Offset NVM: 753-242: (Minimum -20, Maximum 20)*

ADJ 15.6.6 Front (Side 1) Side/Lead Registration Adjustment

Purpose

Correct the lead/side registration of the paper.

NOTE: *Before this task, perform ADJ 15.6.5 Front and Back Magnification (Vertical and Horizontal Magnification).*

NOTE: *Also check the side registration when opening and closing the Transfer Interlock. Also, if the IBT Belt or Transfer Module is replaced, set NVM: 749-405 (Belt Reference Position for Side Registration Correction) to 0, and then perform the following adjustment.*

Adjustment

1. Enter DC129 System Registration Setup, set the following items, and print.
   - Tray: A3 size paper storage tray
   - Printed Side: Duplex
   - Test Pattern: Grid (90 degrees) - Front and Back
   - No. of Prints: 3 sheets
2. Check the 3rd printed sheet.

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*
3. Check that LE Registration and InBoard Side Registration is within 10+/-0.5 mm of the target adjustment value. (Figure 1)

   If it is within the target values, the procedure is complete.

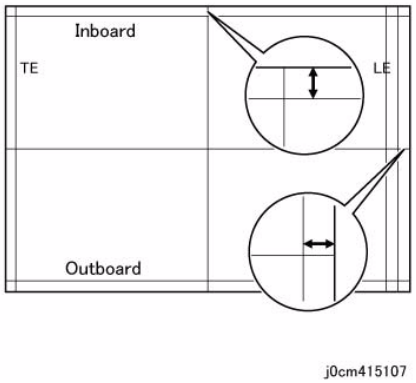


Figure 1 j0cm415107

4. If it is larger than the target value, obtain the correction amount by the following formula.

   (10 - [IB Side Regi Length]) x 10 = [Side Correction Amount]

   ([LE Side Regi Length] - 10) x 10 = [Lead Correction Amount]
5. Specify the adjustment item as Lead Regi, Side Regi in DC129, select Front, and adjust by increasing/decreasing the adjustment step. Perform the test print, and if the result is within the target adjustment values, the procedure is complete.
6. When adjusting with NVM, enter DC131 NVM Read/Write, and add the correction amount to the following NVM.
   - Side Correction Amount DC131 NVM: 742-298 (Setting Range: +/-30)
   - Lead Correction Amount DC131 NVM: 742-306 (Setting Range: +/-30)

   NOTE: *Adjustment by Paper Transport Path Correction Value DC131 NVM: 742-321 (Setting Range: +/-20)*

   When the correction amount of NVM: 742-306 exceeds the setting range, change NVM: 742-321 first.
   - *If the range of the NVM value exceeds the plus direction, change the value to (+20) in the plus direction.*
   - *If it exceeds the minus direction, change the value to (-20) in the minus direction.*
   - *Adjust NVM: 742-306 again under this condition.*

   NOTE: *NVM: 742-306 lead correction amount is the standard correction amount for 81 to 105 gsm, but it is necessary to set the standard value also for the NVM of another paper type (gsm). (The same correction value is set for all paper types until individual change is made.) When the value of NVM: 742-306 has changed, change also the other NVMs in the table below together.*

Table 1

gsm	55-80	81-105	106-135	136-150	151-186	187-220	221-256	257-
Side 1 NVM	742-305	742-306	742-307	742-308	742-309	742-310	742-311	742-312

7. Perform Steps 1 to 3, and check that the lead/side registration is within the target values. If it is other than the target value, perform from Step 4 onwards.

ADJ 15.6.7 Back (Side 2) Side/Lead Adjustment

Purpose

Match the Back (Side 2) side/lead registration against the Front (Side 1). Correct LE/TE registration in the Back (Side 2) direction and IB/OB registration in the Back (Side 2) direction.

NOTE: *Before this task, perform ADJ 15.6.6 Front (Side 1) Side/Lead Registration Adjustment.*

Adjustment

1. Enter DC129 System Registration Setup, set the following items, and print.
   - Tray: A3 size paper storage tray
   - Printed Side: Duplex
   - Test Pattern: Grid (90 degrees) - Front and Back
   - No. of Prints: 3 sheets
2. Check the 3rd printed sheet.

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*
3. Measure the following items. (Figure 1)
   - Front (Side 1) LE (Lead Edge) Registration
   - Front (Side 1) TE (Trail Edge) Registration
   - Front (Side 1) IB (InBoard) Registration
   - Front (Side 1) OB (OutBoard) Registration
   - Back (Side 2) LE (Lead Edge) Registration
   - Back (Side 2) TE (Trail Edge) Registration
   - Back (Side 2) IB (InBoard) Registration
   - Back (Side 2) OB (OutBoard) Registration

NOTE: *The figure indicates only the Front (Side 1) LE and InBoard Registration.*

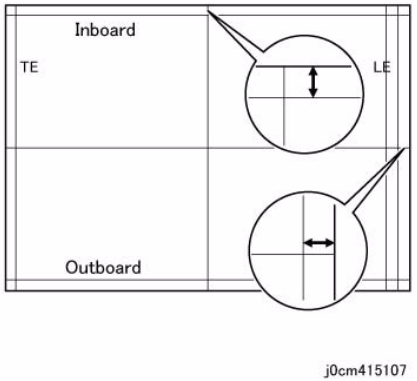


Figure 1 j0cm415107

4. Calculate the Lead Edge/Side Edge Registration Gap of the Front (Side 1) direction, and the InBoard/OutBoard Registration Gap by the following formulas.

   [Front (Side 1) LE Regi] - [Back (Side 2) TE Regi] = [A]

   [Front (Side 1) TE Regi] - [Back (Side 2) LE Regi] = [B]

   [Front (Side 1) IB Regi] - [Back (Side 2) IB Regi] = [C]

   [Front (Side 1) OB Regi] - [Back (Side 2) OB Regi] = [D]

   ([B] - [A]) / 2 = [LE/TE Registration Gap for both sides]

   ([D] - [C]) / 2 = [IB/OB Registration Gap for both sides]
5. If the LE/TE Registration Gap or IB/OB Registration Gap for both sides are larger than +/-0.5 mm of the target adjustment value, proceed to the following step.
6. Calculate the correction amount by the following formula.

   -1 x [LE/TE Registration Gap for both sides] x 10 = [LE/TE Lead Registration Adjustment Amount]

   -1 x [IB/OB Registration Gap for both sides] x 10 = [IB/OB Side Registration Adjustment Amount]

   The correction amount is rounded off to an integer.
7. Specify the adjustment item as Lead Regi, Side Regi in DC129, select Back, and adjust by increasing/decreasing the adjustment step. Perform the test print, and if the result is within the target adjustment values, the procedure is complete.
8. When adjusting with NVM, enter DC131 NVM Read/Write, and add the LE/TE Lead, IB/OB Side correction amount to the following NVM.

   (1) LE/TE Lead Correction Amount DC131 NVM: 742-306 (Setting Range: +/-30)

NOTE:

Dc131 NVM: 742-314 lead correction amount is the standard correction amount for 81 to 105 gsm, but it is necessary to set the standard value also for the NVM of another paper type (gsm). (The same correction value is set for all paper types until individual change is made.) When the value of NVM: 742-314 has changed, change also the other NVMs in the table below together.

Table 1

gsm	55-80	81-105	106-135	136-150	151-186	187-220	221-256	257-
Side 2 NVM	742-313	742-314	742-315	742-316	742-317	742-318	742-319	742-320

(2) IB/OB Side Correction Amount DC131 NVM: 742-325 (Setting Range: +/-10)

9. Perform Steps 1 to 5, and check that the LE/TE Registration Gap or IB/OB Registration Gap for both sides are within the target adjustment values. If it is other than the target value, perform again from Step 6 onwards.

Refer to:

<Concept of Front and Back Registration Adjustment>

Front/Back Lead Regi/Side Regi Registration Adjustment refers to adjustment which is made so that the amount of deviation at both edges is evenly distributed. (Figure 2)

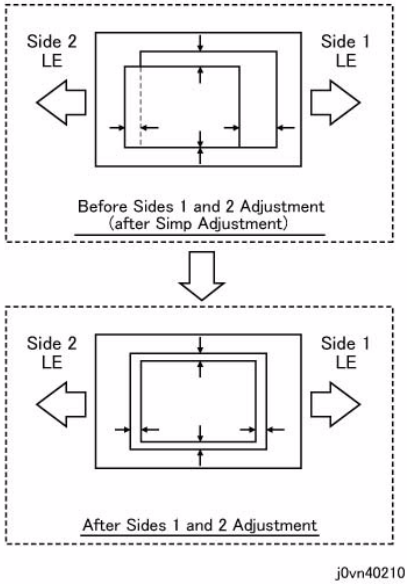


Figure 2 j0vn40210

ADJ 15.6.8 Aligner Guide/Tray Guide Position Adjustment

Purpose

Adjust the variations of each individual machine due to parts tolerance, assembly error, etc.

NOTE:

- *IOT tray is adjusted at the time of shipment, and as HCF A3 is optional, this adjustment should be performed during installation [For detailed procedures and explanation, refer to Chap 9 of the BP-PT17/PT18 SERVICE MANUAL*
- *Perform during replacement of Aligner Unit or Tray.*
- *Before this adjustment, make sure to perform* ADJ 15.15.1 *CIS Setup Cycle.*
- *After this adjustment, perform* ADJ 15.6.1 *Alignment Adjustment.*
- *If power is turned Off/On or transition from Diag mode is performed during adjustment, repeat the adjustment from Step 1.*
- *In case of Tray replacement only, <Tray Side Position Adjustment> should be performed only.*

<Aligner Guide Position Adjustment>

Procedure

1. Enter DC131 NVM Read / Write, change and confirm the following NVM.
   (1) Set the NVM 743-899 (Aligner Side Guide Position Auto Control Active): [0: Do not control (default value), 1: Control] to [1].
   (2) Change the NVM 742-294 (Unit Skew Adjustment Value) to [0].
   (3) Change the NVM 743-065 (Aligner Guide Adjustment Value) to [0].
   (4) Check that NVM 743-931 (Tray Side Guide Position Auto Control Active) is set to [0].
2. Enter DC612 Color Test Pattern Print and obtain the following test pattern.
   - Contact Engine: Any setting
   - Select Test Pattern: Any Halftone
   - Select Color: Any setting
   - Print Side: 1 Sided
   - Tray: A3 size paper storage tray
   - Procon TRC:ON
   - Object (screen): 600C
   - No. of Prints: 2 sheets
3. Check that NVM 743-907 (Aligner Guide Shift Adjustment Result Judgment) is set to [1].
4. ADJ 15.6.1Refer to the flow of alignment adjustment procedure, and adjust side skew, side registration, etc.

<Tray Side Position Adjustment>

Procedure

1. Enter DC131 NVM Read / Write, change and confirm the following NVM.
   (1) To turn ON the auto control mode, set the NVM 743-931 [Tray Side Guide Position Auto Control Active - 0: Do not control (default value), 1: Control] to [1].
   (2) Check that NVM 743-899 (Aligner Side Guide Position Auto Control Active) is set to [0].
2. [Shift Position Adjustment for Tray 1]

Enter DC612 Color Test Pattern Print and obtain the following test pattern. (The other settings can be anything)

- Select Test Pattern: Halftone 0%
- Print Side: 1 Sided
- Tray: Tray 1 (A3)
- No. of Prints: 2 sheets

NOTE: *Side 1/Side 2 and the page number can be identified from the symbol information at the top left on the Lead side.*

- *Sample 1. <1-01>: Side 1 (Front) - 1st page*
- *Sample 2. <2-02>: Side 2 (Rear) - 2nd page*

3. [Shift Position Adjustment for Tray 1]
   Enter DC131 NVM Read / Write and check the NVM in the following table.

Table 1

Chain-Link No.	Contents	Settable Range	Remarks
743-908	Tray 1 Shift Adjustment Result Judgment	0 to 2	(0: Not performed), 1: OK, 2: NG
742-789	Tray 1 Shift Adjustment Timer	0 to 766	Default value: 345

4. 743-908 is [1]: If OK, proceed to Step 6.
5. 743-908 is [2]: If NG, re-adjust from Step 2 above. (If [1] does not result even if adjustment is performed 2 times, contact the Support Department and get instructions.)
6. [Shift Position Adjustment for Tray 2]
   Enter DC612 Color Test Pattern Print and obtain the following test pattern. (The other settings can be anything)
   - Select Test Pattern: Halftone 0%
   - Print Side: 1 Sided
   - Tray: Tray 2 (A3)
   - No. of Prints: 2 sheets

   NOTE: *Side 1/Side 2 and the page number can be identified from the symbol information at the top left on the Lead side.*

   - *Sample 1. <1-01>: Side 1 (Front) - 1st page*
   - *Sample 2. <2-02>: Side 2 (Rear) - 2nd page*

7. [Shift Position Adjustment for Tray 2]
   Enter DC131 NVM Read / Write and check the NVM in the following table.

Table 2

Chain-Link No.	Contents	Settable Range	Remarks
743-909	Tray 2 Shift Adjustment Result Judgment	0 to 2	(0: Not performed), 1: OK, 2: NG

Table 2

Chain-Link No.	Contents	Settable Range	Remarks
742-790	Tray 2 Shift Adjustment Timer	0 to 766	Default value: 345

8. 743-909 is [1]: If OK, proceed to Step 10.
   To turn OFF the auto control mode, set the NVM 743-931 to '0'.

   NOTE: *Upon exiting the Diag, the NVM 743-931 automatically returns to '0'.*

9. 743-909 is [2]: If NG, re-adjust from Step 6 above. (If [1] does not result even if adjustment is performed 2 times, contact the Support Department and get instructions.)
10. ADJ 15.6.1Refer to the flow of alignment adjustment procedure, and adjust side skew, side registration, etc.

ADJ 15.15.1 DC750 CIS Setup Cycle

Purpose

Performs the optimization of the parameter value for the CIS Edge Detection.

Performs the optimization for the LED Power and saves the parameter values in the NVM during M/C shipment and CIS replacement.

Adjustment

1. From the PC-Diag screen, select [Sub-System Check], and enter [DC750 CIS Setup Cycle].
2. Open the Front Door.
   Pull out the Drawer Assembly.
   Load the paper in the Regi section. (Figure 1)

   NOTE: *When loading the paper, insert blank paper at the bottom of the Edge Read Sensor in the Reg Unit, from the direction of the arrow until it touches the Roll so that it will cover the whole surface of the CIS Sensor Read Surface (between Mark 1 and Mark 2), and put back the Unit. The recommended paper size is A4 LEF.*

   If there is paper at the Rear of Mark 1 and the Front of Mark 2, the CIS Sensor Read Surface is covered.

   NOTE: *Remove the blank paper when the setup is complete.*

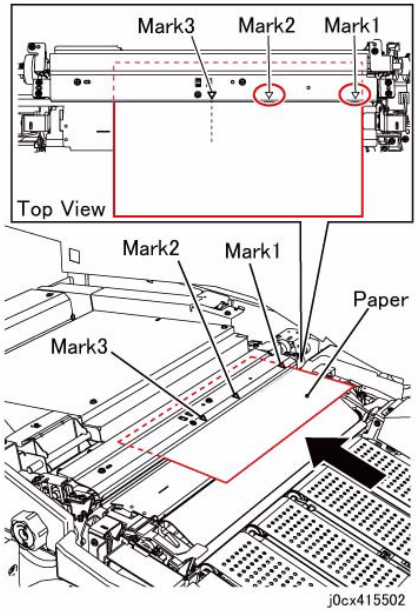


Figure 1 j0cx415502

3. Press [Start] to start the adjustment.
4. Data is displayed on DC750 CIS Setup Cycle screen. (Table 1)
   <OK>
   The measured values of the various items are within the normal range.
   <NG>
   Perform settings or repair according to the Error Code of the failure and perform the [DC750 CIS Setup Cycle] adjustment again.

Table 1

Item (Parameter Name)	Range	Display Unit
Final Result of Power Adjustment	0 = OK, 1 = NG	-
Final Shading Coefficient Computation	0 = OK, 1 = NG	-
Power Adjustment Attempts	0 to 65535	1 time
LED Powered Current Value	0 to 255	0.4 mA
Standard Black Average Value	0 to 255	-
Standard White Average Value	0 to 255	-
Maximum Dynamic Range	0 to 255	0.01V
Fault Code when Result is [NG]	-	-

ADJ 15.15.2 DC751 CIS Check Cycle

Purpose

Performs checking for the edge detection function. This cycle checks if the detection system is operating normally.

Adjustment

1. From the PC-Diag screen, select [Sub-System Check], and enter [DC751 CIS Check Cycle].
2. Select standard sizes for paper size. (Recommended paper: A3/J Paper)

   NOTE: *If this paper size is not available, select the size with the closest width.*
3. Fold a sheet of blank paper of the size that was selected in Step 2 in half to make a crease at the middle of the paper.
4. Open the Front Door.
5. Pull out the Drawer Assembly.
6. Load the paper in the Regi section. (Figure 1)

   NOTE: *Align the crease at the center of the paper with the center of the Reg Unit (Mark 3 position) and set the paper so that its edge reaches the lower part of the edge read sensor.*

   NOTE: *Insert it from the upstream of paper feed, turn the roller with the Knob to feed the paper.*

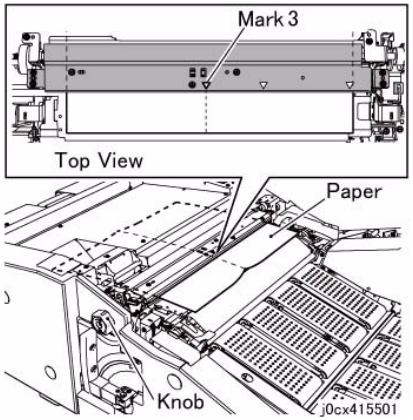


Figure 1 j0cx415501

7. Push in the Drawer and close the Front Door.
8. Press [Start] to start the adjustment.
9. Data is displayed on DC751 CIS Check Cycle screen. (Table 1)

   <OK>

   The measured values of the various items are within the normal range.

   <NG>

   Perform settings or repair according to the Error Code of the failure and perform the [DC751 CIS Check Cycle] adjustment again.

Table 1

Item (Parameter Name)	Range	Display Unit
Final Result of Check Cycle	0 = OK, 1 = NG	-
Paper Edge Position (Average Value)	0 to 65535	0.01 mm
Paper Edge Position	0 to 65535	0.01 mm
Detected Edge Value	0 to 65535	-
Detected Edge Value (After Adjustment)	0 to 65535	-
Detected Edge Threshold Value	0 to 65535	-
Fault Code when Result is [NG]	-	-

ADJ 18.1.1 Attention when replacing component storing important information

Purpose

After installation, any data that the customer has registered is very important. To lose or leak the data would be an unforgivable offense. To gain the trust of customers, it is essential for CE to be knowledgeable about the name of components that store these data. The CE must also have full understanding on how to handle these components when replacing them.

Procedure

This product stores important data in the following components. Perform the operation according to the following procedures.

NOTE:

Collect/discard components according to the separately pre-determined procedures.

Table 1

	Component Name	Stored Information	Pre-replacement operation	Post-replacement operation
1	PC-UI_HDD	1. Customer Settings Data • Stock File (Stock settings set by the user) • Alignment File (Alignment settings set by the user) • External Finisher Profile File (External Finisher profile settings set by the user) • Tray Settings File (Tray settings set by the user) • Temporary Stock Settings File (Temporary stock settings set by the user) • Paper Color Settings File (Custom color names set by the user) • Finisher Fold Adjustment Settings File (Finisher folding adjustment values set by the user) • Stock Sort Settings File (Sort order of stock set by the user) • UI Log (Log for the development department to conduct problem investigation) • Sys Log (Log for the development department to conduct problem investigation)	• Procedures before servicing Refer to PC-UI Recovery Procedure of Chapter 4 ADJ 18.1.3 since detailed procedures are described, and back up the customer settings data file.	• Handling of replaced HDD Overwrite with files that were backed up in advance to the same hierarchy in HDD after replacement.
2	IOT Main Unit	There is no target information.	None specifically. However, perform the normal NVM transfer when PWB is replaced.	None specifically. Perform PWB NVM transfer.

ADJ 18.1.2 Software Download

Purpose

After an initial installation or upgrading of the Main Unit/Option software, perform this procedure to update the software.

NOTE: *Open the M/C Interlock.*

NOTE: *When upgrading the firmware individually for target device at parts replacement, perform it by using the Auto Download Tool (Manual Download).*

Target Devices

Refer to the [Relationship between the device and download file] in the [Manual download using AutoDownloadTool] item.

Required Equipment/Software

NOTE: *To change the SetVersion, reinstall the Auto Download Tool.*

- Auto Download Tool (Saved as default in PC-UI. Its shortcut is on the Desktop.)
- File to be downloaded (SetVersion data to be downloaded)

Tools and Target Software

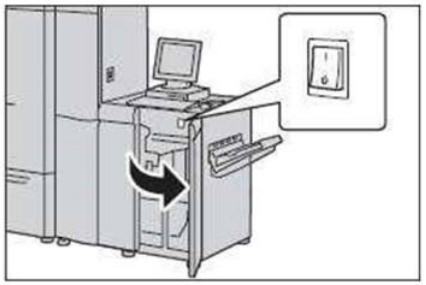
Table 1

Tool Name	Target Software	Remarks
Installation Manager	• PC-UI • PC-SYS • PC-Diag • IOT (IOT Firmware)	For batch update of the applications in PC UI and firmware of the IOT main unit, refer to "Batch download using InstallationManager". (V16.1)
AutoDownloadTool (V16.1) DownloadTool (V16.2)	• IOT Firmware	If you cannot successfully implement IOT firmware with InstallationManager, see "Batch download using AutoDownloadTool". (V16.1) Also, refer to "Downloading" for upgrading specific firmware by individual support, etc.

Batch download using Installation Manager

1. Open the printer cover, and turn on the emergency power switch (red switch). (Figure 1)

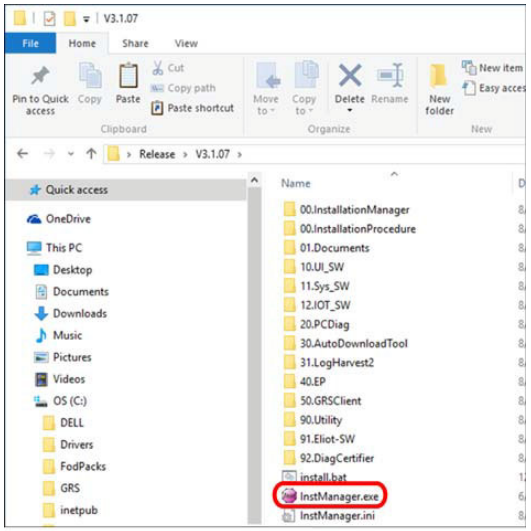
   NOTE: *Keep the printer power supply (switch) off.*



j0cx418531

Figure 1 j0cx418531

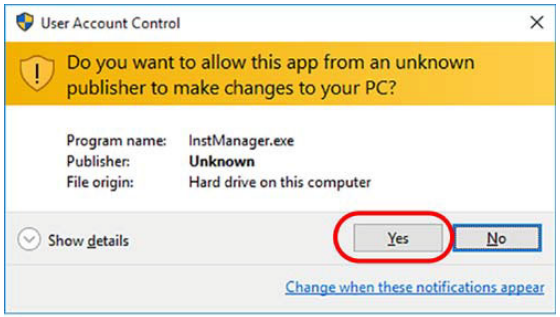
2. Open the package on PC-UI, and click [InstManager.exe] in the package. (Figure 2)



j0cx418532

Figure 2 j0cx418532

If a warning for user account control is displayed, click [Yes]. (Figure 3)


User Account Control
Do you want to allow this app from an unknown publisher to make changes to your PC?
Program name: InstManager.exe
Publisher: Unknown
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear

j0cx418533

Figure 3 j0cx418533

3. Specify the application to be installed, and click [Start].
   If there is nothing to specify, start with the default settings. (Figure 4)

   NOTE: *The version number in the illustration is for reference only. It differs from the actual version number.*

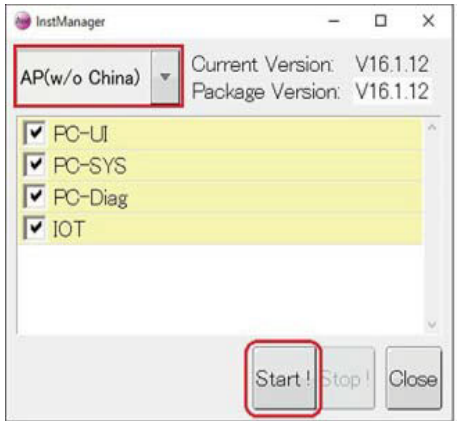


Figure 4 e0ko418501

When the installation is started, the progress is displayed. (Figure 5)

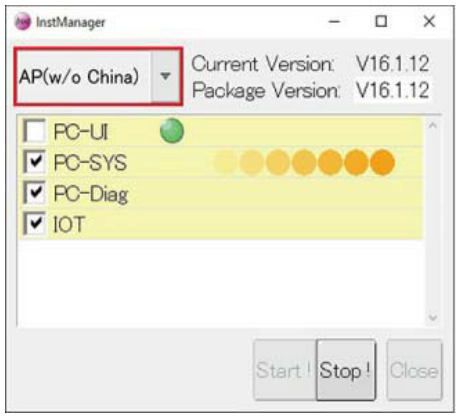


Figure 5 e0ko418502

4. When installation of all application software is completed, a completion screen will be displayed. Click [Yes]. (Figure 6)

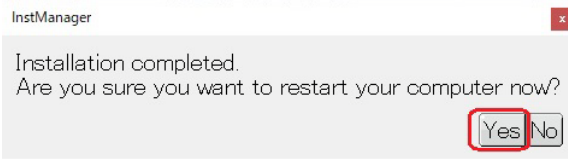


Figure 6 j0ko418503

For IOT Software V16.2

This section describes how to operate IOT Software V16.2.

Manual Download

1. Double-click the [DownloadTool] icon on the PC-UI desktop.

Figure 7 j0kol401016

The DownloadTool screen will be displayed.

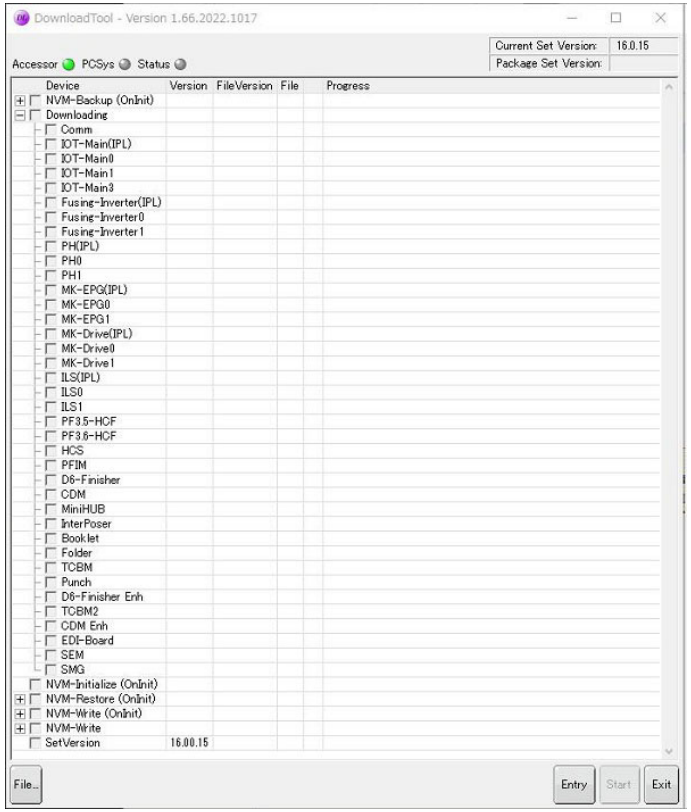


Figure 8 j0kol401017

- Items of IOT, Option (IN/OUT device), and NVM will be displayed.
- NVM-Backup: When initializing NVM, backs up important NVM on the IOT side to PC-UI in advance.
- NVM-Initialize (OnInit): Initializes NVM of 5 PWBs in IOT, excluding Comm and ILS.
- NVM-Restore (OnInit): When initializing NVM, writes back the backed up NVM to IOT.
- NVM-Write (OnInit): When NVM is initialized, writes the contents of NVM that need to be replaced.
- NVM-Write: Writes the contents of NVM that need to be replaced when the set version is updated.

2. Drag and drop the package folder to the list on the DownloadTool screen.

Figure 9 j0kol401018

You can also use the following method.

- Drag and drop the package folder onto the icon when starting the DownloadTool.

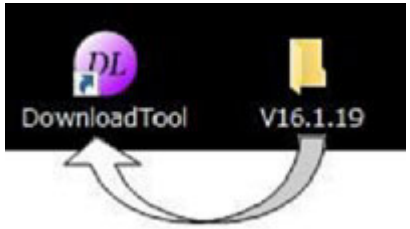


Figure 10 j0kol401019

- Click [File] and specify the package folder to load.

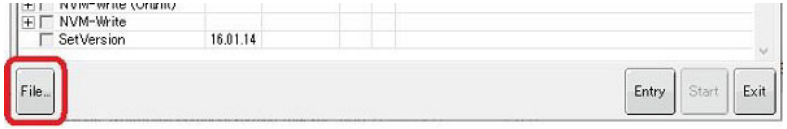


Figure 11 j0kol401020

3. When the dialog for specifying the file/folder is displayed, select the package folder, and click [Finish].

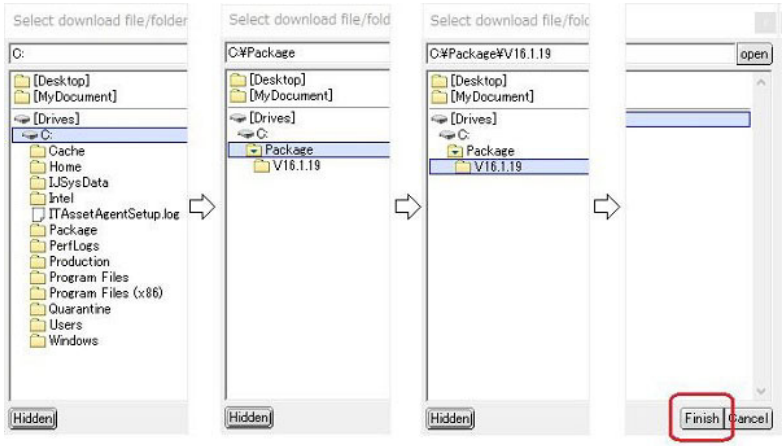


Figure 12 j0kol401021

The software version and file name of each PWB will be displayed.

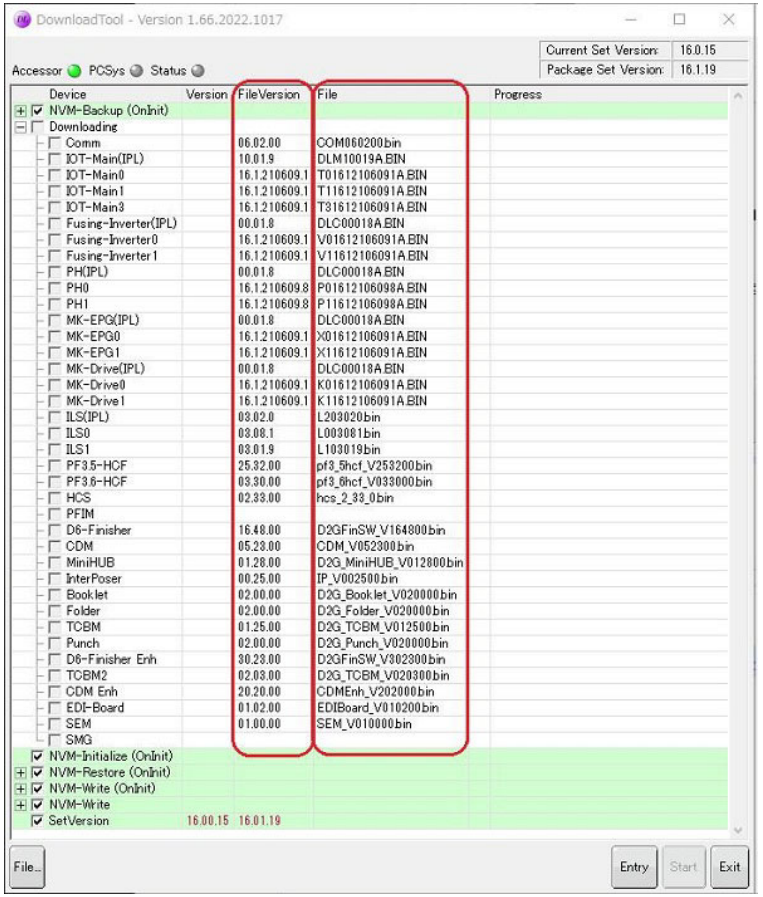


Figure 13 j0kol401022

- The set version of the loaded package is displayed in the [Package Set Version] field at the top right of the screen and the [FileVersion] field of the [SetVersion] item.
- If the set version of the loaded package is newer than the installed set version, the check mark of the [SetVersion] item and the [NVM-Write] item above it will automatically turn ON.
- If DownloadTool determines that NVM initialization is required, the check mark of [NVM-Backup (OnInit)], [NVM-Initialize (OnInit)], [NVM-Restore (OnInit)], [NVM-Write (OnInit)] will automatically turn ON.

4. Click [Entry] to read the software version installed on each PWB.

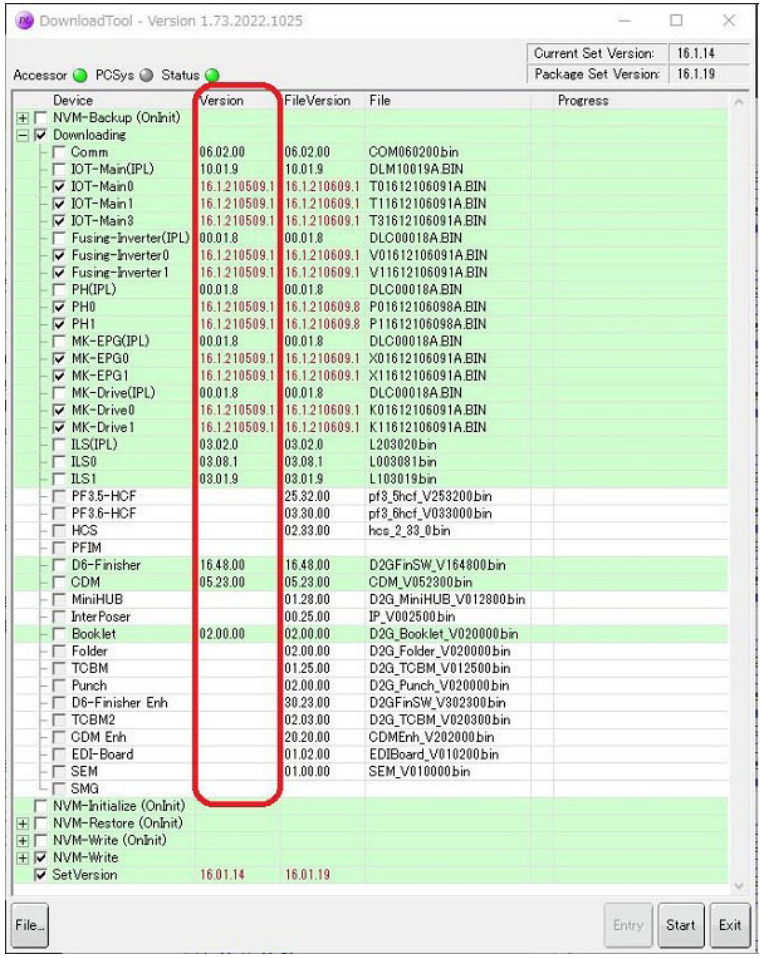


Figure 14 j0kol401023

If there is a difference between the version of the software installed on each PWB and the version loaded from the package folder, the check mark of the software item will automatically turn ON.

5. Click [Start] to download the software with the check mark ON.
   - When the download starts, the download progress screen will be displayed.

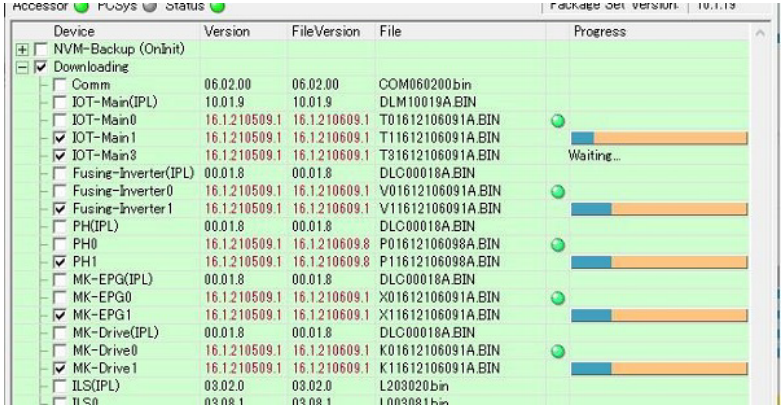


Figure 15 j0kol401024

If the download was successful, a Green mark will appear in the column to the right of the file name. If it fails, a Red mark will be displayed and the content of the failure will be displayed in the [Progress] column.

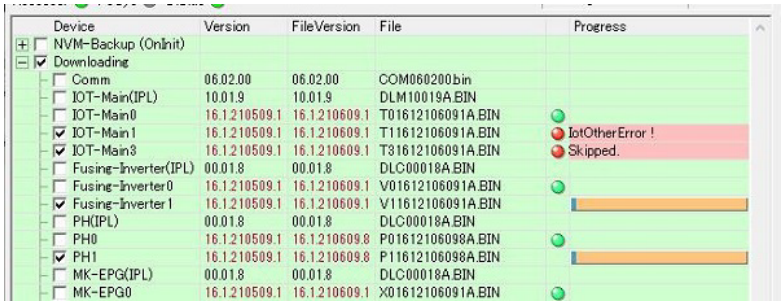


Figure 16 j0kol401025

6. When download is complete, click [Exit].

Rewrite the Set Version to Any Version

Specify any set version to write. If you only write the set version, you can start DownloadTool and run it even when the power of the IOT Main Unit is turned ON.

1. With the tool running, click [SetVer...] at the bottom left of the screen.

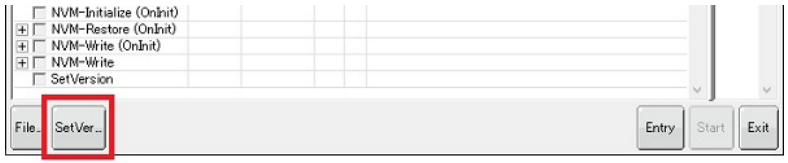


Figure 17 j0kol401026

2. Enter the set version, and click [Finish].

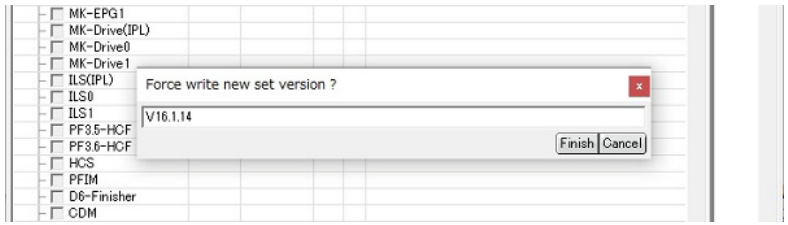


Figure 18 j0kol401027

The set version is written, and the [Current Set Version] field at the upper right and the [Version] field in the [SetVersion] line at the bottom of the list are changed to the new version.

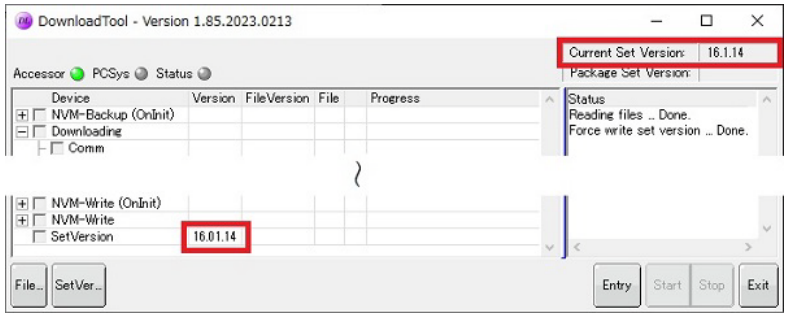


Figure 19 j0kol401028

NOTE: *Writing may not be possible if there is some kind of abnormality, such as when the software on the PC-UI or the Communication PWB cannot be connected.*

Auto Download

The Auto Download feature does not require operator intervention. When the download process and NVM replacement process are complete, it will end automatically.

If processing failed:

If the Auto Download feature fails, the following message will be displayed when stopping.

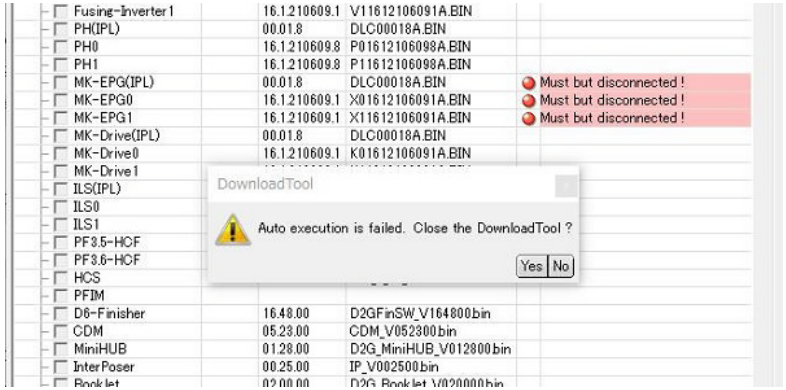


Figure 20 j0kol401029

ADJ 18.1.3 PC-UI Recovery Procedure

Clean

CAUTION

- *When recovery is performed, the PC will be initialized.*
- *The configuration file of the standard software (Sys-SW, UI-SW, LogHarvest 2, etc.) already installed on the PC-UI will be transferred with this procedure but other proprietary installed software and data will be erased.*
- *Reinstall software and data installed specially after recovery.*
- *The data related to the media library and profiles is stored in the following folder. It is recommended to have the user back up this data.*

  C:\Production\Data\UI\public\custom

Purpose

Execute this procedure when replacing HDD due to problems, or when CE decides that it is necessary to reinstall the software due to malfunction of PC-UI software.

Procedure

1. Check the set version.

   Note down the SW set version.

   *Activate LogHarvest 2, and display it by pressing the [Versions] button at the bottom right.
2. Change the setting of Folder Options. (Preparation for copying files to the hidden folder)
   (1) Select [File] on the Explorer menu bar and activate the Folder Options under [Change folder and search options].
   (2) In [Files and Folders] -> [Show files and folders], select [Show hidden files, folders, and drives], and select [OK].
3. Back up the standard software settings file.

   Copy the two folders [NvmData] and [TonerReplacement] located in <C:\Production\Data\Sys> to an external HDD or similar device.

   If you do not save [Data], any changes made to the Sys software settings after installation will revert to the default values.

   If you do not save [NVMData], any changes made to the Sys software settings or fault history after installation will revert to the default values.

   If you do not save [TonerReplacement], the settings for special color engines not installed on the printer will revert to the default values.
4. Prepare to transfer the Internet settings.

   Make a note of the Internet settings information.

   (IP Address, Subnet Mask, and Gateway Address, and DNS of the Internet LAN adapter)
5. Perform PC-UI recovery.
   (1) Load the recovery media, and restart the PC-UI.
   (2) Perform recovery according to the screen. (Recovery Estimated Time: 30 minutes)
   (3) When recovery is completed, remove the DVD, and restart the PC-UI.
6. Install standard software.

   Install the standard software included in the IOT-SW set version that you noted down in Step 1 according to the usual installation procedure.
7. Rewrite the standard software settings file.
   (1) Start the Task Manager, and end the following processes.
   - PCSys
   - SysStarter
   - PCSysACL (All)
   - MediaFileAccessor
   - SysBoardAccessor
   - FileAccessor
   - PCSysTimer
   - ProcessMoniter

   (2) Change the setting of Folder Options. (Preparation for copying files to the hidden folder)
   i. Select [File] on the Explorer menu bar and activate the Folder Options under [Change folder and search options].
   ii. In [Files and Folders] -> [Show files and folders] setting, select [Show hidden files, folders, and drives], and select [OK].
   (3) Overwrite the previously backed-up folders to the same location.

   Copy the backed-up [Data] folder to <C:\Production\Data\Download>.

   Copy the two backed-up folders [NvmData] and [TonerReplacement] to <C:\Production\Data\Sys>.
   (4) Reset UI-PC.
8. Change the setting of Folder Options.
   (1) Select [File] on the Explorer menu bar and activate the Folder Options under [Change folder and search options].
   (2) In [Files and Folders] -> [Show files and folders], select [Don't show hidden files, folders, and drives], and select [OK].
9. Disable automatic update of Java.

   In Java settings of the control panel, after selecting [Do not check] on the warning screen, which is displayed by deselecting [Automatically check for updates] in the [Update] tab, select [OK].
10. Transfer the Internet settings.

    Follow the content noted down (Step 4) to set up the Internet.

    (IP Address, Subnet Mask, and Gateway Address, and DNS of the Internet LAN adapter)
11. If requested for activation, perform according to the instructions. (ADJ 18.1.19)

ADJ 18.1.4 Upgrade method of PC-UI software

Overview

Refer to ADJ 18.1.2 Software Download.

ADJ 18.1.5 MAX SETUP

Purpose

To perform machine checks and setup in order to maintain the stability of the development potential and copy density to obtain good image quality always.

Procedure

MAX SETUP performs image quality adjustment using each DC code of PC-DIAG.

[In the case other than white toner]

1. Perform DC950 ATC Sensor Setup. (ADJ 18.1.6)
2. DC938 PCON CHECK (ADJ 18.1.7)
   (1) Confirm that each switch other than the following 2 types on the ProCon monitor screen is ON.
   - ADC MidSetup Creation Continuous Switch
   - Tone Control Amount MiniSetup Execution Switch during Job

   (2) Execute ProconSetup manually and check that there is no Fail result.
3. Execute DC972 Impression Density Adjustment Cycle (ADJ 20.1.6) and perform measurement and correction calculation with ILS.
   - If the result of impression unevenness is OK, go to Step 4.
   - If the result of impression unevenness is NG, perform the following:
     (1) Execute DC972 Impression Density Adjustment Cycle (ADJ 20.1.6) again, and if the result of impression unevenness is OK, go to Step 4. If the result is NG, go to the following procedure.
     (2) Output the current print on the Manual adjustment screen.
     (3) Set the manual adjustment value (IN/OUT Correction Value, Shape, Level).
     (4) Execution of simulation or (correction) confirmation print is executed.
     (5) If the result of impression unevenness is OK, set the correction value in M/C.
     (6) If the result of impression unevenness is NG, set (3) Manual adjustment value (IN/OUT Correction Value, Shape, Level) again.
4. DC895 Dmax Setup (ADJ 18.1.15)
   (1) Execute Check PG to output a gradation chart (LUT OFF), and if Dmax density is OK, proceed to the next procedure.
   (2) When the Dmax density is NG, select the check box of the engine with a small Dmax, execute Dmax Setup, and perform (1) again.
5. When replacing ADC, perform DC800 ADC Sensor Setup. (ADJ 18.1.13)

   NOTE: *When replacing ADC, it is recommended to perform DC800 when the following standard paper is available. In the absence of standard paper, do not perform DC800.*
   - *Standard paper : J paper (82gsm)*
   - *Standard paper for white: black standard paper (use Kishu color bond black extra heavyweight paper)*
6. Perform the following in DC900 TRC Manual Adjustment. (ADJ 18.1.8)
   (1) Output tone & color confirmation chart with ADC LUT Correction set to ON. (Density test)
   (2) Is gradation OK? If OK, go to 7. If NG, perform (3).

(3) Adjust Procon LUT manually, and go to (1).

7. Perform the following as required.
   - DC938 PCON CHECK is used as required for PCON operation check.
   - DC934 ADC AGC SETUP is used as required for ADC sensor checking.
   - DC922 TONE UP/DOWN is used as required for IOT density adjustment.
   - DC895 Dmax Setup is used as required when Dmax of IOT is low.
   - DC894 ADC TRC Target Set is used as required for cases, in which reproduction density of the highlight or Dmax area in the default ADC gradation control target value is NG due to the fixed variation of ADC sensor when output is performed with Procon TRC ON.
   - DC801 User Dmax Adjustment is used for Dmax density adjustment as required.

[In the case of white toner]

1. Perform DC950 ATC Sensor Setup. (ADJ 18.1.6)
2. DC938 PCON CHECK (ADJ 18.1.7)
   - Execute ProconSetup manually and check that there is no Fail result.
3. In the case of white toner, DC972 Impression Density Adjustment Cycle is not carried out.
4. To install the white toner for the first time in each engine, or to replace the ADC, run the DC807 White ADC Sensitivity Correction Cycle. (ADJ 18.1.21)
5. Perform DC612 Color Test Pattern Print under the following conditions.
   - Select Test Pattern: Halftone 30%, Contact engine: 6C, Print side: 2 Sided, Tray: Tray loaded with A3, Number of prints: 30, Other settings: Any
6. Run the DC807 White ADC Sensitivity Correction Cycle again. (ADJ 18.1.21)
7. Perform the following with DC938 PCON CHECK. (ADJ 18.1.7)
   (1) Perform ProconSetup in Color Mode [6C].
   (2) Output CheckPG with Procon LUT Switch set to ON. (Density test)
   (3) Go to Step 8 if gradation is OK.
   If NG, adjust Dmax with DC801 User Dmax Adjustment.
8. Perform the following as required.
   - DC938 PCON CHECK is used as required for PCON operation check.
   - DC934 ADC AGC SETUP is used as required for ADC sensor checking.
   - DC922 TONE UP/DOWN is used as required for IOT density adjustment.
   - DC895 Dmax Setup is used as required when Dmax of IOT is low.
   - DC900 TRC Manual Adjustment is used as required for gradation adjustment of IOT
9. If gradation is OK, execute DC808 with user black paper as required

NOTE: *Procedures 4, 6 and 7 should be executed with standard black paper*

NOTE: *For IOT SW V5 and later, run DC807 in place of DC800 (color measurement and input are not required)*

NOTE: *Procedure 9 is carried out when performing user calibration with black paper other than standard black paper.*

NOTE: *Difference between DC895 Dmax Setup and DC 801 User Dmax Adjustment*

- *DC895: Adjust the ADC potential target and TC target to the dark side so that only the density of IOT element is darkened. Since the ADC gradation target is not changed, the target gradation value does not change. (Used when there density of the element is not appearing in respect of the target gradation.)*
- *DC801: Adjust ADC potential target, ADC gradation target @ 100% to the dark side. Adjust density to dark/light by 100% including target gradation.*

NOTE: *When parts that affect image quality are replaced, check and set up only the necessary items according to the table below (Table 1).*

O: Readjustment required, d: As required, -: No readjustment required

Table 1

	Installation	NVM Initialize*1	Replace EPGERU	DEVE Replace	Replace IBT Belt	Replace ROS	Replace IOT Marking PWBA	Replace H/T Board	ADC Replace	Replace ATC Sensor	Replace Environment Sensor	Replace 1stBTR	Replace 2nd BTB	Fusing Replace
DC950:ATC Sensor Setup	O	O	-	-	-	-	-	-	-	O	-	-	-	-
DC938:PCON CHECK	O	O	d	d	d	d	d	d	d	d	d	d	d	d
DC972 Impression Density Adjustment Cycle	O	O	d*2	d*2	d	d	d	d	-	-	-	d	d	-
DC895:Dmax Setup	d	d	d	d	d	d	d	d	d	-	-	d	d	-
DC900:TRC Manual Adjustment	d	d	d	d	d	d	d	d	d	-	-	d	d	-
DC894:ADC TRC Target Set	d	d	d	d	d	d	d	d	d	-	-	d	d	-
DC934:ADC AGC Setup	d	d	-	-	d	-	d	-	d	-	-	-	-	-
DC922:Tone UP/DOWN	-	-	-	d	-	-	-	-	-	-	-	-	-	-
DC800 ADC Sensor Setup	-	O	-	-	-	-	-	-	O	-	-	-	-	-
DC801 User Dmax Adjustment	d	d	d	d	d	d	d	d	d	-	-	d	d	d

Table 1

	Installation	NVM Initialize*1	Replace EPGERU	DEVE Replace	Replace IBT Belt	Replace ROS	Replace IOT Marking PWBA	Replace H/T Board	ADC Replace	Replace ATC Sensor	Replace Environment Sensor	Replace 1stBTR	Replace 2nd BTB	Fusing Replace
DC807 White ADC Sensitivity Correction Cycle	O	O	-	-	-	-	-	-	O	-	-	-	-	-
DC808 White ADC Adjust User Target Set Cycle	d	d	-	-	-	-	-	-	d	-	-	-	-	-

*1: Write adjustment data of M/C to NVM

*2: Readjustment of SS direction (paper orientation) is necessary for exchange of YMCK Drum Cartridge/Developer or MM Assembly attachment/detachment. If not executed, periodic unevenness in density may be noticeable in some cases.

NOTE: *MiniSetup is automatically executed when HFSI (DC135) is cleared, therefore, MaxSetup items in the above table need not be executed. However, it is desirable to check the image quality with DC938 PCON CHECK (Condition: 10 sheets/200C)*

NOTE: *White of DC800 ADC Sensor Setup can be substituted by performing DC807*

NOTE: *When parts that affect image quality are adjusted, check and set up only the necessary items according to the table below (Table 2).*

O: Readjustment required, d: As required, -: No readjustment required

Table 2

	Transfer parameter adjustment (1st BTR)	Transfer parameter adjustment (2nd BTB)	Fusing parameter adjustment	Low Dmax	When FS Smile is executed	When SS Smile is executed
DC950:ATC Sensor Setup	-	-	-	-	-	-
DC972 Impression Density Adjustment Cycle	d	d	-	-	O	d
DC938:PCON CHECK	d	d	d	d	d	d
DC900:TRC Manual Adjustment	d	d	-	d	d	d
DC895:Dmax Setup	d	d	-	O	d	d
DC894:ADC TRC Target Set	d	d	-	-	d	d
DC934:ADC AGC Setup	-	-	-	-	-	-
DC922:Tone UP/DOWN	d	d	-	d	-	
DC800 ADC Sensor Setup	-	-	-	-	-	-
DC801 User Dmax Adjustment	d	d	-	d	d	d

Table 2

	Transfer parameter adjustment (1st BTR)	Transfer parameter adjustment (2nd BTB)	Fusing parameter adjustment	Low Dmax	When FS Smile is executed	When SS Smile is executed
DC807 White ADC Sensitivity Correction Cycle	-	d	-	d	-	-
DC808 White ADC Adjust User Target Set Cycle	-	d	-	d	-	-

ADJ 18.1.6 DC950 ATC Sensor Setup

Purpose

To acquire the sensitivity correction values [Correction Coefficient] and [Correction Offset] for adjusting the ATC sensor output from the bar code numbers which display the sensitivity attribute in every ATC Sensor. The bar code numbers are set in NVM [Bar Code Number] manually from this adjustment screen.

When this adjustment is required:

Developer Housing Assy replacement

ATC Sensor replacement

When replacing gold, silver, clear and white toners

Operation Overview

- When you select DC950 ATC Sensor Setup from Image Quality Adjustment, you can display the [Barcode No.], [Correction Coefficient], and [Correction Offset] of each of the colors, #1, #2 [Y], #3 [M], #4 [C], #5 [K], and #6. (Figure 1)
- The [Bar Code No.] value displayed on the DC950 ATC Sensor Setup screen can be rewritten with the Keypad.
- Selecting [Start] updates the NVM [Bar Code Number], [Correction Coefficient], and [Correction Offset] for each of the colors, #1,#2 [Y], #3 [M], #4 [C], #5 [K], and #6 after the calculation based on the [Bar Code Number] value displayed on the screen at that time. The [Correction Coefficient] and [Correction Offset] screen displays will also be updated at the same time.

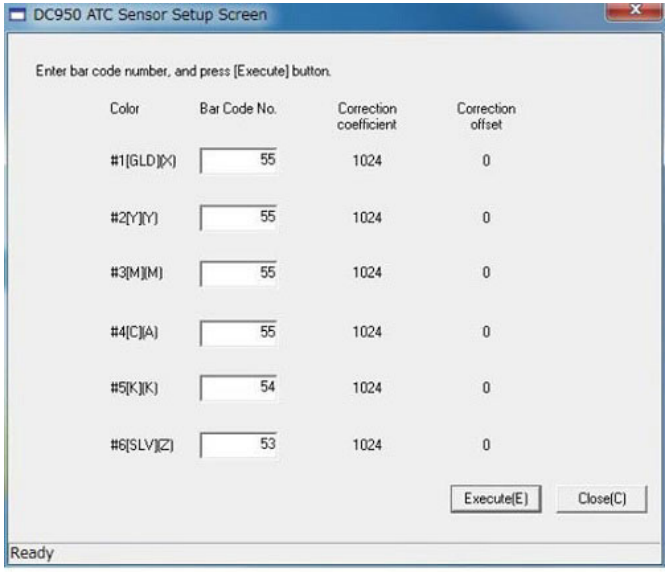


Figure 1 j0cx418501

Adjustment

1. Start PC-Diag, select [Image Quality Adjustment], and click the DC950 ATC Sensor Setup button.
2. Input the number indicated on the replaced sensor into the Bar Code Number on the screen, and click [Execute].
3. Check that the [Correction Coefficient] and [Correction Offset] have changed.

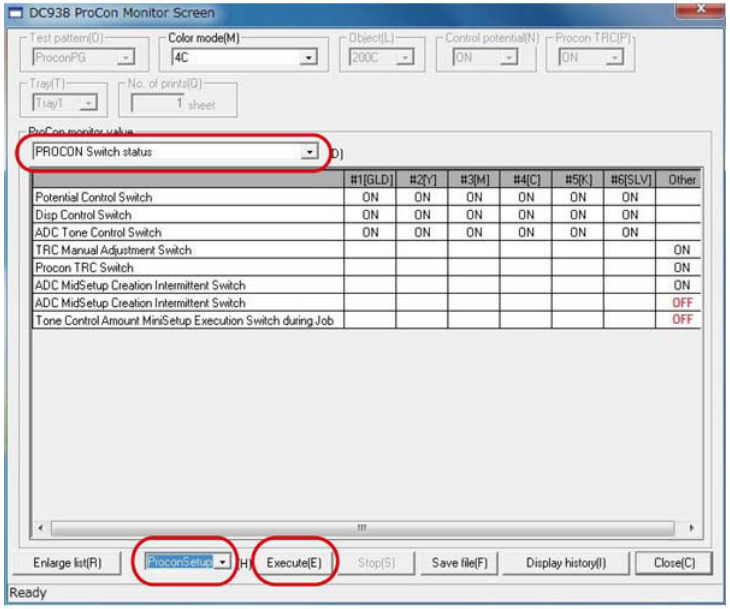
ADJ 18.1.7 DC938 PCON CHECK

Overview

- Display ON/OFF status of the current PROCON Switch and judgment (Fail Occurrence Status) in a list.
- List the NVMs of the current value related to the main PROCON.
- Save and display the PROCON Monitor value when image quality Fail occurs.
- Potential control, PROCON LUT can be changed and confirmation print can be performed.

Adjustment

1. Start PC-Diag, select [Image Quality Adjustment], and click the DC938 PCON CHECK button.
2. The [PROCON Switch Status] in the PROCON Monitor screen checks that [ADC MidSetup Creation Continuous Switch] and [In Job Gradation Control Amount MiniSetup Switch] are OFF, and all other switches are ON. (Figure 1)



j0cx418502

Figure 1 j0cx418502

3. When OFF, set the values of NVMs in the table below (Table 1) to 1 (ON).

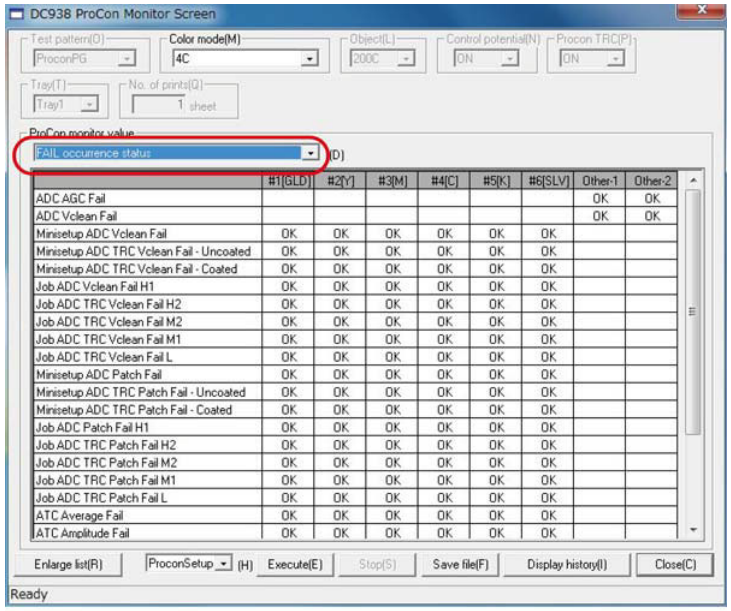
Table 1

Switch Name	NVM	Description
Potential Control Switch	766-001 to 006	1: Procon Potential Mode
Disp Control Switch	765-001 to 006	1: Procon Toner Supply Mode

Table 1

Switch Name	NVM	Description
ADC Gradation Control Switch	772-001 to 006	1: Mode which applies LUT calculated from the ADC Gradation Patch as the ADC_LUT.
TRC Manual Adjustment Switch	772-007	1: TRC Manual Adjustment ON
Procon TRC SW	772-008	1: ADC LUT ON in VideoASIC
ADC MidSetup Creation Intermittent Switch	766-021	1: Execute 2nd MidSetup with intermittent PV condition after the last Mini/MidSetup execution
ADC MidSetup Creation Continuous Switch	766-022	1: Execute 2nd MidSetup during continuous print after the last Mini/MidSetup execution
In Job Gradation Control Amount MiniSetup Switch	772-010	1: When the change of gradation control amount in the middle of a Job is large, execute 2nd MidSetup

4. Select [Procon Setup] at the bottom left of the screen, and click [Execute]. (Figure 1)
5. After executing Setup, display [Fail Occurrence Status], and check that the judgment of all items is OK. (Figure 2)


DC938 ProCon Monitor Screen
Test pattern(O)
ProconPG
Color mode(M)
4C
Object(L)
200C
Control potential(N)
ON
Procon TRC(P)
ON
Tray(T)
Tray1
No. of prints(Q)
1 sheet
ProCon monitor value
FAIL occurrence status
(D)
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[SLV] Other-1 Other-2
ADC AGC Fail OK OK
ADC Vclean Fail OK OK
Minisetup ADC Vclean Fail OK OK OK OK OK OK
Minisetup ADC TRC Vclean Fail - Uncoated OK OK OK OK OK OK
Minisetup ADC TRC Vclean Fail - Coated OK OK OK OK OK OK
Job ADC Vclean Fail H1 OK OK OK OK OK OK
Job ADC TRC Vclean Fail H2 OK OK OK OK OK OK
Job ADC TRC Vclean Fail M2 OK OK OK OK OK OK
Job ADC TRC Vclean Fail M1 OK OK OK OK OK OK
Job ADC TRC Vclean Fail L OK OK OK OK OK OK
Minisetup ADC Patch Fail OK OK OK OK OK OK
Minisetup ADC TRC Patch Fail - Uncoated OK OK OK OK OK OK
Minisetup ADC TRC Patch Fail - Coated OK OK OK OK OK OK
Job ADC Patch Fail H1 OK OK OK OK OK OK
Job ADC TRC Patch Fail H2 OK OK OK OK OK OK
Job ADC TRC Patch Fail M2 OK OK OK OK OK OK
Job ADC TRC Patch Fail M1 OK OK OK OK OK OK
Job ADC TRC Patch Fail L OK OK OK OK OK OK
ATC Average Fail OK OK OK OK OK OK
ATC Amplitude Fail OK OK OK OK OK OK
Enlarge list(R)
ProconSetup
(H)
Execute(E)
Stop(S)
Save file(F)
Display history(I)
Close(C)
Ready

j0cx418503

Figure 2 j0cx418503

If NG, go to FaultCodeRAP (Chapter 2), and resolve the problem.

- 092-642 to 643: ADC AGC Fail (#1/2)
- 092-644 to 645: ADC V clean Fail (#1/2)

- 092-606 to 611: Minisetup ADC Patch Fail (#1/2/3/4/5/6)
- 092-612 to 617: Minisetup ADC TRC Patch Fail Uncoated (#1/2/3/4/5/6)
- 092-618 to 623: Minisetup ADC TRC Patch Fail Coated (#1/2/3/4/5/6)
- 092-624 to 629: Job ADC Patch Fail (#1/2/3/4/5/6)
- 092-630 to 635: Job ADC TRC Patch Fail H (#1/2/3/4/5/6)
- 092-636 to 641: Job ADC TRC Patch Fail L (#1/2/3/4/5/6)
- 092-650 to 655: ATC Average Fail (#1/2/3/4/5/6)
- 092-656 to 661: ATC Amplitude Fail (#1/2/3/4/5/6)
- 092-646 to 647: Temperature Sensor Fail (#1/2)
- 092-648 to 649: Humidity Fail (#1/2)
- 092-310 to 315: VH Charge Check Fail (#1/2/3/4/5/6)
- 092-662 to 667: ESV VH Fail (#1/2/3/4/5/6)
- 092-668 to 673: ESV Vcont VH4 Fail (#1/2/3/4/5/6)
- 092-674 to 679: ESV Vcont VH5 Fail (#1/2/3/4/5/6)
- 092-680 to 685: ESV Vcont VH6 Fail (#1/2/3/4/5/6)
- 092-692 to 697: Job ADC TRC Patch Fail M2 (#1/2/3/4/5/6)
- 092-686 to 691: Job ADC TRC Patch Fail M1 (#1/2/3/4/5/6)

6. Select [CheckPG] at the bottom left of the screen, set the number of prints to 10 sheets*, and click [Execute].

   NOTE: *10 sheets*: At least 9 prints are required to form ADC patches in all types of jobs.*

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*

   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*

7. Check that the [Fail Occurrence Status] displays are all OK.

   If NG, go to FaultCodeRAP (Chapter 2) described in Step 5, and resolve the problem until it becomes OK.

8. Checking by DC938 PCON CHECK is now complete.

ADJ 18.1.8 DC900 TRC Manual Adjustment

Purpose

- Perform fine adjustment manually for 9-step density ranges of each screen for uncoated and coated, correct the Procon LUT data.
- Print and check the configuration results of gradation in which data is updated by TRC Control and manually.

  NOTE: *If the ATC average value deviates from the target value in DC938 PROCON CHECK, execute DC922 Tone UP/DOWN before performing this procedure.*

Procedure

1. Start PC-Diag, select [Image Quality Adjustment], and click the DC900 TRC Manual Adjustment button.
2. Set Object, Paper type mode, ADC LUT correction, Color mode, Tray, No. of prints, and TRC Check PG for Test pattern of the parameter setting column, and click [Execute]. (Figure 1)
   - Object (screen): 200C
   - Paper type mode: Uncoated
   - ADC LUT correction: OFF (To confirm Dmax, first output Procon TRC as OFF)
   - Output Color: 4C
   - Tray: Select the tray in which A3 SEF (J Paper) is loaded
   - No. of prints: 10 (Density check should be carried out after 10th sheet)
   - Test pattern (H): TRC Check PG

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*

   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*

   NOTE: *Instead of outputting the test pattern with [TRC Check PG] of DC900, [Check PG] may be executed in DC895 Dmax Setup to output the test pattern. In that case, output with the following settings.*

   - *Color mode: 4C*
   - *Tray: Select the tray in which A3 SEF (J Paper) is loaded*
   - *No. of prints: 10 (Density check should be carried out after 10th sheet)*

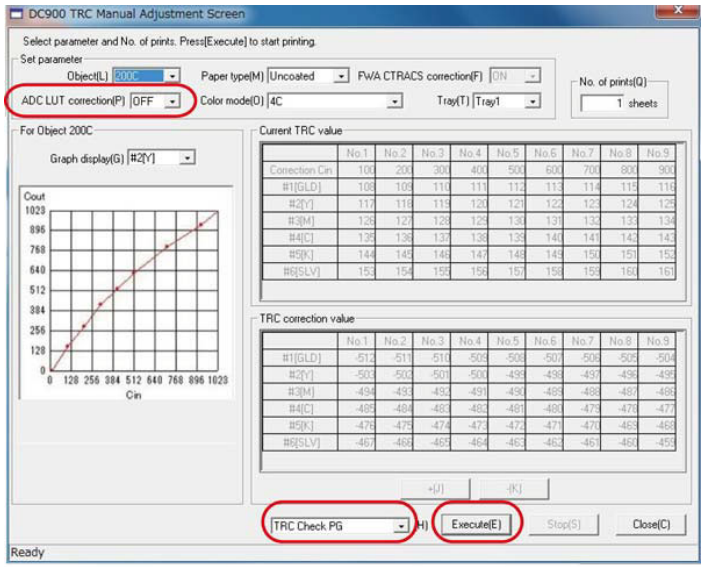


Figure 1 j0cx418504

3. Density test: Dmax check

   Check Dmax on the 10th output sample.

   Compare visually the Dmax measurement point of Cin 99.6% density of each color of Y/M/C/K (first from Lead) with the shipping sample. If density appears, go to Step 5. If density does not appear, go to Step 4. (Figure 2)

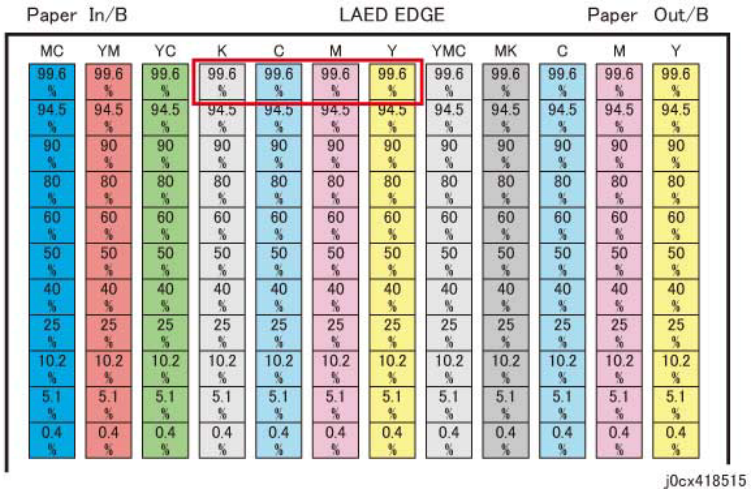


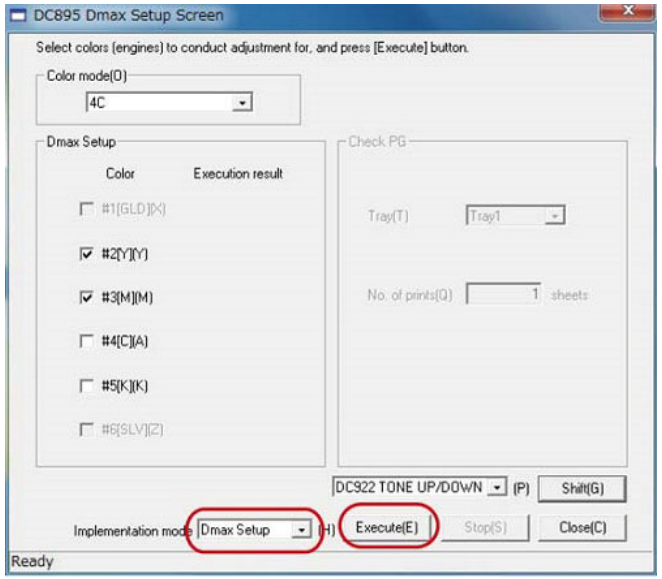
Figure 2 j0cx418515

4. Enter DC895 Dmax Setup, set the execution mode to [Dmax Setup], check the color with low density, and click the Execute button. If the result is OK, the procedure is complete. (Figure 3)

   Perform 1 to 3, and reconfirm. If density appears, go to Step 5.

NOTE: *To print the symbolized page number on the PG, set the value of NVM 757-929 to 1. (Refer to 6.4.18 Test Pattern Print for the explanation on printing page no.)*

NOTE: *Dmax Setup can be executed up to 2 times for each color. (A 3rd time is not available.) If the density does not appear even after repeating 2 times, check the NG item in the Fail Occurrence Status of DC938 PCON CHECK, and restore the NG item. (Refer to ADJ 18.1.7) If there is no NG item, check parts such as ADC Sensor/1st BTR/2nd BTB.*



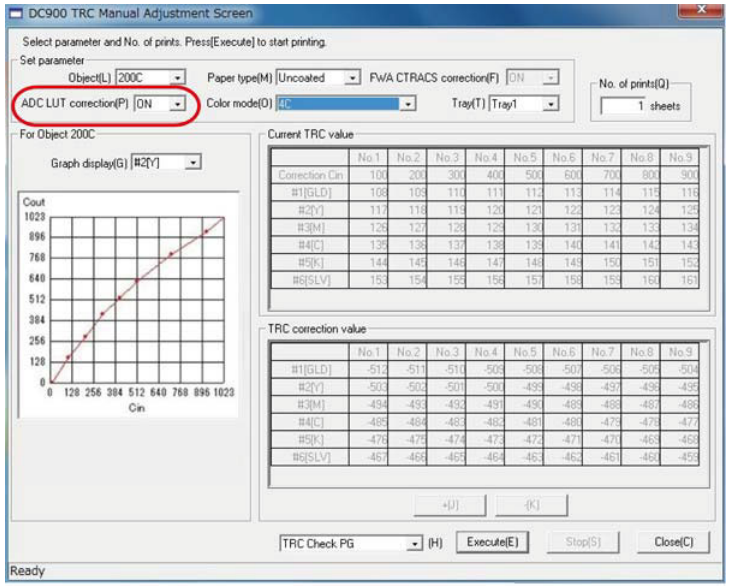
j0cx418505

Figure 3 j0cx418505

5. When replacing ADC, perform DC800 ADC Sensor Setup. (ADJ 18.1.13)
6. Select [DC900 TRC Manual Adjustment] on the Image Quality Adjustment screen.
7. Set Object, Paper type mode, ADC LUT correction, Color mode, Tray, No. of prints, and TRC Check PG for Test pattern of the parameter setting column, and click [Execute]. (Figure 4)
   - Object (screen): 200C
   - Paper type mode: Uncoated
   - ADC LUT correction: ON (turn ON and confirm the gradation control result from highlight to Dmax)
   - Output Color: 4C
   - Tray: Select the tray in which A3 SEF (J Paper) is loaded
   - No. of prints: 10 (Density check should be carried out after 10th sheet)
   - Test pattern (H): TRC Check PG

NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*

- *Example 1. <1-01>: Side 1 - Page 1*
- *Example 2. <2-02>: Side 2 - Page 2*



j0cx418506

Figure 4 j0cx418506

8. Perform density test. Compare the output sample with the shipping sample. If the density of each color (Y/M/C/K) in the output sample of Cin 99.6% (top patch Y/M/C/K), Cin 80% (Y/M/C/K), and Cin 25% is the same as the shipping sample, exit image quality adjustment. (Figure 5)

   If the density is light or dark, go to Step 9.

Table 1 Patch No. and Cin Comparison

Patch No.	Cin
Patch No. 9	Cin99.6%
Patch No. 7	Cin80%
Patch No. 3	Cin25%

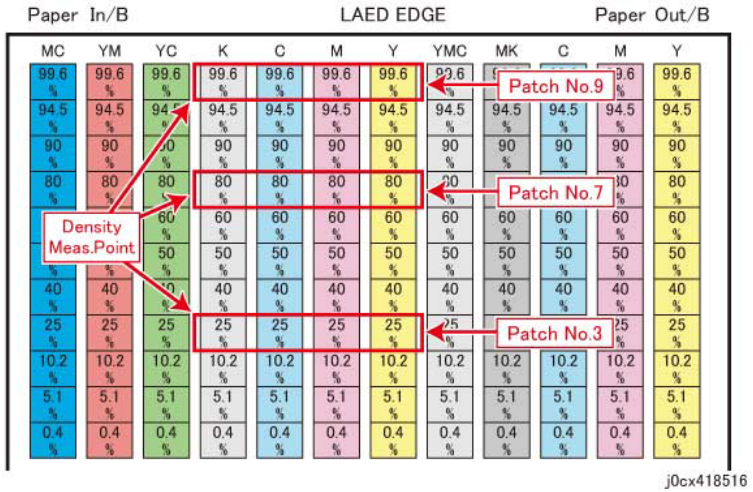


Figure 5 j0cx418516

9. Enter the [DC900 TRC Manual Adjust] screen, and select [TRC Manual Adjustment]. (Figure 6)

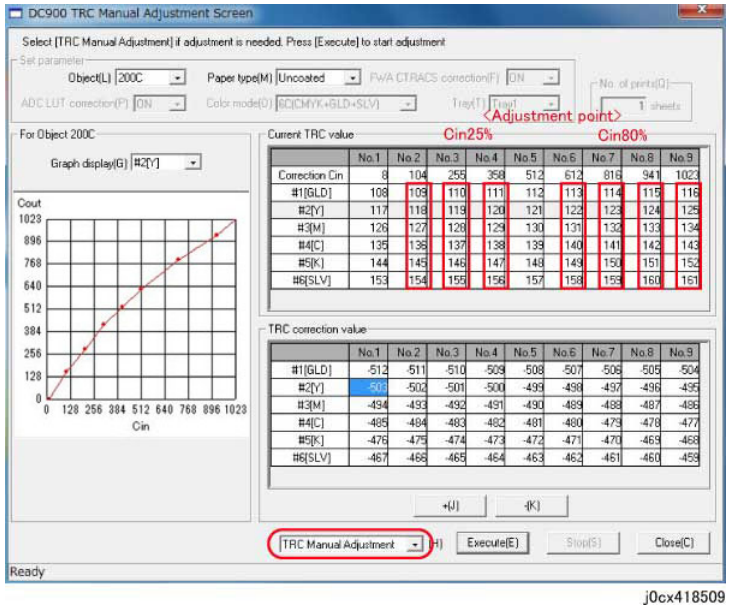


Figure 6 j0cx418509

10. In the TRC correction value column of [Y], [M], [C], and [K] on the [DC900 TRC Manual Adjust] screen, click the patch no. column of the color which requires adjustment, and enter the value with the [+], [-] button.
    (1) When density is high:
    -> Enter a negative value for adjustment in the correction value column of the corresponding color and location.
    Max amount of change: Up to [-60] for (Cin 99.6%) section, [-60] for (Cin 80%) section, [-36] for (Cin 25%) section.
    (2) When density is low:
    -> Enter a positive value for adjustment in the correction value column of the corresponding color and location.
    Max amount of change: Up to [+60] for (Cin 99.6%) section, [+60] for (Cin 80%) section, [+36] for (Cin 25%) section.

- To adjust Cin 25% section, for No. 3, change it by +/-12 each time, and for No. 2 and No. 4, change it by half of that which is +/-6 each time.
- To adjust Cin 80% section, for No. 7, change it by +/-20 each time, and for No. 6 and No. 8, change it by half of that which is +/-10 each time.
- To adjust Cin 99.6% section, for No. 9, change it by +/-20 each time, and for No. 8, change it by half of that which is +/-10 each time.

NOTE: *The amount of change every time is a guide, and it may be changed depending on the case.*

NOTE: *TRC Manual adjustment applies in common to all screens.*

11. After adjustment, return to Step 7, output a test print, and check the density again. When the density becomes OK, go to 12. If NG, perform the adjustment of 10.

    NOTE: *If further density adjustment is required even after changing the amount to Max, check the NG item in the Fail Occurrence Status of DC938 PCON CHECK, and restore the NG item. (Refer to* ADJ 18.1.7*) If there is no NG item, check the ADC Sensor/1st BTR/2nd BTB.*

12. When the density is in the desired state, select [TRC Save] in [DC900 TRC Manual Adjustment], and press the [Execute] button.

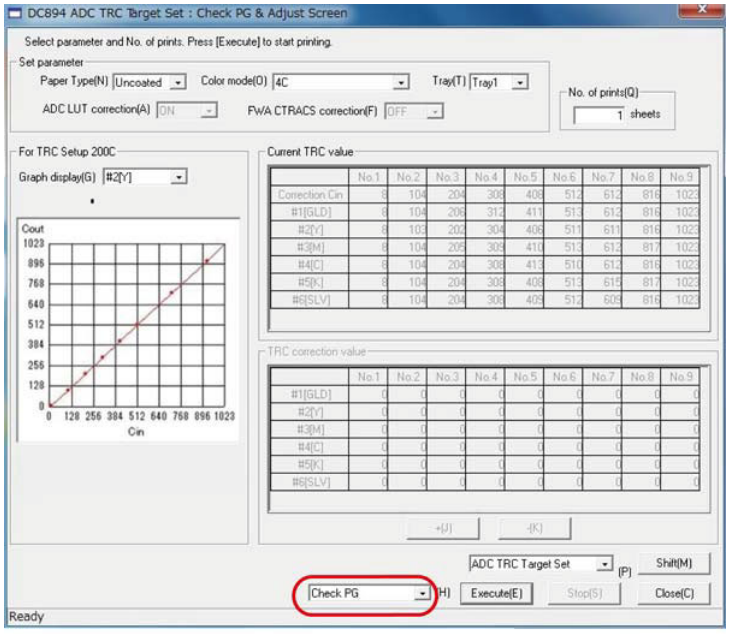
ADJ 18.1.9 DC894 ADC TRC Target Set

Purpose

Measure the TRC 20 gradation patch density in the state where the highlight part has been adjusted, and set the ADC target curve. ADC TRC Target Set is used as required for cases, in which reproduction density of the highlight or Dmax area in the default ADC gradation control target value is NG due to the fixed variation of ADC sensor when output is performed with Procon TRC ON.

Procedure

1. Select [DC894 ADC TRC Target Set] on the Image Quality Adjustment screen, and execute it.
2. ADC TRC Target Set: Check PG & Adjust screen is displayed. (Figure 1)



j0cx418510

Figure 1 j0cx418510

3. Set Paper type mode, Color mode, Tray, No. of prints of the parameter, select [Check PG], and click [Execute].
   - Paper type mode: Uncoated
   - Output Color: 4C
   - Tray: Select the tray in which A3 SEF (J Paper) is loaded
   - Number of prints: 1
   - Test pattern (H): Check PG

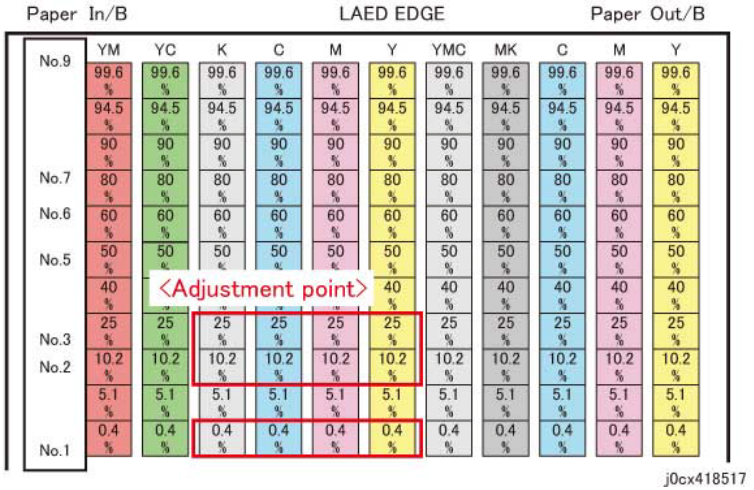
NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*

- *Example 1. <1-01>: Side 1 - Page 1*
- *Example 2. <2-02>: Side 2 - Page 2*

4. Check the density of each color (Y, M, C, K) by comparing No. 1, No. 2, and No. 3 of the output test print (highlight section: Cin 25% or less) with the shipping sample. (Figure 2)
   - The patch of Cin (0.4%) is not reproduced.
   - The patch of Cin (5.1%) is reproduced.

   When the above 2 conditions are satisfied, the procedure is complete.

   When they are not satisfied, continue to Manual adjustment of 5.

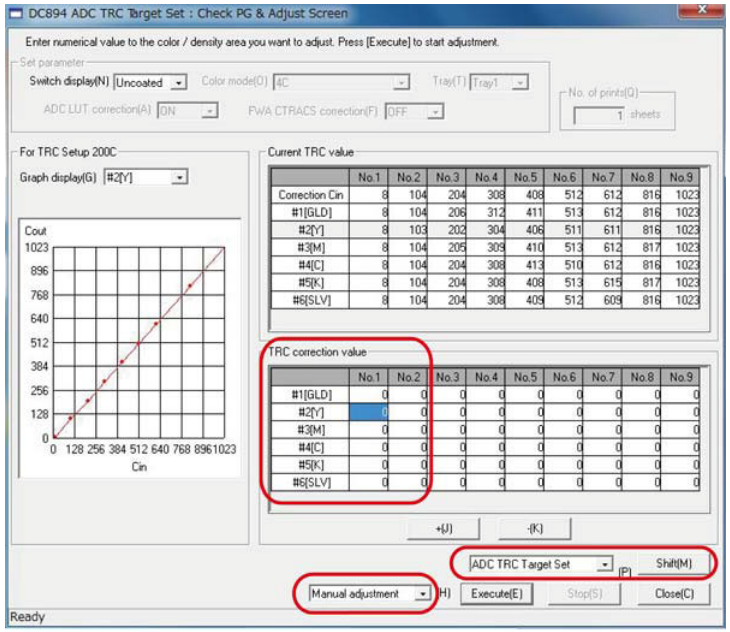


j0cx418517

Figure 2 j0cx418517

5. Select Manual. (Figure 3)

NOTE: *If you want to fine-tune the default ADC target value, select [ADC TRC Target Set] directly without clicking Check PG or Manual adjustment on this screen, and click the [Shift] button to go to the ADC TRC Target Set: Target Set screen (Figure 4). (To Step 11)*



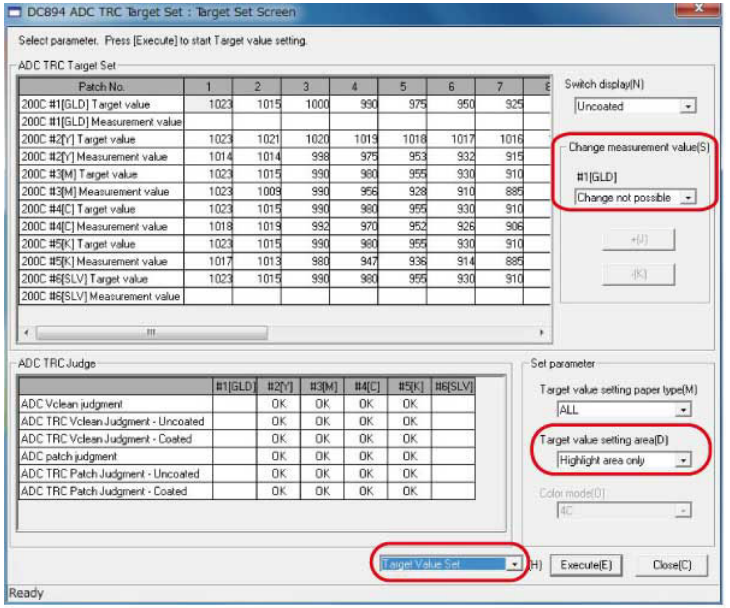
j0cx418511

Figure 3 j0cx418511

6. Substitute the same numerical values in No. 1 and No. 2 columns of [TRC correction value] on the screen.
   - The density becomes darker when it is a positive value and lighter if it is a negative value.
   - Change amount at a time is +/-8 (maximum +/-24)

   After change, click [Execute], and repeat Steps 3 to 6. (Adjustment is possible up to 3 times)

   If Manual adjustment is OK, go to Step 7.
7. Select [ADC TRC Target Set], and click the [Shift] button.
8. ADC TRC Target Set: Target Set screen is displayed. (Figure 4)



j0cx418512

Figure 4 j0cx418512

9. Select [ADC TRC Target Set], select [ALL] for the parameter setting, Target value setting paper type mode, and click the [Execute] button. Check that the judgment [ADC TRC Judge] is all OK.
10. When the judgment [ADC TRC Judge] is all OK, and when the measured value is displayed, under [Set parameter], select [Highlight area only] for [Target value setting area], and click the [Execute] button.

    NOTE: *Do not use other than [Highlight area only]*
11. To fine-adjust manually the ADC target value, follow the procedure below.
    - In ADC TRC Target Set, move the cursor to and click the target value or measured value portion of the engine that you want to manually correct.
    - Check that the name of the engine you want to fine-tune is displayed in the [Change measurement value] on the right section, and set [Change not possible] to [Change possible].
    - As the current target value of the engine to be fine-tuned is displayed in the measurement value column, change this value directly. (If the density is high, increase the value, and when the density is low, decrease the value)
    - If you want to adjust the highlight area, change Patch No. 1 to No. 9 by +/-10 each time as a guide.

NOTE: *[DC894 ADC TRC Target Set] does not need to be performed as a normal MaxSetup procedure, and it is executed only when the highlight reproduction density in the default ADC target value is not what is expected. At this time, Check PG and manual adjustment, etc. are not executed from the ADC TRC Target Set: Check PG & Adjust screen.*

12. After adjusting the highlight area of ADC target value, under [Set parameter], select [Highlight area only] for [Target value setting area], and click the [Execute] button.

ADJ 18.1.10 DC922 Tone UP/Down

Purpose

This feature forcibly adds or discharges toner and is used for troubleshooting when the toner density becomes abnormal due to toner dispense problems, etc. It is not required for normal image quality adjustment.

When the execution mode [Reset] is executed in [DC895 Dmax Setup], adjust with Tone Up/Down until the ATC measurement value reaches the ATC target value.

Procedure

1. Start PC-Diag, select [Image Quality Adjustment], enter [DC922 TONE UP/DOWN], check [ATC target value] and [ATC measurement value] on the toner density adjustment screen. (Figure 1)

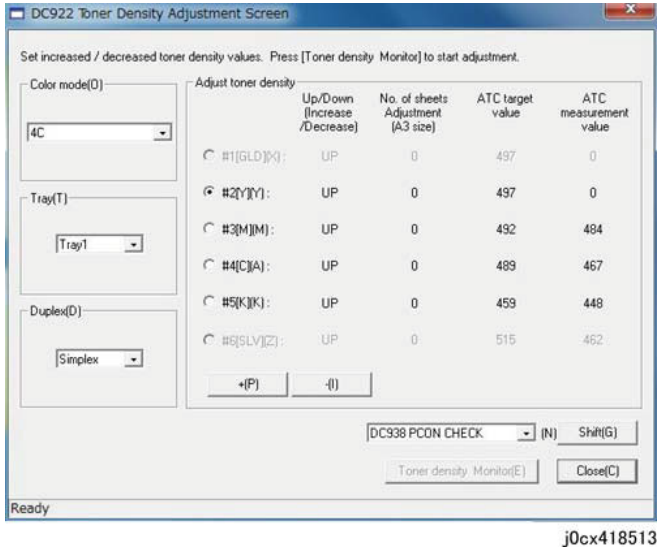


Figure 1 j0cx418513

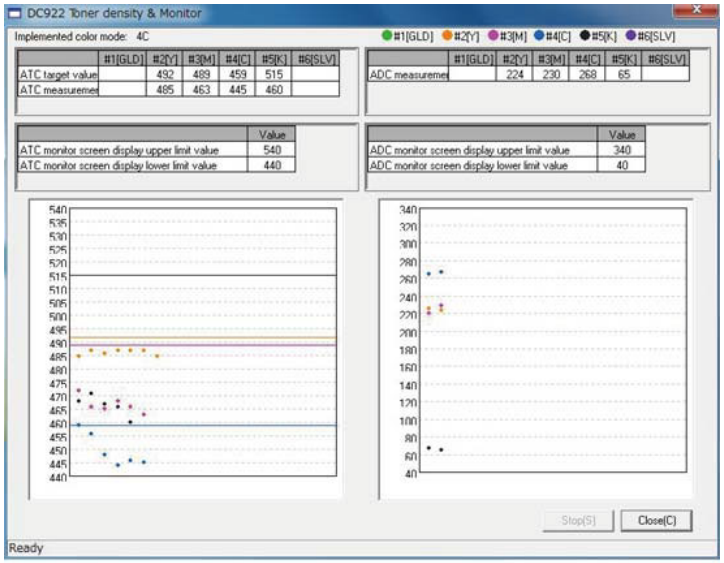
2. When [ATC measurement value] is less than or equal to [ATC target value-20], check the no. of sheets to be adjusted for the colors, in which up/down is displayed, then click the [Toner density & Monitor] button.

   NOTE: *For the up/down of the no. of sheets to be adjusted (+(P)/-(I) button), set the no. of sheets to be adjusted (about 10 sheets) in consideration of environment (humidity), time degradation of Deve, etc.*

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*

   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*

3. On the Toner density & Monitor screen, check the [ATC target value] and [ATC measurement value], and exit if [ATC measurement value] is equal to or less than [ATC target value-20]. (Figure 2) If it is larger than [ATC target value-20], go back to 2 and adjust.


DC922 Toner density & Monitor
Implemented color mode: 4C
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[SLV]
ATC target value 492 489 459 515
ATC measuremer 485 463 445 460
ADC measuremer 224 230 268 65
ATC monitor screen display upper limit value 540
ATC monitor screen display lower limit value 440
ADC monitor screen display upper limit value 340
ADC monitor screen display lower limit value 40
Value
Stop(S)
Close(C)
Ready

j0cx418514

Figure 2 j0cx418514

ADJ 18.1.11 DC934 ADC AGC Setup

Purpose

Check the level of the ADC Sensor when the IBT belt is in the clean state, and adjust the output value that is always stable for the ADC Sensor contamination.

Procedure

1. Start PC-Diag, select and execute [DC934 ADC AGC Setup] on the Image Quality Adjustment screen.
2. Check that the [Judgment] fields on the [ADC AGC Setup] screen are all OK.
   If there is any NG result, perform the following items.
   - When ADC-GAIN is NG: Replace ADC Sensor (PL 18.6) or IOT Main PWB (PL 18.14).
   - When ADC Vcln-SPC (or DIF) max/min is NG, replace the following in sequence.
     – IBT Belt (PL 6.3)
     – ADC Sensor (PL 18.6)
     – IOT Main PWB (PL 18.14)

ADJ 18.1.12 DC685 Regicon Setup Cycle

Purpose

Optimize color registration/control including ReC sensor and skew correction.

NOTE: *As REGI CON SETUP is automatically performed at the required timing, when HFSI (DC135) is cleared with parts replacement due to color registration, or immediately after power on, there is no need to perform it intentionally. However, be sure to do it after the following tasks.*

- *When replacing ReC Sensor*

Adjustment

1. Start PC-Diag, select and execute [DC685 Regicon Setup Cycle] on the subsystem check screen.
2. Check the color mode, and click the [Execute] button.
3. Select [Close] after exiting Regicon Setup, and return to the subsystem check screen.

ADJ 18.1.13 DC800 ADC Sensor Setup

Purpose

- To set the ADC Tone Target Correction Amount that corresponded to the ADC Sensor individual difference from the designated Tone Chart density color measurement value and ADC Tone measurement value.

Overview

- To correct the individual difference of ADC Sensor.
- To manually enter the density measurement value of color measurement chart and set it into the NVM.
- Colorimetric chart: Calculates the ADC sensor Cin 100% gradation target value (ADC sensor white detection correction amount in White mode) from the density value (L* value in White mode), and displays it on the screen.
- Perform during replacement of ADC Sensor.

NOTE: *The White of DC800 ADC Sensor Setup can be substituted by running DC807.*

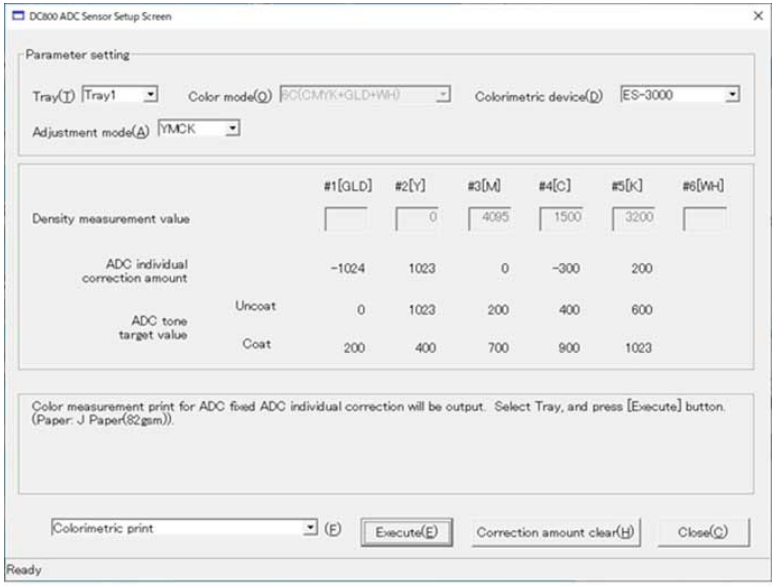
NOTE: *After adjusting the ADC sensor sensitivity used for white toner control using DC807 White ADC Sensitivity Correction Cycle, do not perform adjustment with Adjustment Mode [White] of DC800 ADC Sensor Setup as the adjusted value set by the DC807 White ADC Sensitivity Correction Cycle will be overwritten.*

NOTE: *In the absence of the following standard paper, do not perform DC800.*

- *Standard paper : J paper (82gsm)*
- *Standard paper for white: black standard paper (use Kishu color bond black extra heavyweight paper)*

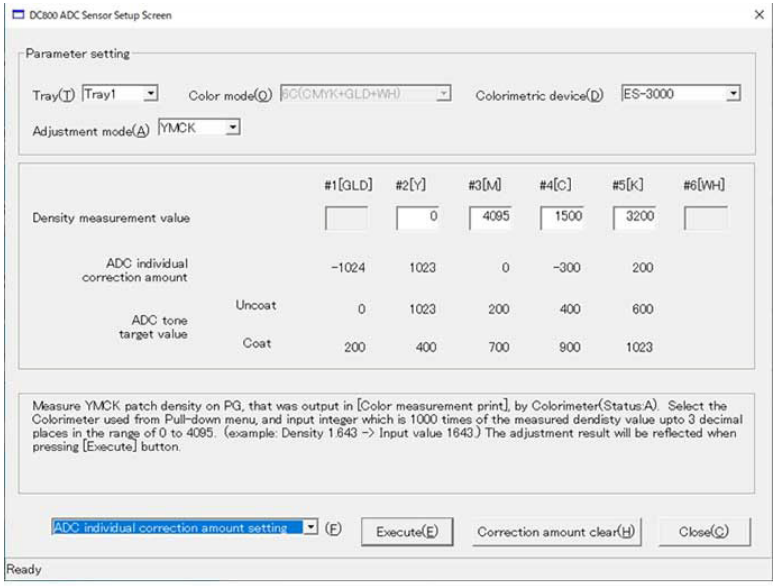
Procedure

1. Start up the PC-Diag, select [IQ adjustment], and click [DC800] ADC Sensor Setup.
2. The ADC Sensor Setup Screen is displayed. (Figure 1)
   - When [Adjustment mode] is pulled down, [YMCK] mode and [White] mode can be selected.


DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+WH)
Colorimetric device(D) ES-3000
Adjustment mode(A) YMCK
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
Density measurement value 0 4095 1500 3200
ADC individual correction amount -1024 1023 0 -300 200
ADC tone target value Uncoat 0 1023 200 400 600
Coat 200 400 700 900 1023
Color measurement print for ADC fixed ADC individual correction will be output. Select Tray, and press [Execute] button. (Paper: J Paper(82gsm)).
Colorimetric print (F) Execute(E) Correction amount clear(H) Close(C)
Ready

dar418514

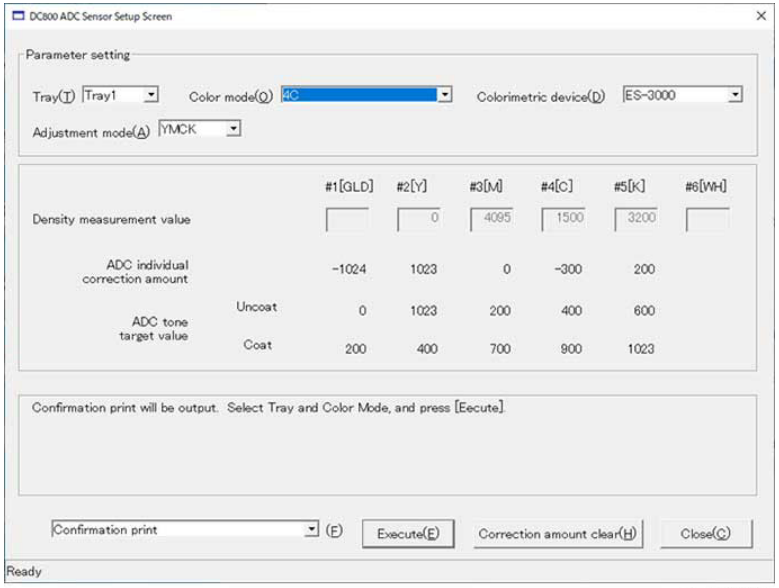
Figure 1 dar418514


DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+WH)
Colorimetric device(D) ES-3000
Adjustment mode(A) YMCK
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
Density measurement value 0 4095 1500 3200
ADC individual correction amount -1024 1023 0 -300 200
ADC tone target value Uncoat 0 1023 200 400 600
Coat 200 400 700 900 1023
Measure YMCK patch density on PG, that was output in [Color measurement print], by Colorimeter(Status:A). Select the Colorimeter used from Pull-down menu, and input integer which is 1000 times of the measured dendisty value upto 3 decimal places in the range of 0 to 4095. (example: Density 1.643 -> Input value 1643.) The adjustment result will be reflected when pressing [Execute] button.
ADC individual correction amount setting (F) Execute(E) Correction amount clear(H) Close(C)
Ready

dar418515

Figure 2 dar418515

3. In the case of [YMCK] adjustment mode, proceed to Step 4. In the case of [White] adjustment mode, proceed to Step 8.
4. Select [Colorimetric print], set the Tray and Colorimetric device in the Parameter setting column, then click [Execute]. (Figure 1)
   - Tray: Select a Tray loaded with A3 SEF (J paper).
   - Colorimetric device: Select the Spectrophotometer to use.
5. Select [ADC individual correction amount setting], use a Spectrophotometer to measure the YMCK Color Patch density at the center of the PG that was output by [Colorimetric print], select the Spectrophotometer that was used from the pull-down menu, round the measured density value to the 3rd decimal place and multiply it by 1000 for entry in the range of 0 to 4095, and click [Execute]. (Figure 2)
   - For example, if the density value is 1.643, enter [1643] in the density measurement value column.
6. Select [Confirmation print], set the Tray, Color Mode in the Parameter setting column, then click [Execute]. (Figure 3)
   - Tray: Select a Tray loaded with A3 SEF (J paper).
   - Color Mode: 4C.

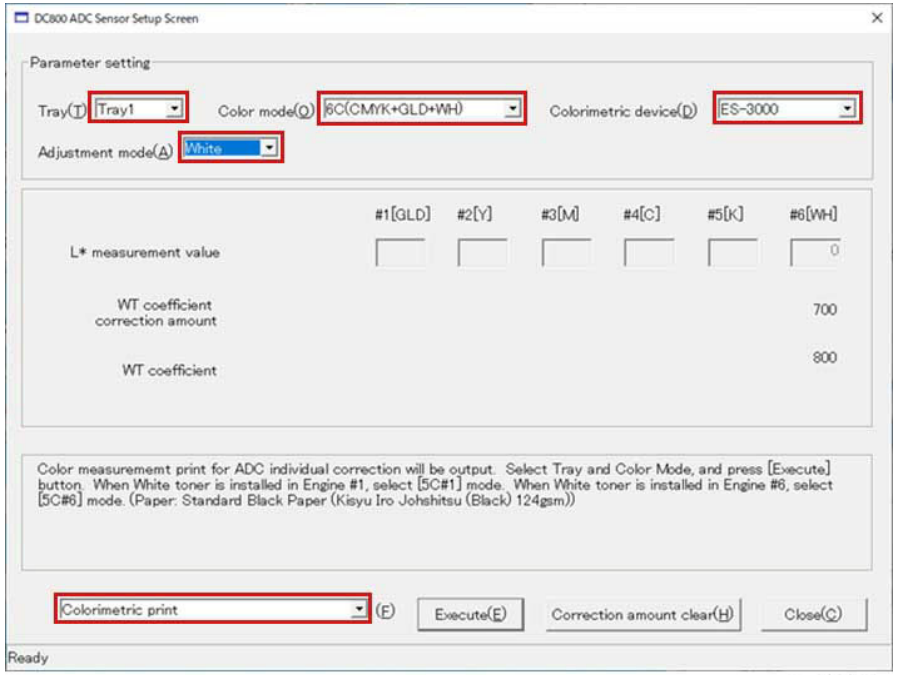


dar418516

Figure 3 dar418516

When selecting a Color Mode that includes only the #2, #3, #4, and #5 Engines, output Procon PG #2 to 5; when selecting a Color Mode that includes #1 and #6 Engines, output both Procon PG #2 to 5 and Procon PG #1 and 6 as 1 set.

7. Use a Spectrophotometer to measure the K Color Patch density at the center of the printout and, if it is at the desired density, end the adjustment. If there is a problem, adjust by using DC900 TRC Manual Adjustment (ADJ 18.1.8).
8. The following are the procedures for the [White] adjustment mode.
9. Select [Colorimetric print], set the Tray, Color Mode, and Colorimetric device in the Parameter setting column, then click [Execute]. (Figure 4)
   - Tray: Select a Tray loaded with black standard paper.
   - Color Mode: When white is installed in Toner #1 engine, 6C, 5C#1 is selectable, and when it is installed in #6 engine, 6C, 5C#6 can be selected.
   - Colorimetric device: Select the Spectrophotometer to use.


DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+WH)
Colorimetric device(D) ES-3000
Adjustment mode(A) White
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
L* measurement value
0
WT coefficient correction amount
700
WT coefficient
800
Color measurememt print for ADC individual correction will be output. Select Tray and Color Mode, and press [Execute] button. When White toner is installed in Engine #1, select [5C#1] mode. When White toner is installed in Engine #6, select [5C#6] mode. (Paper: Standard Black Paper (Kisyu Iro Johshitsu (Black) 124gsm))
Colorimetric print
(F)
Execute(E)
Correction amount clear(H)
Close(C)
Ready

dar418517

Figure 4 dar418517

10. Measure patch L* of center portion WHT#1, WHT#6 of PG output by [Colorimetric print] with colorimeter. (Figure 5)

Figure 5 j0cx418568

11. Select [ADC individual correction amount setting], and select the colorimeter used by pull-down. In the L* colorimetric value column, enter the measured lightness L* value (standard range: 70 to 74) up to the first decimal place as an integer value, in the range of 0 to 1023 with a 10-fold value and press the [Execute] button. (Figure 6)
    - For example, if the measured L* value in ES-3000 of the patch of WHT#6 is 72.3, enter [723] in the field of #6 [Wh] of [L* measured value].

NOTE: *Enter respectively for WHT#1: IN patch colorimetric value, WHT#6: OUT color patch colorimetric value. In addition, if only WHT#1 is within the target L*, and when only the adjustment value of WHT#6 is entered and executed subsequently, take note that deviation from the original adjustment will occur because the correction amount is calculated at the same time for WHT#1 with the update setting.*

NOTE: *Do not press the [Enter] key on the keyboard after entering the L* measurement value. Also, click on the [Execute] button only once. Should you press the [Enter] key or press the [Execute] button twice, execute DC800 ADC Sensor Setup from the beginning without pressing the [Correction Amount Clear] button.*

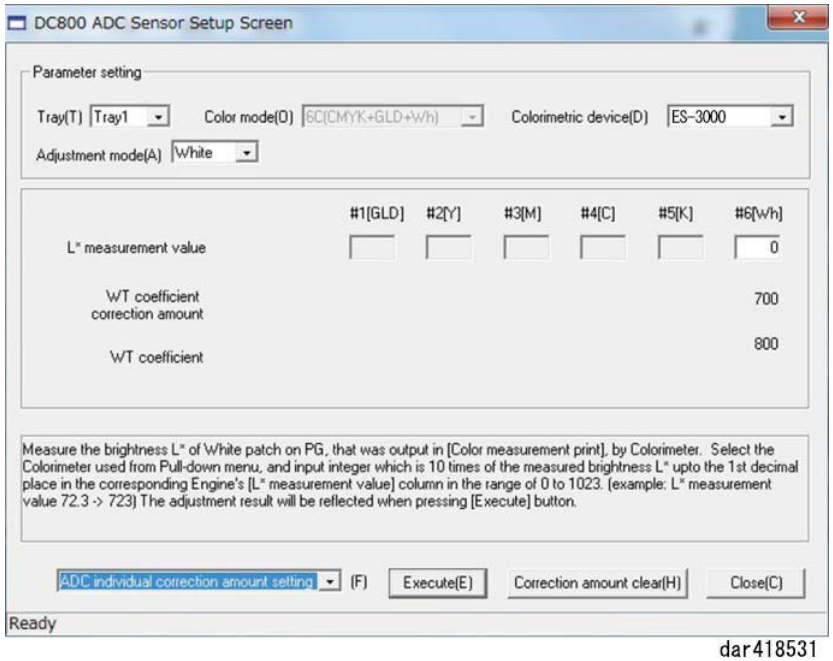

DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+Wh)
Colorimetric device(D) ES-3000
Adjustment mode(A) White
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[Wh]
L* measurement value
0
WT coefficient correction amount
700
WT coefficient
800
Measure the brightness L* of White patch on PG, that was output in [Color measurement print], by Colorimeter. Select the Colorimeter used from Pull-down menu, and input integer which is 10 times of the measured brightness L* upto the 1st decimal place in the corresponding Engine's [L* measurement value] column in the range of 0 to 1023. (example: L* measurement value 72.3 -> 723) The adjustment result will be reflected when pressing [Execute] button.
ADC individual correction amount setting
(F)
Execute(E)
Correction amount clear(H)
Close(C)
Ready
dar418531

Figure 6 dar418531

12. Select [Confirmation print], set the Tray, Color Mode in the Parameter setting column, then click [Execute]. (Figure 7)
    - Tray: Select a Tray loaded with Black paper standard paper
    - Color Mode: Any

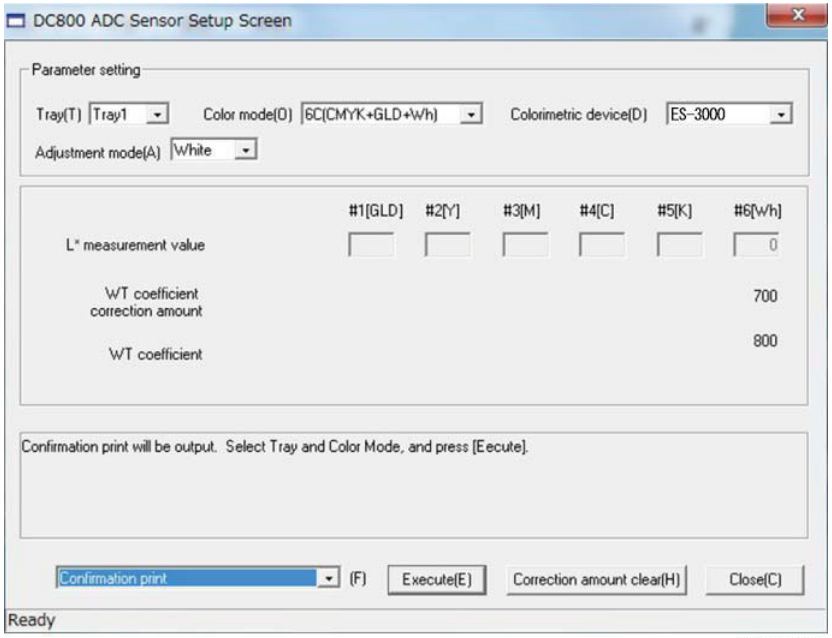


Figure 7 dar418532

NOTE: *Both ProconPG#2-5, ProconPG#1, 6 is output as 1 set by executing [Test print].*

13. Among the prints which are output, use a Spectrophotometer to measure the patches L* of WHT#1 and WHT#6 of ProconPG# 1, 6 shown in Figure 8, and if it is the desired colorimetric value, end the adjustment. If there is a problem, adjust by using DC900 TRC Manual Adjustment (ADJ 18.1.8).

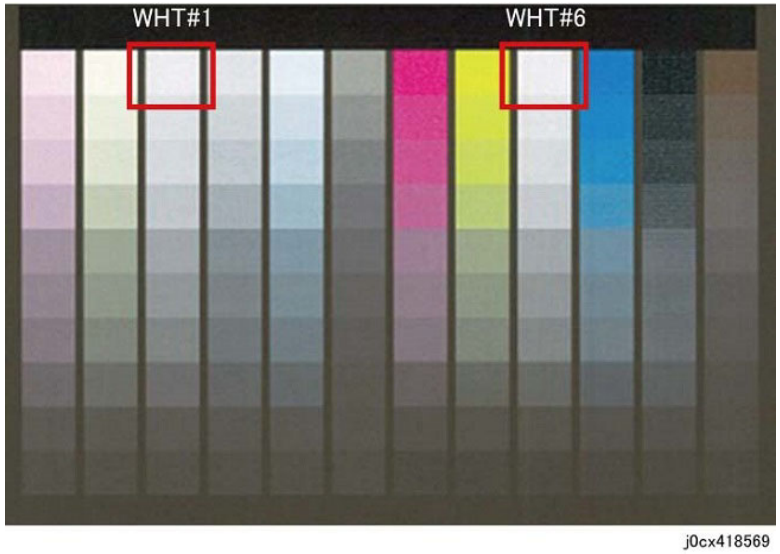


Figure 8 j0cx418569

ADJ 18.1.14 DC801 User Dmax Ajustment

Purpose

- This is a User oriented function for adjusting the density at Beta section when an image quality defect, such as Dmax density error/dropping FI, has occurred. It adjusts the ADC Potential Target and ADC Tone Target for Potential Control according to the adjustment value.

Overview

- To calculate the correction amount of ADC Potential Target and Tone Target from the adjustment value of the Engine that performs the specified density adjustment and write it into the NVM.

Procedure

1. Start up the PC-Diag, select [IQ adjustment], and click [DC801] User Dmax Adjustment.
2. The User Dmax Ajustment Screen is displayed. (Figure 1).
   - When [Paper type] is pulled down, Uncoated/Coated can be selected.

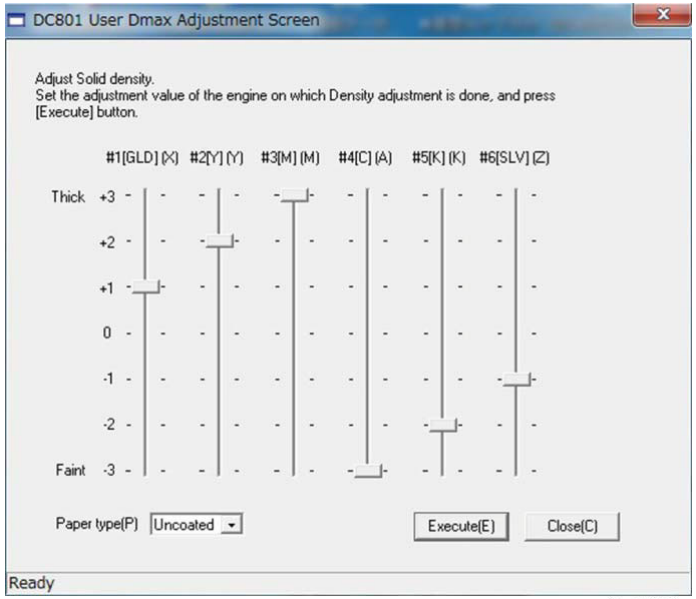


Figure 1 j0cx418521

3. Select the paper type to perform density adjustment, set the adjustment value of the Engine that performs the density adjustment and click [Execute].
4. Use DC612 Test Pattern Print or DC900 TRC Manual Adjustment (ADJ 18.1.8) to output the TRC Check PG and check the density.
5. Perform adjustment of 4C density as required to bring out the maximum performance of 5C, 6C image quality when white toner is added.
   (1) Output 10 sheets of DC612 Total Chart1.
   - Recommended Paper: J paper, OS coated paper (A3)
   - Contact Engine: 4C

   (2) Perform color measurement with a colorimeter. (Figure 2)

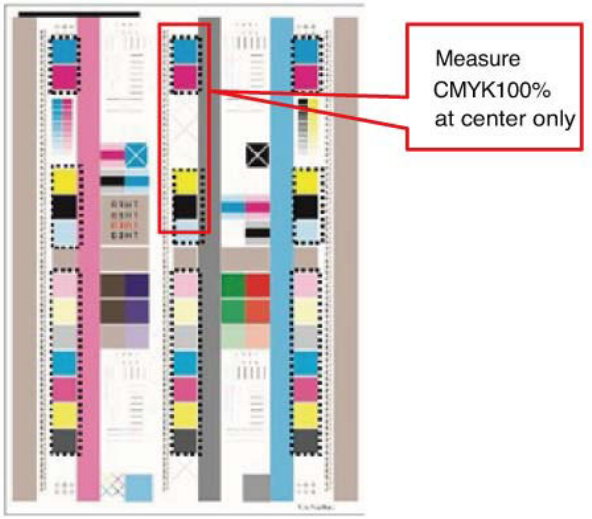


Figure 2 e0cx418610

   (3) Change the volume by 1 Step in DC801 User Dmax Adjustment.
   Target change amount (Figure 3)

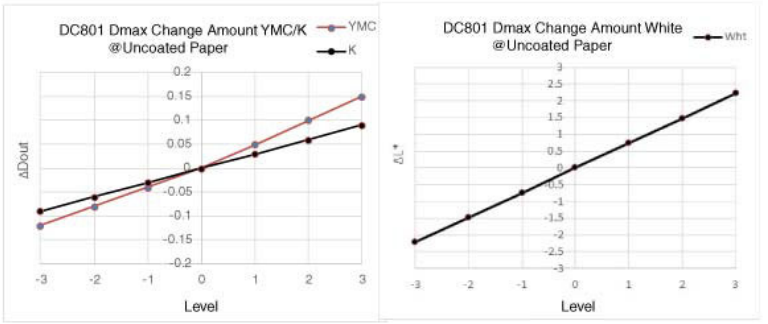


Figure 3 e0cx418611

   (4) Repeat steps 1 to 3 until the value ranges in Figure 4 are obtained.

●Iridesse Production Press

Paper		J Paper				OS Coated Paper			
Measure area		Y	M	C	K	Y	M	C	K
Dmax	Upper limit	1.77	1.72	1.68	1.93	2.04	1.98	1.95	2.22
	Lower limit	1.45	1.40	1.36	1.61	1.72	1.66	1.63	1.90

Figure 4 e0cx418612

NOTE: *DC801 Precautions*

- *When volume is changed, perform density adjustment immediately before printing.*
- *Changing the volume 1 step at a time is recommended.*
  (Control delays may occur and cause overshooting.)
- *Change amounts are guidelines, and there is a risk of saturation especially on the darker side, which is highly dependent on development capacity.*

ADJ 18.1.15 DC895 Dmax Setup

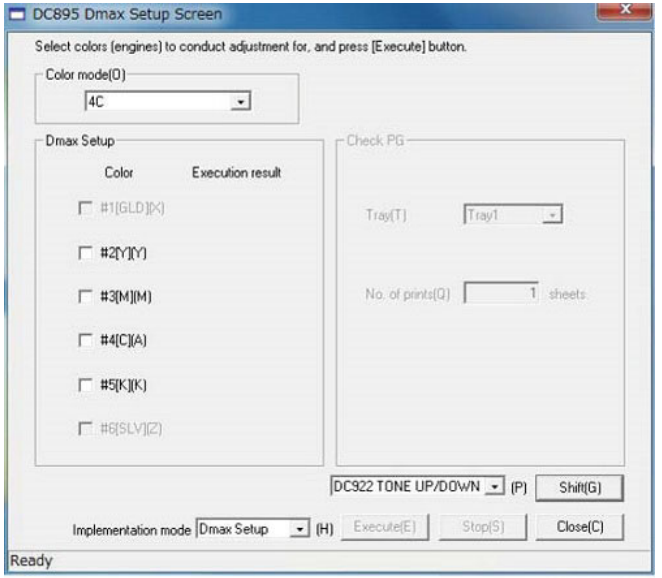
Purpose

- Since Dmax (Cin 100% density) is light, and if the target TRC (gradation curve) cannot be obtained even if calibration is performed, the Dmax Setup function will be performed.
- After executing Dmax Setup, display the result. Specify the Tray, number of prints, output the image quality check pattern, and check the correction result.

  NOTE: *As setup is used in conjunction with the following DC code, the reference adjustment items are as follows.*
  - *DC900 TRC Manual Adjustment:* ADJ 18.1.8
  - *DC922 Tone UP/DOWN:* ADJ 18.1.10

Procedure

1. Select [Image Quality Adjustment] on the PC Diag screen.
2. Select DC895: Dmax Set Up. (Figure 1)
   Select a color whose density is lower than the target at Cin 99.6%, select [Dmax Setup] for the implementation mode, and press Execute.



j0cx418529

Figure 1 j0cx418529

3. The machines stops, and if the result is all OK, go to Step 4.
   When it is NG, restore NG item with DC938 PCON Check. (Refer to ADJ 18.1.7)
4. In [Implementation mode], select [Check PG], select the following items and execute. The LUT OFF check sample is printed.
   - Tray: Select the tray in which A3 SEF (J Paper) is loaded

- Number of prints: 10

5. Compare the output sample with the shipping sample. If the density of each color (Y/M/C/K) in the output sample (10th sheet) of Cin 99.6% (top patch) is the same as the shipping sample or better, it is OK.

ADJ 18.1.16 DC740 MBT Guide Adjustment

Purpose

It is the feature for the maintenance site that adjusts the size detection sensor in the width direction of the MBT.

Overview

- To set and confirm the size detection correction value in the MBT width direction.
  - To set the sensor output values for the maximum and minimum positions for the MBT Guide using NVM.
  - To display the detected size in the width direction of the MBT Guide.

NOTE: *This adjustment is performed when the replacing the MBT Size Sensor and when a size detection error occurs.*

Procedure

1. Start PC-Diag, select [Subsystem Check], and click the [DC740] MBT Guide Adjustment button.
2. Select the [Minimum Value], [Maximum Value] or [Guide Test] button on the screen.
3. When [Minimum Value] is selected
   (1) Align the MBT Guide to the minimum position.
   (2) Select [Start].
   - If the sensor output value is within the specified range, [OK] will be displayed.
     At the same time, the NVM [518-192] MBT Side Guide Minimum Position data is changed.
   - If the sensor output value is out of the specified range, [NG] will be displayed.
     If [NG], check the guide position and try again.
4. When [Maximum Value] is selected
   (1) Align the MBT Guide to the maximum position.
   (2) Select [Start].
   - If the sensor output value is within the specified range, [OK] will be displayed.
     At the same time, the NVM [518-193] MBT Side Guide Maximum Position data is changed.
   - If the sensor output value is out of the specified range, [NG] will be displayed.
     If [NG], check the guide position and try again.
5. When [Guide Test] is selected.
   (1) Align the MBT paper guide to the size you want to check.
   (2) Select [Start].
   (3) The size of the paper width displayed.
6. Select [Close] to return to the [Subsystem Check] screen.

ADJ 18.1.17 Copy All Adjustment

Purpose

Adjust the variations of each individual machine due to parts tolerance, assembly error, etc. for secondary transfer bias timing.

Procedure

1. Check and change the following NVMs.
   NVM 742-306 (Lead Regi adjustment: 81 to 105 gsm case): Note down the current value

   NOTE: *For other weights 742-305 (Up to 80 gsm), 742-307 (106 to 135 gsm), 742-308 (136 to 150 gsm), 742-309 (151 to 186 gsm), 742-310 (187 to 220 gsm), 742-311 (221 to 256 gsm), 742-312 (More than 257 gsm)*

   NVM 753-789 to 753-801 (Image Lead Adjustment): Change to 0
   NVM 753-364 (Edge Erase Amount-Lead): Change to 0 (Border Erase=0)
   NVM 753-365 (Edge Erase Amount-Trail): Change to 0 (Border Erase=0)
2. Enter DC612 Color Test Pattern Print and obtain the following test pattern.
   - Contact engine: Perform for 4C and if necessary, other contact modes
   - Select Test Pattern: Halftone
   - Select Color: K
   - Print Side: 1 Sided
   - Tray: A3 size paper storage tray
   - Procon TRC: ON
   - Object (screen): 600C
   - No. of Prints: 1 sheets

   NOTE: *The front and back, and page number are identified by the printing information on the top left of the leading side.*
   - *Example 1. <1-01>: Side 1 - Page 1*
   - *Example 2. <2-02>: Side 2 - Page 2*
3. Measure the amount of transfer failure at the leading edge of the paper with a measure. (If it is difficult to confirm the lead and trail edges, change the value of NVM 742-306 (81 to 105 gsm case) by +/-30, and adjust the position of the picture.)
4. Change the value of NVM 753-789 to 753-801, go back to 2, print the test pattern, and adjust until the bias and the lead edge of the image match.

   NOTE: *Increasing the adjustment amount +/-16 (1 step: 0.1mm), the bias timing will be shifted to the lead edge direction.*
5. When the adjustment is completed, set the value in the following NVMs.
   NVM 742-306 (Lead Regi adjustment: 81 to 105 gsm case): Current value recorded in Step 1
   NVM 753-364 (Edge Erase Amount-Lead): Change to 20 (Border Erase Default)
   NVM 753-365 (Edge Erase Amount-Trail): Change to 20 (Border Erase Default)
6. Perform Lead Regi Adjustment. (Refer to ADJ 15.6.6)

ADJ 18.1.18 Notes on Replacing Each PWB

Purpose

PWB has parts that require software installation only at the time of physical replacement and after replacement. Refer to this item and perform it before and after replacement.

Table 1

No	PWB Name	PL	Pre/Post-replacement operation
1	MK_Drive_ADC_PWB	PL 18.3	[Procedures before and after replacement] There is no problem just by physical replacement.
2	MK_EPG_ADC_PWB	PL 18.3	[Procedures before and after replacement] There is no problem just by physical replacement.
3	Fusing_ADC_PWB	PL 18.7	[Procedures before and after replacement] There is no problem just by physical replacement.
4	PH_ADC_PWB	PL 18.2	[Procedures before and after replacement] There is no problem just by physical replacement.
5	CRUM_PWB	• Toner: PL 18.1 • Drum: PL 18.3	[Procedures before and after replacement] There is no problem just by physical replacement.
6	Each CORE_PWB	• PH-CORE PWB: PL 18.2 • MK_DRV CORE PWB: PL 18.3 • MK_EPG CORE PWB: PL 18.3 • FSR/INV CORE PWB: PL 18.7	[Pre-replacement operation] Nothing specific if only the CORE board is replaced. When replacing the NVM PWB, back up NVM data using DC361. [Post-replacement operation] • CORE PWB: Since CORE PWB has the same hardware, it is necessary to download software depending on the features to be used. ADJ 18.1.2 Refer to the Software Download, and install the necessary Software. • NVM PWB: When replacing the NVM boards, do not exchange more than 2 out of 3 for the IOT-L side. If it is necessary to replace multiple NVM boards, turn on the power every time 1 is replaced, and ensure consistency of data with DC132. Restore with NVM data backed up in advance using DC361 after replacing the NVM PWB.

Table 1

No	PWB Name	PL	Pre/Post-replacement operation
7	DST PWB (IOT-L)	• DST 1 PWB: PL 18.11 • DST 3 PWB: PL 18.13 • DST 4 PWB: PL 18.11	[Pre-replacement operation] In the case of blown Fuse, identify and repair short-circuited areas. [Post-replacement operation] None specifically.
8	DST 2 PWB (IOT-R)	PL 18.7	[Pre-replacement operation] In the case of blown Fuse, identify and repair short-circuited areas. [Post-replacement operation] None specifically.
9	LED_Power Supply_PWB	PL 18.11	[Pre-replacement operation] In the case of blown Fuse, identify and repair short-circuited areas. [Post-replacement operation] None specifically.
10	HalfTone_PWB	• PL 18.14 (YM,CK) • PL 18.13 (SS)	[Procedures before and after replacement] There is no problem just by physical replacement.
11	IOT_Main_PWB	PL 18.14	[Pre-replacement operation] Make a note of each PWB version before replacement. [Post-replacement operation] Check the software version after replacement, and match the version when it is different from the version that is noted down in advance (ADJ 18.1.2)
12	SYS_PWB	PL 18.14	[Pre-replacement operation] Make a note of each PWB version before replacement. [Post-replacement operation] Check the software version after replacement, and match the version when it is different from the version that is noted down in advance (ADJ 18.1.2)
13	FLY_PWB	• FLY2,9: PL 18.7 • Other FLY: PL 18.11	[Procedures before and after replacement] There is no problem just by physical replacement.
14	Sensor_PWB	• PH1/PH2: PL 18.2 • DRV1/2: PL 18.3 • Fusing1/2: PL 18.7	[Procedures before and after replacement] There is no problem just by physical replacement.

Table 1

No	PWB Name	PL	Pre/Post-replacement operation
15	MD_PWB (Motor_Drive_PWB)	• EPG1: PL 18.3 • EPG2: PL 18.3 • DRV: PL 18.3 • PH1: PL 18.2 • PH2: PL 18.3 • FSR/INV 1: PL 18.7 • FSR/INV 2: PL 18.7	[Pre-replacement operation] In the case of blown Fuse, identify and repair short-circuited areas. [Post-replacement operation] None specifically.
16	ILS DC Poewr PWB	PL 20.2	[Pre-replacement operation] In the case of blown Fuse, identify and repair short-circuited areas. [Post-replacement operation] None specifically.
17	Motor Drive PWB	• Toner Dispense: PL 18.17 • Toner Cartridge: PL 18.17	[Procedures before and after replacement] There is no problem just by physical replacement.

ADJ 18.1.19 OS License Activation

Overview

Windows 10 only

Verifies the OS is genuine.

Activation is required in the following cases.

- When OS full recovery is performed
- When the motherboard is replaced

NOTE:*The product is activated at the time of shipment, so it is unnecessary to activate the OS during installation.*

Authentication is performed automatically while the Internet is connected, otherwise, the user authenticates by calling the Microsoft license activation center.

If you can not place a call at the machine installation site, note down "Free phone number" and "Installation ID (9 groups of numbers of 6 to 7 digits)" displayed in (5) of Step 2, go out once to make a call to the telephone number noted down to obtain the confirmation ID for the Installation ID, return to the machine installation site, and perform (8) of Step 2 onwards.

The activation procedure by telephone is descibed below.

Procedure

1. Confirmation of License Activation.

   As there are 2 ways of confirmation, they are described in the order of confirmation by command, confirmation by [System] of [Control Panel].

   - Confirmation by command
     (1) Sign in as Windows administrator.
     (2) Right-click the Windows mark at the bottom left of Windows, and click [Run] from the displayed quick access menu.

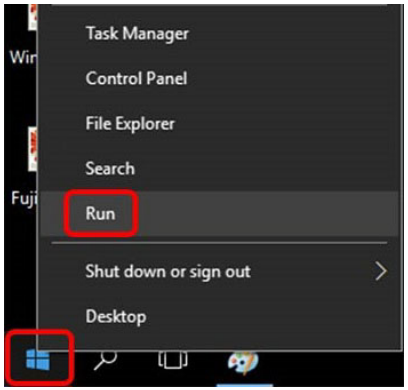


Figure 1 adj23090000-01

(3) Enter [slmgr.vbs/dli] in the name field in the [Run] window, and click [OK].

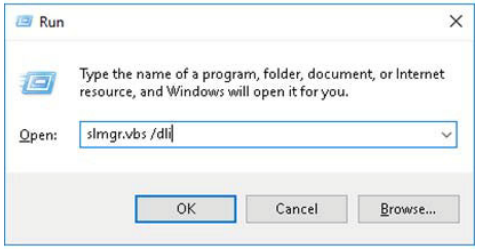


Figure 2 adj23090000-02

(4) Check [License Status] in the displayed window.
   – If license is activated

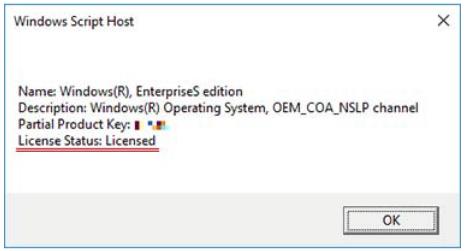


Figure 3 adj23090000-03

- Confirmation by [System] of [Control Panel]

(1) Right-click on [PC] on the desktop and select [Properties].

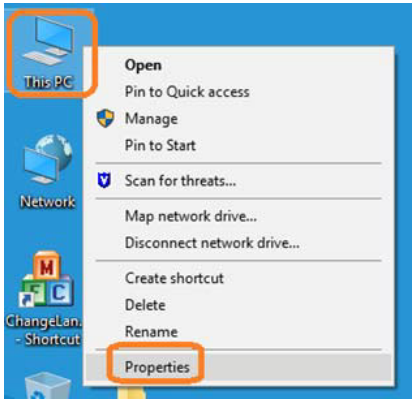


Figure 4 adj23090000-12

(2) Check "Windows license activation".

– If license is activated

Figure 5 adj23090000-13

2. If license is not activated, perform license activation.
   (1) Sign in as Windows administrator.
   (2) Right-click the Windows mark at the bottom left of Windows, and click [Run] from the displayed quick access menu.

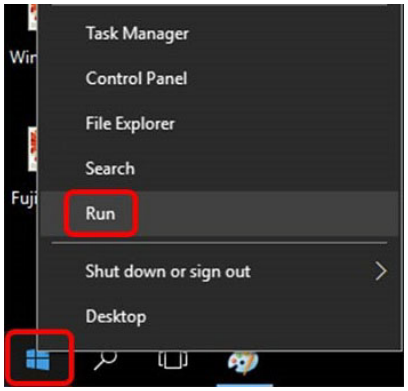


Figure 6 adj23090000-01

   (3) Enter [slui.exe 4] in the name field in the [Run] window, and click [OK].

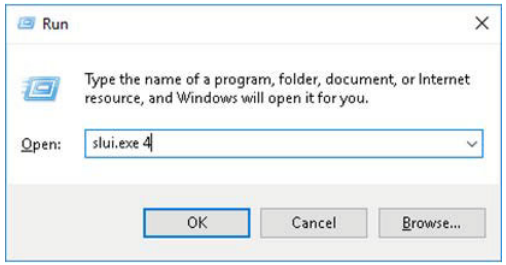


Figure 7 adj23090000-04

   (4) Click on the list in the "Select your country or region" window, select the appropriate region, and click "Next".

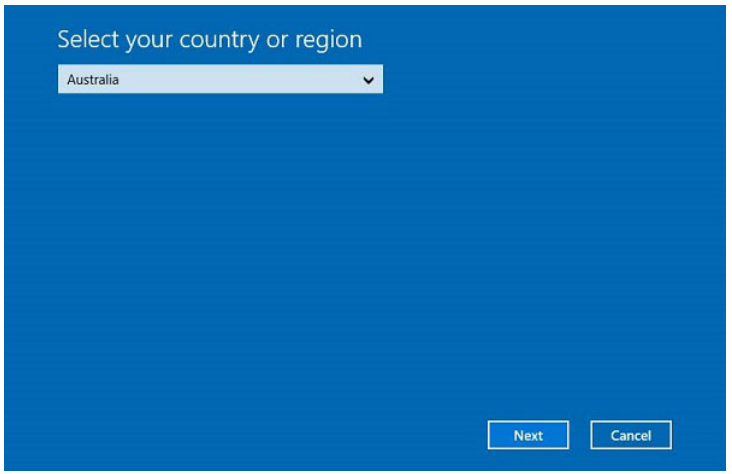


Figure 8 adj23090000-05

   (5) Make a call to the displayed phone number.
   (This is sample view when select Australia.)

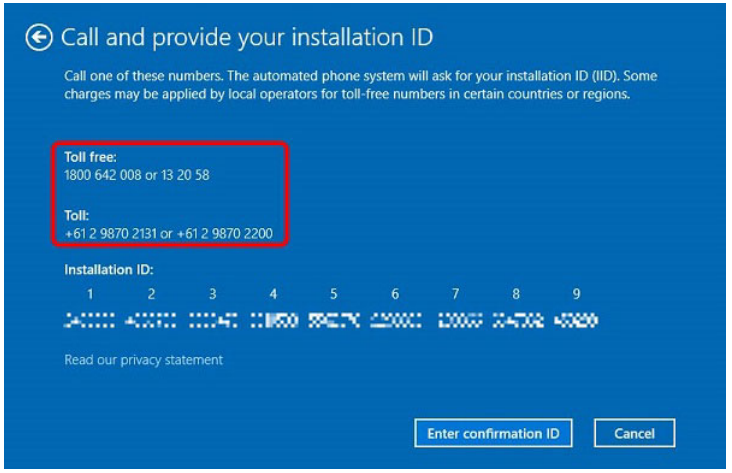

Call and provide your installation ID
Call one of these numbers. The automated phone system will ask for your installation ID (IID). Some charges may be applied by local operators for toll-free numbers in certain countries or regions.
Toll free:
1800 642 008 or 13 20 58
Toll:
+61 2 9870 2131 or +61 2 9870 2200
Installation ID:
1 2 3 4 5 6 7 8 9
Read our privacy statement
Enter confirmation ID
Cancel

Figure 9 adj23090000-06

   (6) Respond with push tone according to the telephone guidance.

   NOTE:*Conversation and input examples are described at the end of the procedure.*

   (7) When you enter the Installation ID (9 groups of numbers of 6 to 7 digits), the confirmation ID will be read out to you, so note it down.

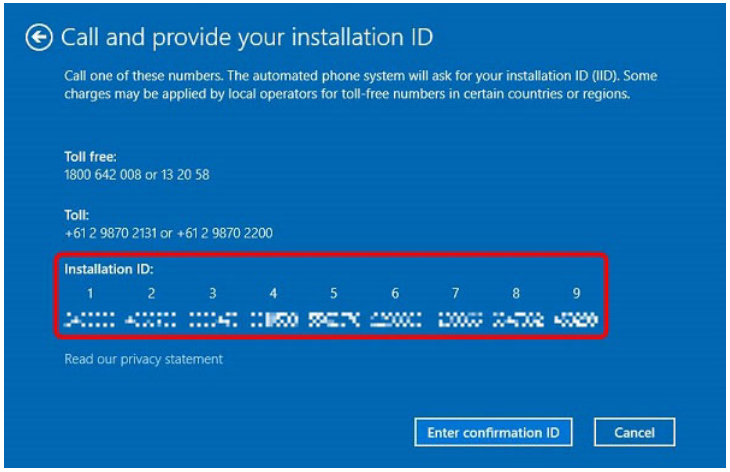

Call and provide your installation ID
Call one of these numbers. The automated phone system will ask for your installation ID (IID). Some charges may be applied by local operators for toll-free numbers in certain countries or regions.
Toll free:
1800 642 008 or 13 20 58
Toll:
+61 2 9870 2131 or +61 2 9870 2200
Installation ID:
1 2 3 4 5 6 7 8 9
Read our privacy statement
Enter confirmation ID
Cancel

Figure 10 adj23090000-07

(8) Click [Enter confirmation ID] in the Windows Activation window.

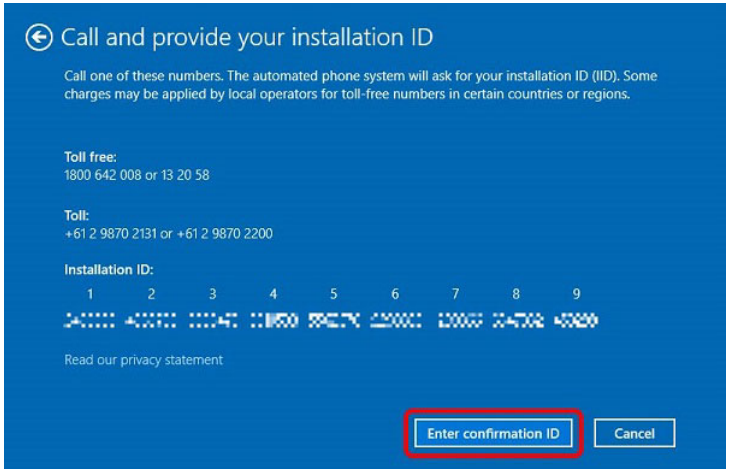

Call and provide your installation ID
Call one of these numbers. The automated phone system will ask for your installation ID (IID). Some charges may be applied by local operators for toll-free numbers in certain countries or regions.
Toll free:
1800 642 008 or 13 20 58
Toll:
+61 2 9870 2131 or +61 2 9870 2200
Installation ID:
1 2 3 4 5 6 7 8 9
Read our privacy statement
Enter confirmation ID
Cancel

Figure 11 adj23090000-08

(9) Enter the confirmation ID you noted down in the [Enter confirmation ID] window, and click [Activate Windows].

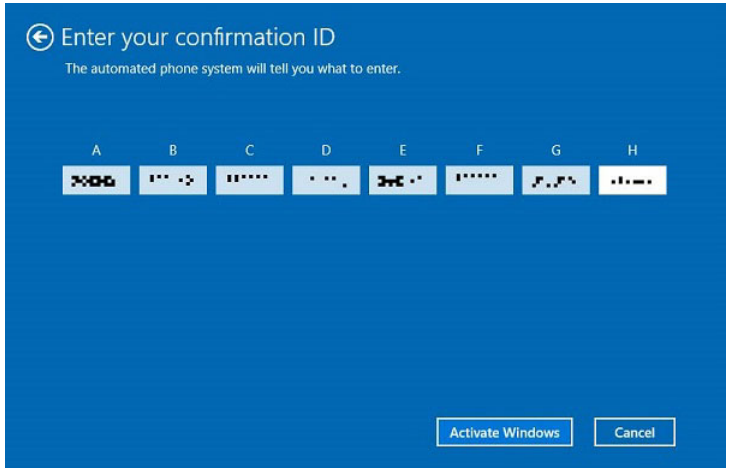


Figure 12 adj23090000-09

(10) Select [Close] to close the window when “Thanks, you’re all done.” is displayed.

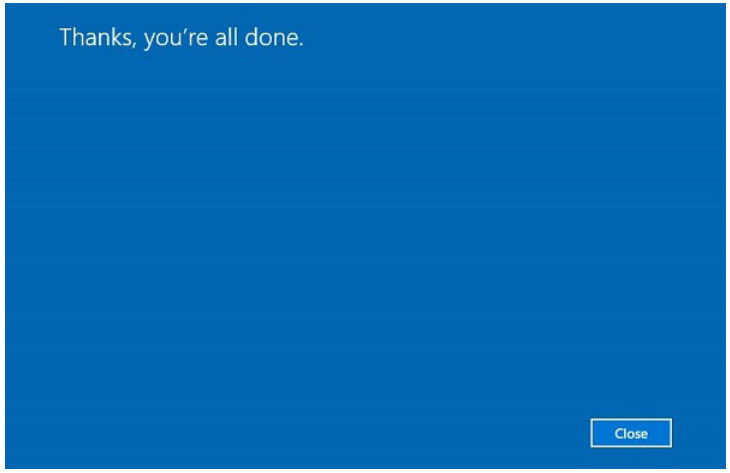


Figure 13 adj23090000-10

(11) Confirm that license activation is completed according to Step 1.

Response/input example by phone

Table 1

Order	Call destination response	Input number
input conditions		
1	Language	"[as you like]"
2	Product	"1"
3	Windows 10	"1"
4	Windows 10 Upgrade	"2"
5	Product Key	"2"
6	License Information	"2"
input Install ID		
7	Install ID 1	"[7 digit]"
8	Install ID 2	"[7 digit]"
9	Install ID 3	"[7 digit]"
10	Install ID 4	"[7 digit]"
11	Install ID 5	"[7 digit]"
12	Install ID 6	"[7 digit]"
13	Install ID 7	"[7 digit]"
14	Install ID 8	"[7 digit]"
15	Install ID 9	"[7 digit]"
make a note of Confirm ID		
16	Confirm ID A	"1" [6 digit]
17	Confirm ID B	"1" [6 digit]
18	Confirm ID C	"1" [6 digit]
19	Confirm ID D	"1" [6 digit]
20	Confirm ID E	"1" [6 digit]
21	Confirm ID F	"1" [6 digit]
22	Confirm ID G	"1" [6 digit]
23	Confirm ID H	"1" [6 digit]
Complete		

ADJ 18.1.20 DC805 Cooling Module BeltSteering Information

Purpose

- Graph the location information of Belt and Walk Motor Position for the purpose of grasping the state of the cooling device in the market, isolating the cause when Limit Fail occurs, setting the adjustment contents, adjustment amount.

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC805.
3. DC805 Cooling Device Belt Steering Information screen is displayed. (Figure 1)
   [Select/Check with [Execute].] message is displayed.

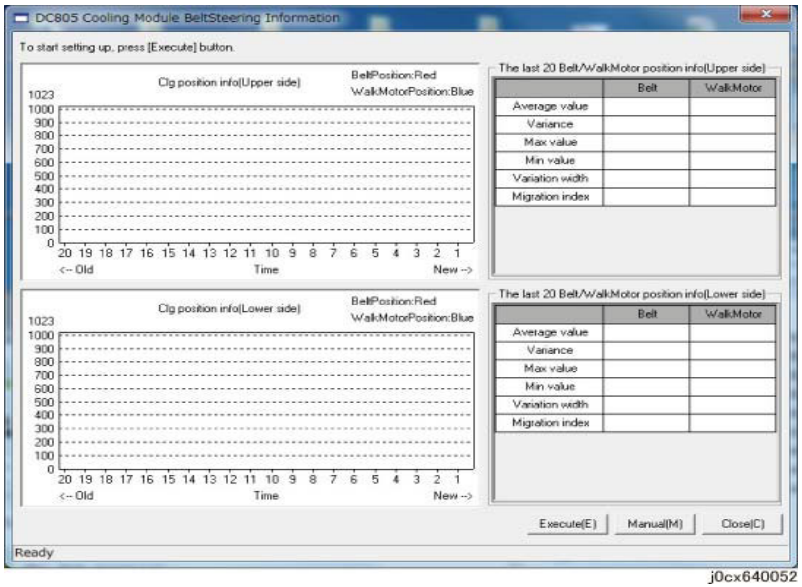


Figure 1 j0cx640052

4. Retrieval/display of NVM information and graphing
   Click [Execute] according to the message.
   (1) If completed successfully, the respective values of Upper/Lower for Belt/WalkMotor Upper/Lower from the retrieved NVM information are displayed in the position information. The following applies for details of the displayed data.
   - Average Value: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Average Value
   - Dispersion: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Dispersion
   - Maximum Value: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Maximum Value

- Minimum Value: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Minimum Value
- Range: Maximum value to Minimum value
- Movement Index: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Movement Index

NOTE: *For retrieval of NVM information, obtain the NVM value of Clg Position Information Acquisition (NVM [999-001] - [999-101]). Refer to* 6.3.8 *NVM 999 RMT List for the details.*

(2) The respective values of Upper/Lower for Belt/WalkMotor Upper/Lower from the retrieved NVM information are graphed as position information. The details of graph display are as follows.

- Display in a graph the BeltPosition and WalkMotorPosition for the last 20 times.
- All the data on the upper side are plotted together in a single graph.
- All the data on the lower side are also plotted together in a single graph.
- BeltPosition and WalkMotorPosition differs in point color or shape.
- The vertical axis is from 0 to 1023, and grid lines are displayed every 100.
- The horizontal axis shows the first time (the latest data) to the 20th time (the oldest data), the 20th time on the left side and the 1st time on the right side.

5. Click the [Manual] button to display the document. According to the instructions of the document, confirm the isolation of the cause at the occurrence of Upper / Lower Limit Fail, check the adjustment content, adjustment amount and make adjustment.

[In the case of Lower Limit Fail (010-353, 010-355) occurrence]

(1) Run 30 sheets of A3 Dup.

(2) Execute DC805 and check the Cooling Device Belt Steering information.

(3) Perform adjustment based on the following table.

Table 1

Fail Code	010-353		010-355	
Fail	In Limit Fail		Out Limit Fail	
Walk Motor Position average value	730 or higher		30 or lower	
Belt Position (red)	Monotonically decreasing	Monotonically increasing	Monotonically decreasing	Monotonically increasing
Belt Position movement index	-	70 or lower	70 or lower	-
Adjustment amount	F 1.5 (Figure 2)	F 1 (Figure 2)	R 1 (Figure 3)	R 1.5 (Figure 3)

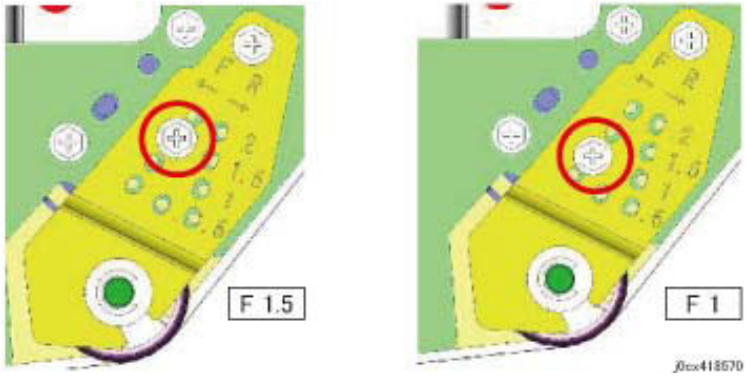


Figure 2 j0cx418570

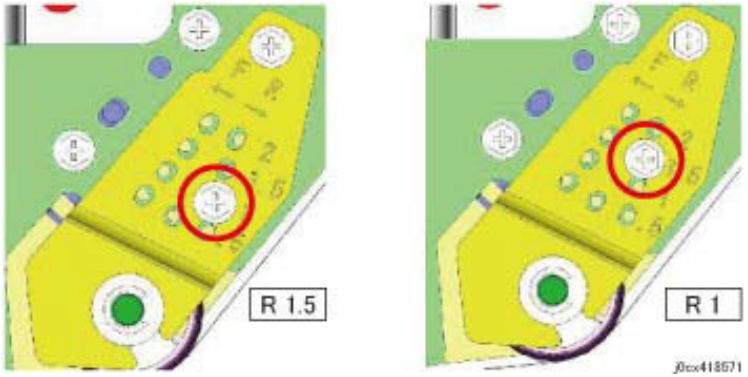


Figure 3 j0cx418571

(4) Run 30 sheets of A3 Dup.

(5) Confirm with DC805 Cooling Device Belt Steering Information that 30 <= Walk Motor Position average value <= 730.

[In the case of Upper Limit Fail (010-352, 010-354) Occurrence]

(1) Run 30 sheets of A3 Dup.

(2) Execute DC805 and check the Cooling Device Belt Steering information.

(3) Perform adjustment based on the following table.

Table 2

Fail Code	010-352	010-354
Fail	In Limit Fail	Out Limit Fail
Walk Motor Position average value	730 or higher	30 or lower

Table 2

Belt Position (red)	Monotonically decreasing	Monotonically increasing	Monotonically increasing	Monotonically decreasing
Belt Position movement index	-	30 or lower	30 or lower	-
Adjustment amount	-1.5 (Figure 4)	-1 (Figure 4)	1 (Figure 5)	1.5 (Figure 5)

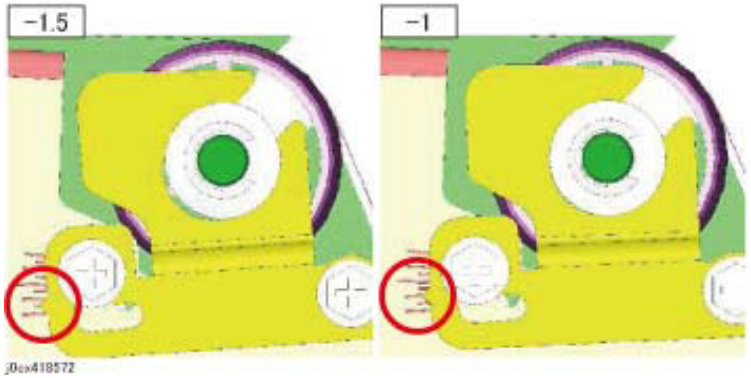


Figure 4 j0cx418572

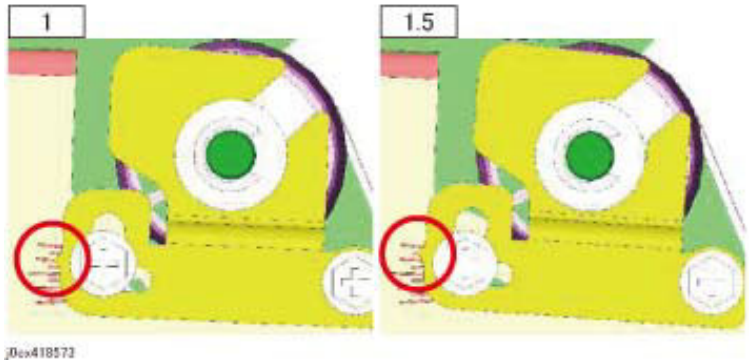


Figure 5 j0cx418573

(4) Run 30 sheets of A3 Dup.

(5) Confirm with DC805 Cooling Device Belt Steering Information that 30 <= Walk Motor Position average value <= 730.

6. After DC805 Cooling Device Belt Steering Information is completed, select [Close] to return to the IQ Adjustment screen.

ADJ 18.1.21 DC807 White ADC Sensitivity Correction Cycle

Purpose

- Automatically adjusts ADC sensor sensitivity used for white toner control by using standard paper (black standard paper) or customer-selected paper (user paper: black paper) at shipment, installation adjustment, or customer adjustment.

Overview

- Correct individual differences in ADC sensor sensitivity used for white toner control.
- Select standard paper or user paper as adjustment target.
- When ADC sensitivity correction is executed, a colorimetric chart is output from the selected tray and measured with ILS. The ADC sensor sensitivity is automatically adjusted based on the colorimetric result.
- The key operator can execute this feature from Tools.

NOTE: *With the execution of DC807 White ADC Sensitivity Correction Cycle, substitution can be done in DC800 ADC Sensor Setup Adjustment Mode [White].*

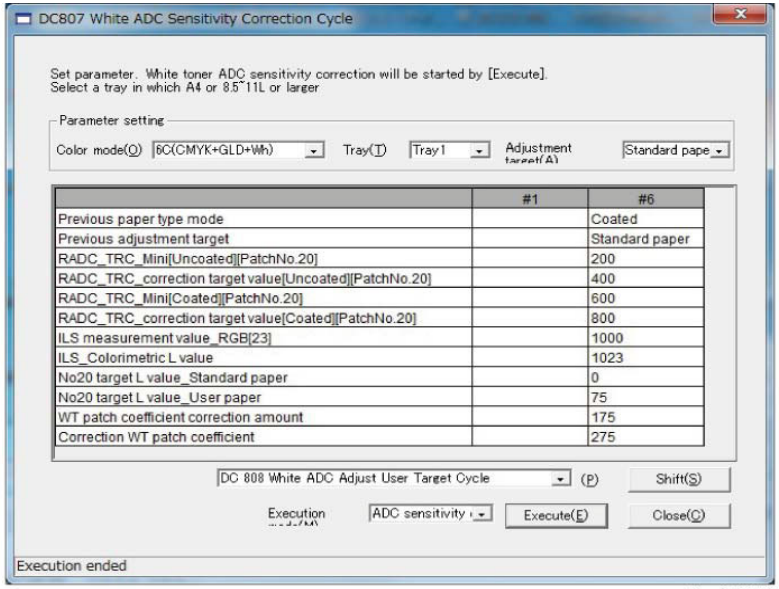
NOTE:

- *Do not execute if there is no black standard paper or black paper selected by the customer (recommended paper is specified separately). Further, for black standard paper, use Kishu color bond black extra heavyweight paper.*
- *After adjusting the ADC sensor sensitivity used for white toner control using this feature, do not perform adjustment with Adjustment Mode [White] of DC800 ADC Sensor Setup as the adjusted value set by the feature will be overwritten.*
- *If the ADC Sensor is replaced, perform the procedure after the replacement.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC807.
3. DC807 White ADC Sensitivity Correction Cycle screen is displayed. (Figure 1)

   [Set parameter. White toner ADC sensitivity correction will be started by [Execute]. Select a tray in which A4 or 8.5 x 11L or larger, black paper is loaded.] is displayed together with the screen display parameters and the default value of the white toner ADC sensitivity correction. (Table 1)



j0cx640056

Figure 1 j0cx640056

Table 1 Display/Setting Item

Display/Setting Item	Display range
Previous Paper Type Mode	0: Uncoated 1: Coated
Previous Adjustment Target	0: Standard Paper 1: User Paper
RADC_TRC_Mini [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Mini [Coated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Coated] [PatchNo.20]	0 to 1023
ILS Measurement Value_RGB[23]	0 to 1023
ILS_ Colorimetric L Value	0 to 1023
No 20 Target L Value_Standard Paper	0 to 1023
No 20 Target L Value_User Paper	0 to 1023
WT Patch Coefficient Correction Amount	-1024 to 1023
Correction WT Patch Coefficient	0 to 1023

4. Select the color mode. Recommendation is 6C.

(1) Color mode: Select the setting items from the following.

Table 2 Setting Data

Setting Item	Description
6C	Select 6C (CMYK + GLD or SLV or CLR or Wh + Wh) (Default).
5C#1	Select 5C#1 (CMYK+Wh).
5C#6	Select 5C#6 (CMYK+Wh).
1C#1	Select 1C#1 (Wh).
1C#6	Select 1C#6 (Wh).

- Color mode that does not include White engine can not be selected.
- Default in the order of 6C -> 5C#1 -> 5C#6 is determined based on the installed engine.

5. Select the adjustment target, standard paper (default) or user paper. When using black standard paper, select [Standard Paper]. When adjusting with DC808 White ADC Adjust User Target Set Cycle the target which is set, select [User Paper].

NOTE:

- *To perform this adjustment for the first time, select [Standard Paper].*
- *Since this adjustment is made so that the key operator can repeat it from Tools, decide with the customer whether to use standard paper or user paper for adjustment in future.*
- *In future, when adjusting with user paper, immediately after adjustment with standard paper, set the user paper target with DC808 White ADC Adjust User Target Set Cycle.*

6. Select a tray. Set 1 or more sheets of paper (black paper) corresponding to the adjustment target in the tray and select it. Tray options are Tray 1 (Default) to Tray 6, or MBT.
7. Select the execution mode. Select [ADC Sensitivity Correction] and select [Execute]. (Figure 1)
   Options for the execution mode are ADC Sensitivity Correction (Default), Test Print, or Initialization.
8. 1 sheet of colorimetric chart (PG No. 385 CTRACS Pattern (for correction/6C/ILS)) is output and the ADC sensor sensitivity used for white toner control is automatically adjusted. The display of the set values on the screen is updated.
9. To check the current state or adjustment result, select the execution mode, [Test print] and select [Execute]. (Figure 2)
   - 1 sheet of single sided PG No.386 CTRACS Pattern (for check/6C/ILS) will be printed.

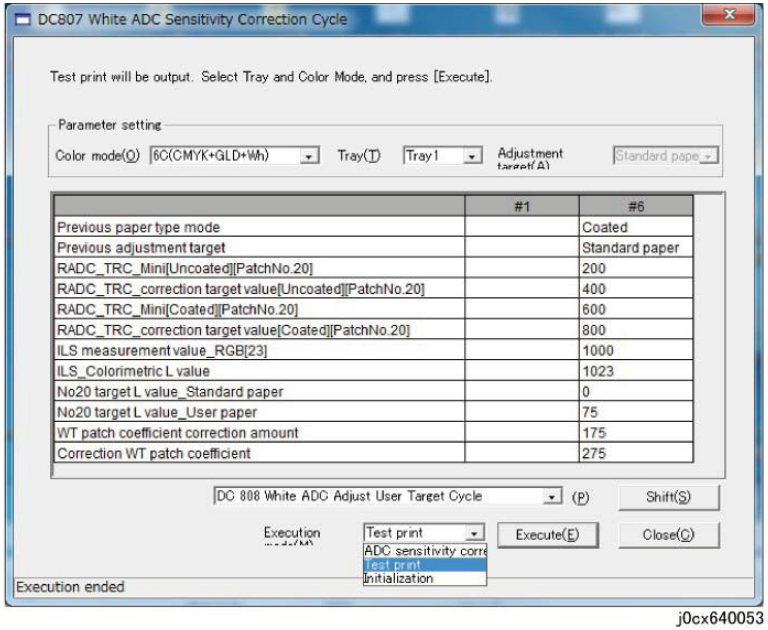


Figure 2 j0cx640053

10. To initialize the adjustment result, select the execution mode, [Initialization] and select [Execute].
11. When transitioning to DC808 White ADC Adjust User Target Set Cycle, select [Shift], and the DC808 White ADC Adjust User Target Set Cycle screen will be displayed.

ADJ 18.1.22 DC808 White ADC Adjust User Target Set Cycle

Purpose

- A user paper target for automatically adjusting the ADC sensor sensitivity used for white toner control is set using customer selected paper (user paper: black paper) at the time of customer adjustment.

Overview

- Set the target when performing DC807 White ADC Sensitivity Correction Cycle with adjustment target, [User Paper].
- When User Paper Target Setting is executed, a colorimetric chart is output from the selected tray and measured with ILS. The user paper target based on the colorimetric result is automatically set.

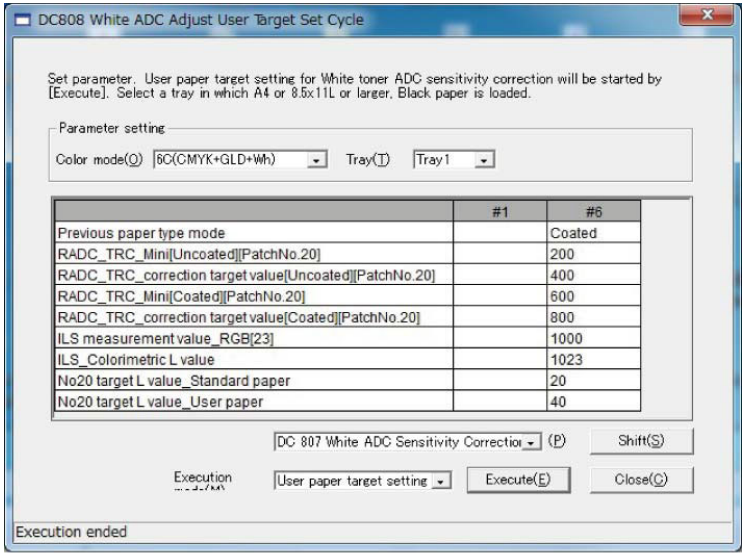
NOTE:

- *If there is no customer-selected black paper, do not execute it.*
- *Before executing this feature, execute DC807 White ADC Sensitivity Correction Cycle using standard paper with the adjustment target, [Standard Paper]. Further, for black standard paper, use Kishu color bond black extra heavyweight paper.*
- *If the ADC Sensor is replaced, perform the procedure after the replacement.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC808.
3. The DC808 White ADC Adjust User Target Set Cycle screen is displayed. (Figure 1)

   [Set parameter. User paper target setting for White toner ADC sensitivity correction will be started by [Execute]. Select a tray in which A4 or 8.5 x 11L or larger, black paper is loaded.] is displayed together with the screen display parameters and the default value of the user paper target setting for white toner ADC sensitivity correction. (Table 1)


DC808 White ADC Adjust User Target Set Cycle
Set parameter. User paper target setting for White toner ADC sensitivity correction will be started by [Execute]. Select a tray in which A4 or 8.5x11L or larger, Black paper is loaded.
Parameter setting
Color mode(O) 6C(CMYK+GLD+Wh)
Tray(T) Tray1
#1 #6
Previous paper type mode Coated
RADC_TRC_Mini[Uncoated][PatchNo.20] 200
RADC_TRC_correction target value[Uncoated][PatchNo.20] 400
RADC_TRC_Mini[Coated][PatchNo.20] 600
RADC_TRC_correction target value[Coated][PatchNo.20] 800
ILS measurement value_RGB[23] 1000
ILS_Colorimetric L value 1023
No20 target L value_Standard paper 20
No20 target L value_User paper 40
DC 807 White ADC Sensitivity Correctio (P)
Shift(S)
Execution
User paper target setting
Execute(E)
Close(C)
Execution ended

j0cx640058

Figure 1 j0cx640058

Table 1 Display/Setting Item

Display/Setting Item	Display range
Last Paper Type Mode	0: Uncoated 1: Coated
RADC_TRC_Mini [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Mini [Coated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Coated] [PatchNo.20]	0 to 1023
ILS Measurement Value_RGB[23]	0 to 1023
ILS_ Colorimetric L Value	0 to 1023
No 20 Target L Value_Standard Paper	0 to 1023
No 20 Target L Value_User Paper	0 to 1023

4. Select the color mode. Recommendation is 6C.
   (1) Color mode: Select the setting items from the following.

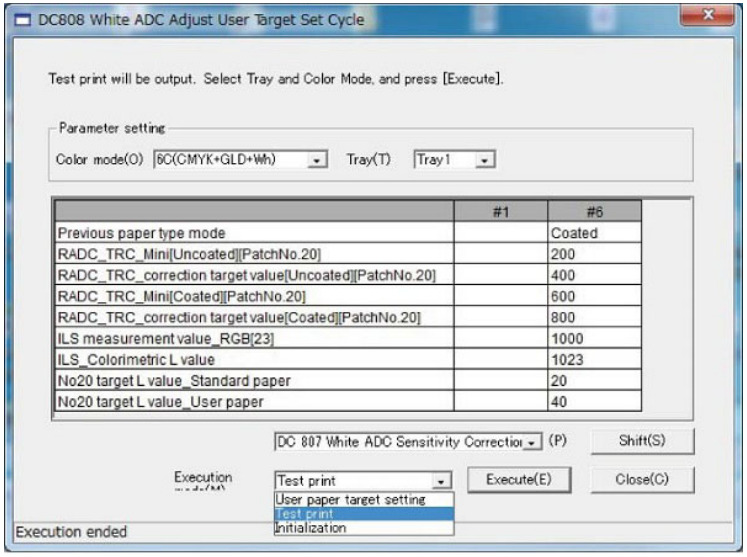
Table 2 Setting Data

Setting Item	Description
6C	Select 6C (CMYK + GLD or SLV or CLR or Wh + Wh) (Default).
5C#1	Select 5C#1 (CMYK+Wh).
5C#6	Select 5C#6 (CMYK+Wh).
1C#1	Select 1C#1 (Wh).
1C#6	Select 1C#1 (Wh).

- Color mode that does not include White engine can not be selected.
- Default in the order of 6C -> 5C#1 -> 5C#6 is determined based on the installed engine.

NOTE: *When white is installed in both #1 engine and #6 engine, select 6C.*
ADC sensitivity correction amounts are calculated for each engine, so if only one engine is activated during ADC sensitivity correction, the correction amount for the inactive engine will not be calculated.

5. Select a tray. Set 1 or more sheets of customer-selected paper (black paper) corresponding to the adjustment target in the tray and select it. Tray options are Tray 1 (Default) to Tray 6, or MBT.
6. Select the execution mode. Select [User paper target setting] and select [Execute]. (Figure 1)
   Options for the execution mode are User Paper Target Setting (Default), Test Print, or Initialization.
7. 1 sheet of colorimetric chart (PG No. 385 CTRACS Pattern (for correction/6C/ILS)) is output and the user paper target for automatically adjusting the ADC sensor sensitivity used for white toner control is set. Furthermore, the display of the set values on the screen is updated.
8. To check the current state or adjustment result, select the execution mode, [Test print] and select [Execute]. (Figure 2)
   - 1 sheet of single sided PG No.386 CTRACS Pattern (for check/6C/ILS) will be printed.



j0cx640059

Figure 2 j0cx640059

9. To initialize the user paper target, select the execution mode, [Initialization] and select [Execute].

10. When transitioning to DC807 White ADC Sensitivity Correction Cycle, select [Shift], and the DC807 White ADC Sensitivity Correction Cycle screen will be displayed.

ADJ 18.1.23a White ADC Sensitivity Adjustment (Color Measurement: ILS)

ADC Sensitivity Adjustment Flow

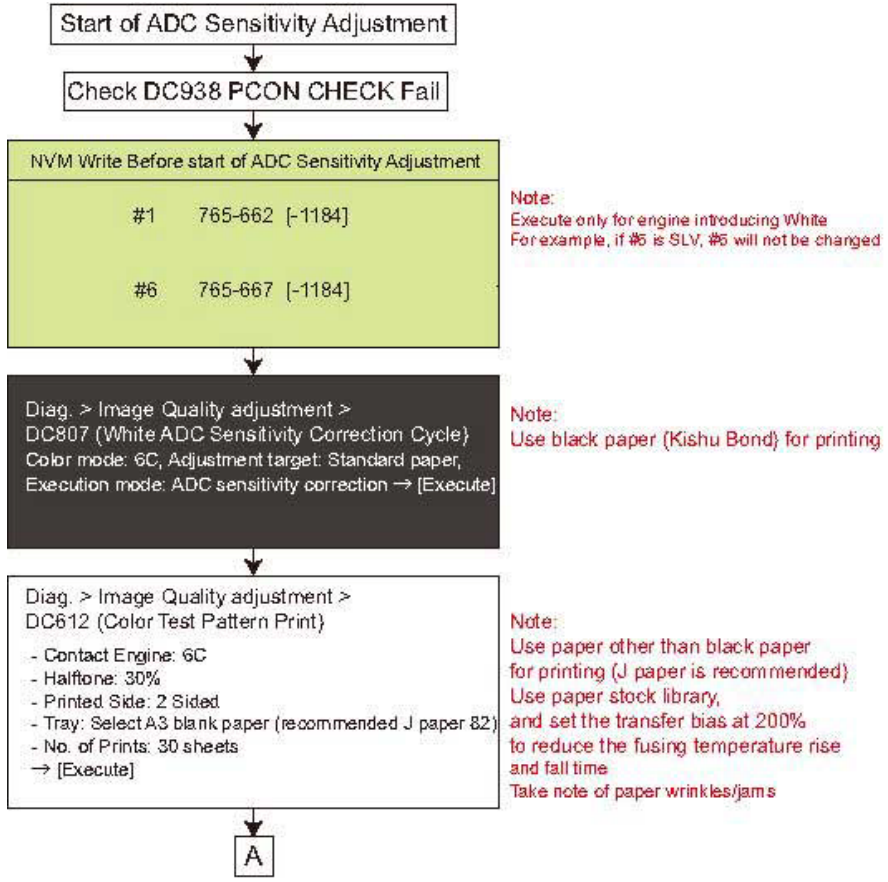

Start of ADC Sensitivity Adjustment
Check DC938 PCON CHECK Fail
NVM Write Before start of ADC Sensitivity Adjustment
#1 765-662 [-1184]
#6 765-667 [-1184]
Note:
Execute only for engine introducing White
For example, if #5 is SLV, #5 will not be changed
Diag. > Image Quality adjustment >
DC807 (White ADC Sensitivity Correction Cycle)
Color mode: 6C, Adjustment target: Standard paper,
Execution mode: ADC sensitivity correction → [Execute]
Note:
Use black paper (Kishu Bond) for printing
Diag. > Image Quality adjustment >
DC612 (Color Test Pattern Print)
- Contact Engine: 6C
- Halftone: 30%
- Printed Side: 2 Sided
- Tray: Select A3 blank paper (recommended J paper 82)
- No. of Prints: 30 sheets
→ [Execute]
Note:
Use paper other than black paper
for printing (J paper is recommended)
Use paper stock library,
and set the transfer bias at 200%
to reduce the fusing temperature rise
and fall time
Take note of paper wrinkles/jams
A

Figure 1 dar418518

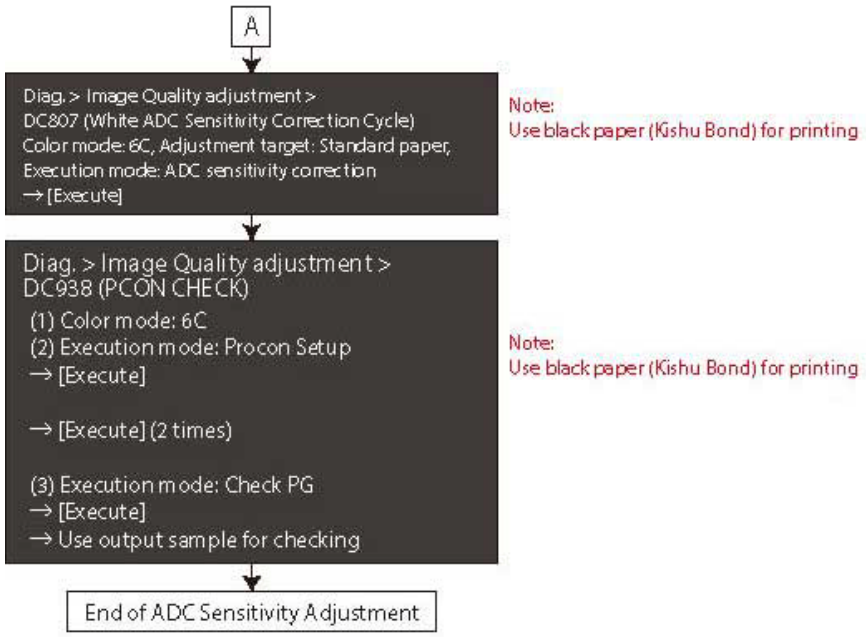

A
Diag. > Image Quality adjustment >
DC807 (White ADC Sensitivity Correction Cycle)
Color mode: 6C, Adjustment target: Standard paper,
Execution mode: ADC sensitivity correction
→ [Execute]
Note:
Use black paper (Kishu Bond) for printing
Diag. > Image Quality adjustment >
DC938 (PCON CHECK)
(1) Color mode: 6C
(2) Execution mode: Procon Setup
→ [Execute]
→ [Execute] (2 times)
(3) Execution mode: Check PG
→ [Execute]
→ Use output sample for checking
Note:
Use black paper (Kishu Bond) for printing
End of ADC Sensitivity Adjustment

Figure 2 dar418519

Procedure

1. Check Fail with [DC938 PROCON CHECK] (ADJ 18.1.7). Go to Chapter 2 Image Quality Trouble-shooting to repair the trouble in the case of NG.
2. Enter DC131 NVM Read / Write and change the following NVM.
   - Change #1 NVM [765-662] (delta ATC Target Vdeve Correction Amount [#1]) to [-1184].
   - Change #1 NVM [780-838] (delta RADC Target Humidity Correction Coefficient [#1] [Negative]) to [0].
   - Change #6 NVM [765-667] (delta ATC Target Vdeve Correction Amount [#6]) to [-1184].
   - Change #6 NVM [780-848] (delta RADC Target Humidity Correction Coefficient [#6] [Negative]) to [0].

   NOTE: *Execute only for the engine that is introducing White. For example, if #6 is SLV, #6 will not be changed.*
3. Start up the PC Diag, select [IQ adjustment], and click [DC807 White ADC Sensitivity Correction Cycle].
4. Select the following from the pull-down in DC807 White ADC Sensitivity Correction Cycle screen. (Figure 3)
   (1) Color mode (Figure 3)
   - When White Toner is installed in #1 engine, 6C and 5C#1 can also be selected.
   - When White Toner is installed in #6 engine, 6C and 5C#6 can also be selected.
   - When White is installed in both #1 engine and #6 engine, select 6C.

   (2) Tray: Select a Tray loaded with Black paper (Kishu Bond) standard paper. (Figure 3)
   (3) Adjustment target: Select Standard paper. (Figure 3)
   (4) Execution mode: Select ADC sensitivity correction. (Figure 3)

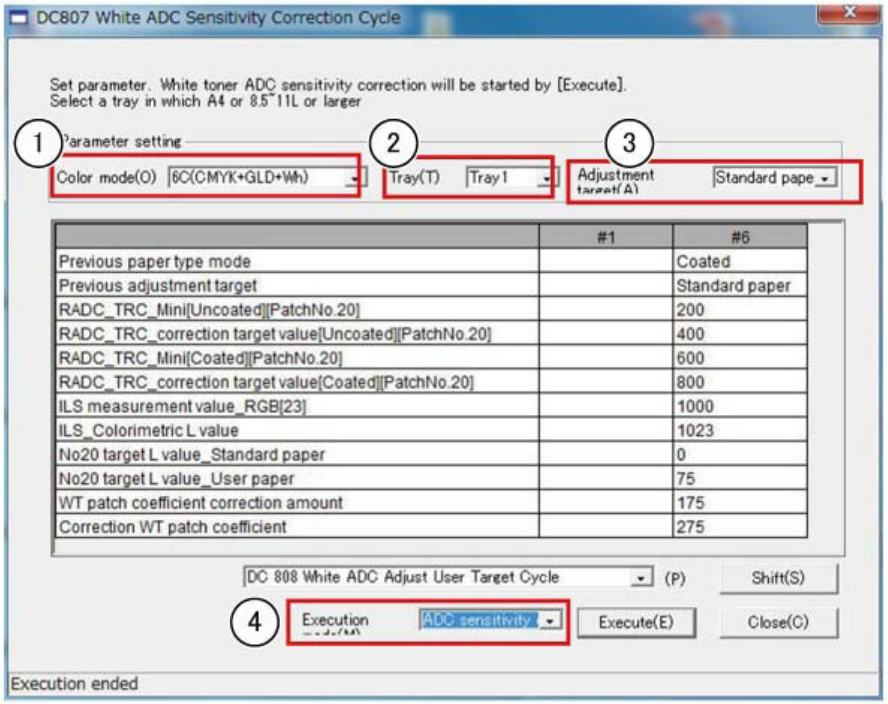


Figure 3 e0cx418605

5. Click [Execute] in DC807 White ADC Sensitivity Correction Cycle screen.
   The printed test chart is automatically measured with ILS, and ADC sensitivity correction amounts based on the measurement values will be set.
6. Click [Close].

   NOTE: *ADC sensitivity correction amounts are calculated for each engine, so if only one engine is activated during ADC sensitivity correction, the correction amount for the inactive engine will not be calculated.*
7. Enter [DC612 Color Test Pattern Print] (6.3.5.1), and click [Execute] with the following settings.
   - Contact Engine: 6C
   - Halftone: 30%
   - Printed Side: 2 Sided
   - Tray: A3 blank paper (recommended J paper)

- No. of Prints: 30 sheets

8. Enter DC807 White ADC Sensitivity Correction Cycle, and perform steps 4 to 6.
9. Enter DC131 NVM Read / Write and change the following NVM.
   - Change #1 NVM [780-838] (delta RADC Target Humidity Correction Coefficient [#1] [Negative]) to [652].
   - Change #6 NVM [780-848] (delta RADC Target Humidity Correction Coefficient [#6] [Negative]) to [528].
10. Enter [DC938: PROCON CHECK] (ADJ 18.1.7) and perform the following.
    (1) Set Color mode to [6C], Execution mode to [Procon Setup], and click [Execute].
    (2) Click [Execute] again.

    NOTE: *[Execute] will be executed 2 times in total.*

    (3) Set Execution mode to [Check PG], and click [Execute].

    NOTE: *Use black paper (Kishu Bond) for printing.*

11. End of ADC Sensitivity Adjustment

ADJ 18.1.23b White ADC Sensitivity Adjustment (Color Measurement: ES-3000)

ADC Sensitivity Adjustment Flow

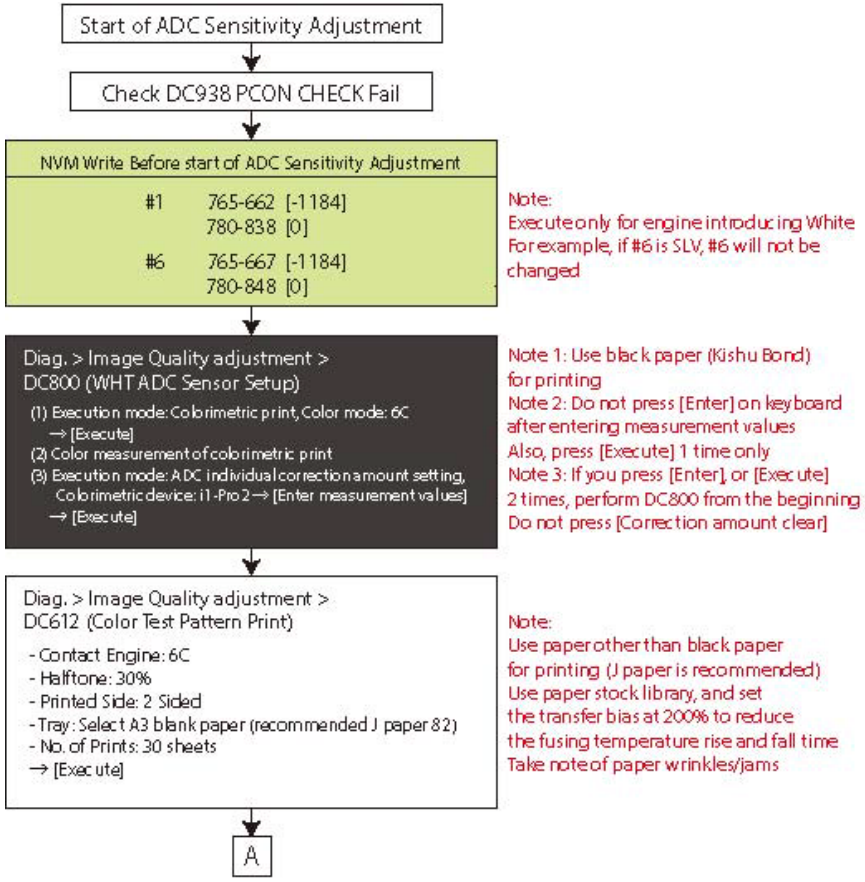

Start of ADC Sensitivity Adjustment
Check DC938 PCON CHECK Fail
NVM Write Before start of ADC Sensitivity Adjustment
#1 765-662 [-1184]
780-838 [0]
#6 765-667 [-1184]
780-848 [0]
Note:
Execute only for engine introducing White
For example, if #6 is SLV, #6 will not be changed
Diag. > Image Quality adjustment >
DC800 (WHT ADC Sensor Setup)
(1) Execution mode: Colorimetric print, Color mode: 6C
→ [Execute]
(2) Color measurement of colorimetric print
(3) Execution mode: ADC individual correction amount setting,
Colorimetric device: i1-Pro 2 → [Enter measurement values]
→ [Execute]
Note 1: Use black paper (Kishu Bond) for printing
Note 2: Do not press [Enter] on keyboard after entering measurement values
Also, press [Execute] 1 time only
Note 3: If you press [Enter], or [Execute] 2 times, perform DC800 from the beginning
Do not press [Correction amount clear]
Diag. > Image Quality adjustment >
DC612 (Color Test Pattern Print)
- Contact Engine: 6C
- Halftone: 30%
- Printed Side: 2 Sided
- Tray: Select A3 blank paper (recommended J paper 82)
- No. of Prints: 30 sheets
→ [Execute]
Note:
Use paper other than black paper for printing (J paper is recommended)
Use paper stock library, and set the transfer bias at 200% to reduce the fusing temperature rise and fall time
Take note of paper wrinkles/jams
A

Figure 1 e0kol418537

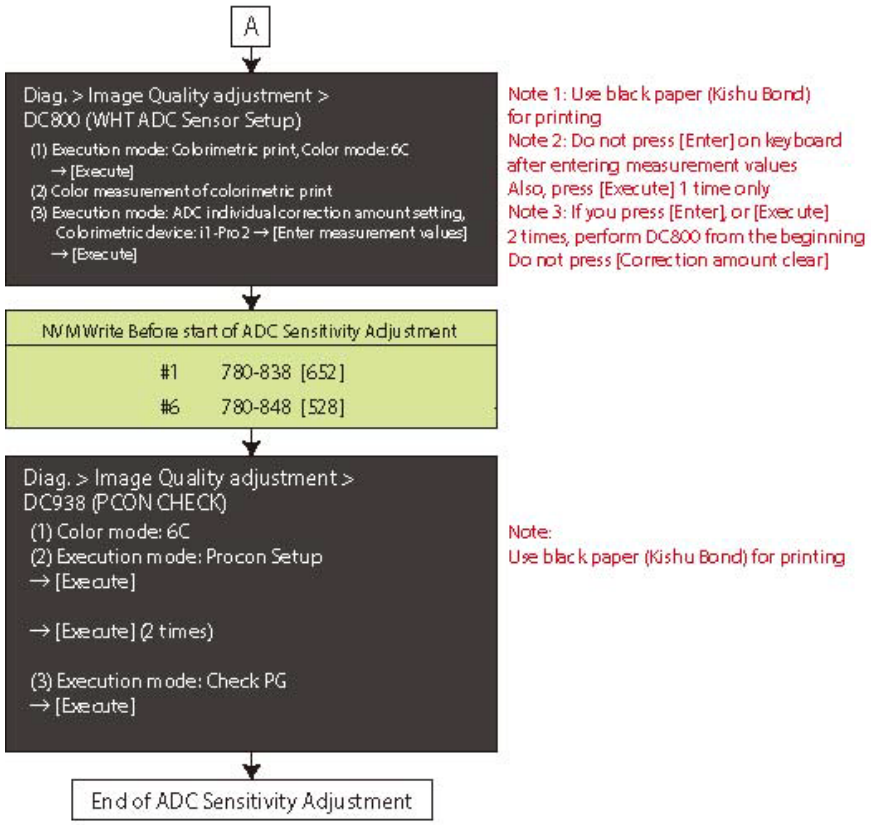

A
Diag. > Image Quality adjustment >
DC800 (WHT ADC Sensor Setup)
(1) Execution mode: Colorimetric print, Color mode: 6C
→ [Execute]
(2) Color measurement of colorimetric print
(3) Execution mode: ADC individual correction amount setting,
Colorimetric device: i1-Pro 2 → [Enter measurement values]
→ [Execute]
Note 1: Use black paper (Kishu Bond) for printing
Note 2: Do not press [Enter] on keyboard after entering measurement values
Also, press [Execute] 1 time only
Note 3: If you press [Enter], or [Execute] 2 times, perform DC800 from the beginning
Do not press [Correction amount clear]
NVM Write Before start of ADC Sensitivity Adjustment
#1 780-838 [652]
#6 780-848 [528]
Diag. > Image Quality adjustment >
DC938 (PCON CHECK)
(1) Color mode: 6C
(2) Execution mode: Procon Setup
→ [Execute]
→ [Execute] (2 times)
(3) Execution mode: Check PG
→ [Execute]
Note:
Use black paper (Kishu Bond) for printing
End of ADC Sensitivity Adjustment

Figure 2 e0kol418538

Procedure

1. Check Fail with [DC938 PROCON CHECK] (ADJ 18.1.7). Go to Chapter 2 Image Quality Troubleshooting to repair the trouble in the case of NG.
2. Enter DC131 NVM Read / Write and change the following NVM value.
   - Change #1 NVM [765-662] (delta ATC Target Vdeve Correction Amount [#1]) to [-1184].
   - Change #1 NVM [780-838] (delta ADC Target Humidity Correction Coefficient [#1] [Negative]) to [0].
   - Change #6 NVM [765-667] (delta ATC Target Vdeve Correction Amount [#6]) to [-1184].
   - Change #6 NVM [780-848] (delta ADC Target Humidity Correction Coefficient [#6] [Negative]) to [0].

   NOTE: *Execute only for the White engine to be introduced. For example, if #6 is SLV, #6 will not be changed.*
3. Start up the PC-Diag, select [IQ adjustment], and click [DC800 ADC Sensor Setup].
4. Select [White] from the [Adjustment mode] pull-down in DC800 ADC Sensor Setup screen. (Figure 3)
5. Form the bottom pull-down, select [Colorimetric print], set the Tray, Color Mode in the Parameter setting column as follows, then click [Execute]. (Figure 3)
   - Tray: Select a Tray loaded with Black paper standard paper
   - Color Mode:
     – When white is installed in #1 engine, 6C, 5C #1 can be selected.
     – When white is installed in #6 engine, 6C, 5C #6 can be selected.

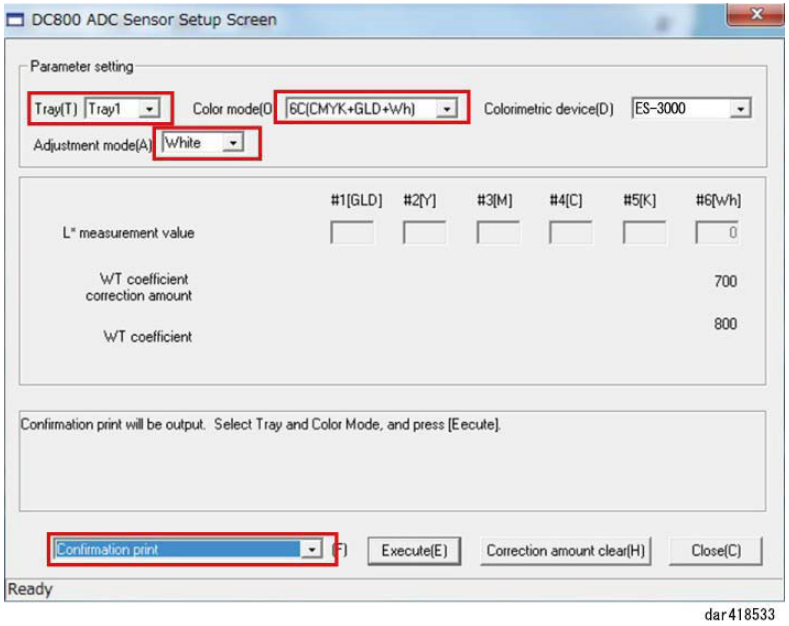
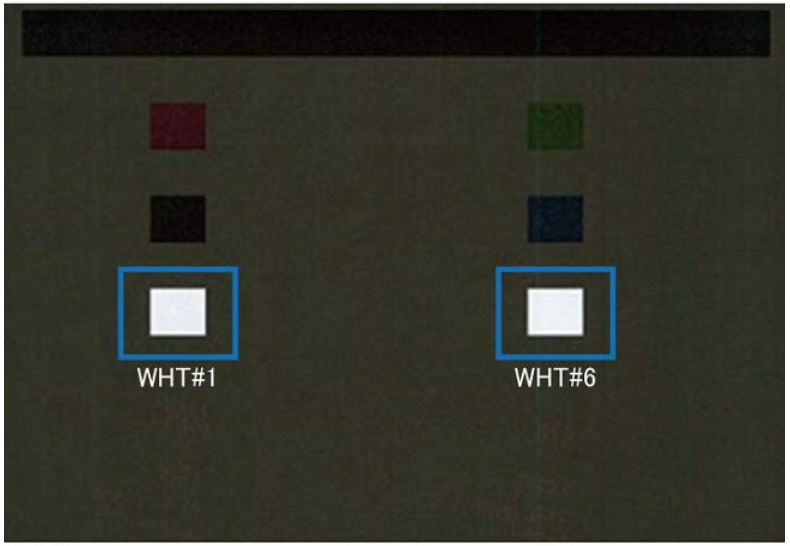


Figure 3 dar418533

6. Measure the L* of the WHT toner patch in the print output in Step 5 (Figure 4) with ES-3000 attached to the server.

NOTE: *IN side patch corresponds to #1 engine, and OUT side patch corresponds to #6 engine*



j0cx418568

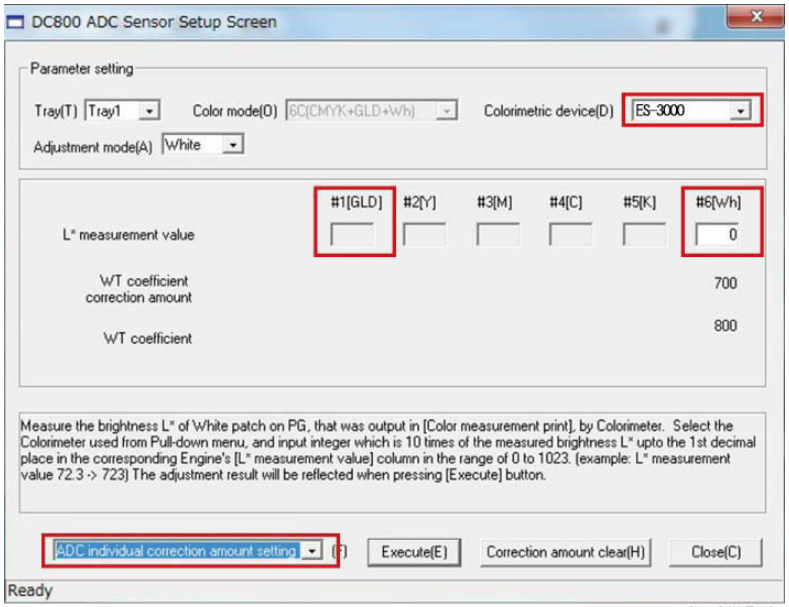
Figure 4 j0cx418568

7. In the bottom pull-down, select [ADC individual correction amount setting], select the colorimeter (i1 - Pro2) to be used in the [Colorimeter] pull-down, enter the L* value measured in Step 6 up to1 decimal place as a 10-fold integer (0 to 1023) for [L* measurement value column] of the corresponding engine, and press the [Execute] button.

NOTE: *For example, if the L* value of the WHT#6 patch measured by i1 is 71.8, enter [718] in the #6 column of [L* measured value].*

NOTE: *In [ADC individual correction amount setting], when both WHT #1 and WHT #6 are installed, be sure to input L* measurement values simultaneously for both #1 and #6 engines. In addition, if only WHT#1 is within the target L*, and when only the adjustment value of WHT#6 is entered and executed subsequently, take note that deviation from the original adjustment will occur because the correction amount is calculated at the same time for WHT#1 with the update setting.*

NOTE: *Do not press the [Enter] key on the keyboard after entering the L* measurement value. Also, click on the [Execute] button only once. Should you press the [Enter] key or press the [Execute] button twice, execute DC800 ADC Sensor Setup from the beginning without pressing the [Correction Amount Clear] button.*


DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+Wh)
Colorimetric device(D) ES-3000
Adjustment mode(A) White
#1[GLD]
#2[Y]
#3[M]
#4[C]
#5[K]
#6[Wh]
L* measurement value
0
WT coefficient correction amount
700
WT coefficient
800
Measure the brightness L* of White patch on PG, that was output in [Color measurement print], by Colorimeter. Select the Colorimeter used from Pull-down menu, and input integer which is 10 times of the measured brightness L* upto the 1st decimal place in the corresponding Engine's [L* measurement value] column in the range of 0 to 1023. (example: L* measurement value 72.3 -> 723) The adjustment result will be reflected when pressing [Execute] button.
ADC individual correction amount setting
Execute(E)
Correction amount clear(H)
Close(C)
Ready

dar418534

Figure 5 dar418534

8. Click [Close].
9. Enter [DC612 Color Test Pattern Print] (6.3.5.1), and click [Execute] with the following settings.
   - Contact Engine: 6C
   - Halftone: 30%
   - Printed Side: 2 Sided
   - Tray: A3 blank paper (recommended J paper)
   - No. of Prints: 30 sheets
10. Enter DC800 ADC Sensor Setup, and perform Steps 4 to 8.
11. Enter DC131 NVM Read / Write and change the following NVM value.

- Change #1 NVM [780-838] (delta ADC Target Humidity Correction Coefficient [#1] [Negative]) to [652].
- Change #6 NVM [780-848] (delta ADC Target Humidity Correction Coefficient [#6] [Negative]) to [528].

12. Enter [DC938 PROCON CHECK] (ADJ 18.1.7), and perform the following.
    (1) Set the color mode to [6C], the execution mode to [ProconSetup], and click [Execute].
    (2) Click [Execute] again.

    NOTE: *[Execute] will be executed 2 times in total.*

    (3) Set the execution mode to [CheckPG], and click [Execute].

    NOTE: *Use black paper for printing.*

13. End of ADC Sensitivity Adjustment

ADJ 18.1.24 Brightness Check / Adjustment Final Action

Lightness Check/Adjustment Final Action Flow

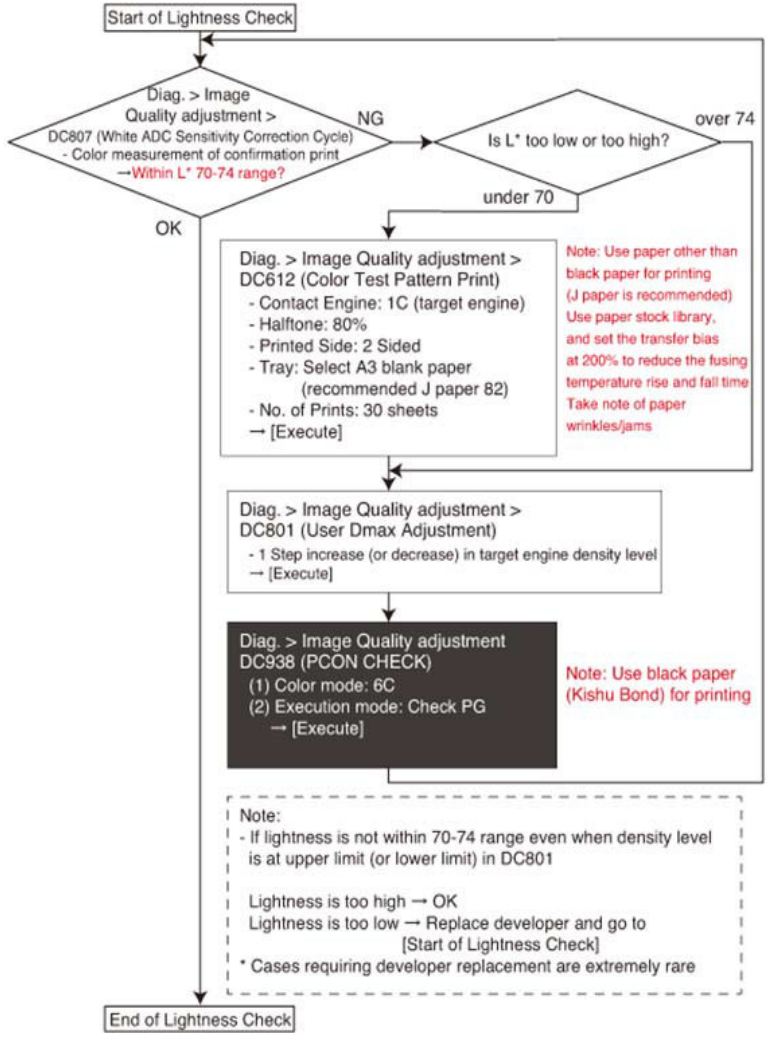

Start of Lightness Check
Diag. > Image Quality adjustment >
DC807 (White ADC Sensitivity Correction Cycle)
- Color measurement of confirmation print
→Within L* 70-74 range?
NG
Is L* too low or too high?
over 74
under 70
OK
Diag. > Image Quality adjustment >
DC612 (Color Test Pattern Print)
- Contact Engine: 1C (target engine)
- Halftone: 80%
- Printed Side: 2 Sided
- Tray: Select A3 blank paper
(recommended J paper 82)
- No. of Prints: 30 sheets
→ [Execute]
Note: Use paper other than black paper for printing (J paper is recommended) Use paper stock library, and set the transfer bias at 200% to reduce the fusing temperature rise and fall time Take note of paper wrinkles/jams
Diag. > Image Quality adjustment >
DC801 (User Dmax Adjustment)
- 1 Step increase (or decrease) in target engine density level
→ [Execute]
Diag. > Image Quality adjustment
DC938 (PCON CHECK)
(1) Color mode: 6C
(2) Execution mode: Check PG
→ [Execute]
Note: Use black paper (Kishu Bond) for printing
Note:
- If lightness is not within 70-74 range even when density level is at upper limit (or lower limit) in DC801
Lightness is too high → OK
Lightness is too low → Replace developer and go to [Start of Lightness Check]
* Cases requiring developer replacement are extremely rare
End of Lightness Check

Figure 1 e0cx418606

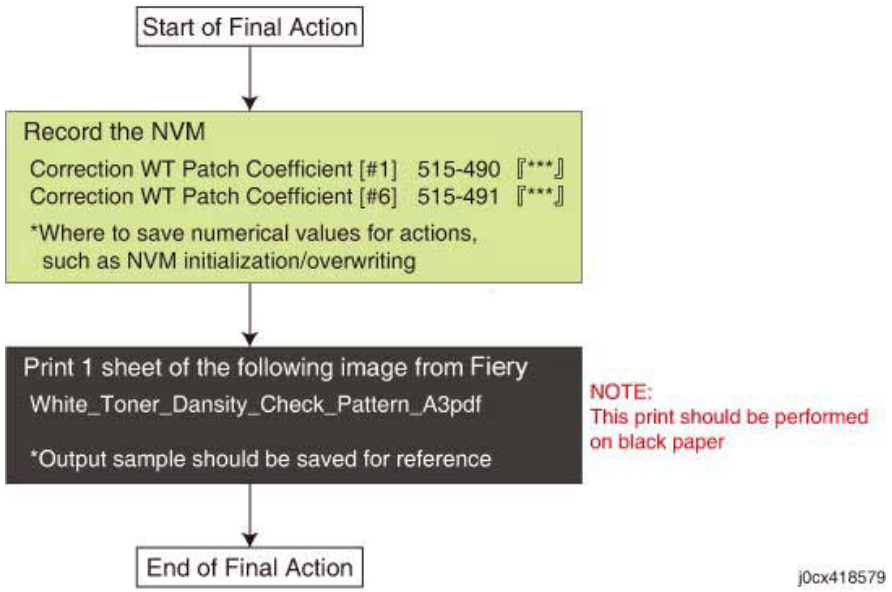

Start of Final Action
Record the NVM
Correction WT Patch Coefficient [#1] 515-490 [***]
Correction WT Patch Coefficient [#6] 515-491 [***]
*Where to save numerical values for actions, such as NVM initialization/overwriting
Print 1 sheet of the following image from Fiery
White_Toner_Dansity_Check_Pattern_A3pdf
*Output sample should be saved for reference
NOTE:
This print should be performed on black paper
End of Final Action
j0cx418579

Figure 2 j0cx418579

Procedure

1. <Start of Lightness Check>
   Start up the PC Diag, select [IQ adjustment], and click [DC807 White ADC Sensitivity Correction Cycle].
2. Select the following from the pull-down in DC807 White ADC Sensitivity Correction Cycle screen. (Figure 3)
   (1) Execution mode: Select [Test print]. (Figure 3)
   (2) Tray: Select a Tray loaded with Black paper (Kishu Bond) standard paper. (Figure 3)
   (3) Color mode (Figure 3)
   - When White Toner is installed in #1 engine, 6C and 5C#1 can also be selected.
   - When White Toner is installed in #6 engine, 6C and 5C#6 can also be selected.
   - When White is installed in both #1 engine and #6 engine, select 6C.

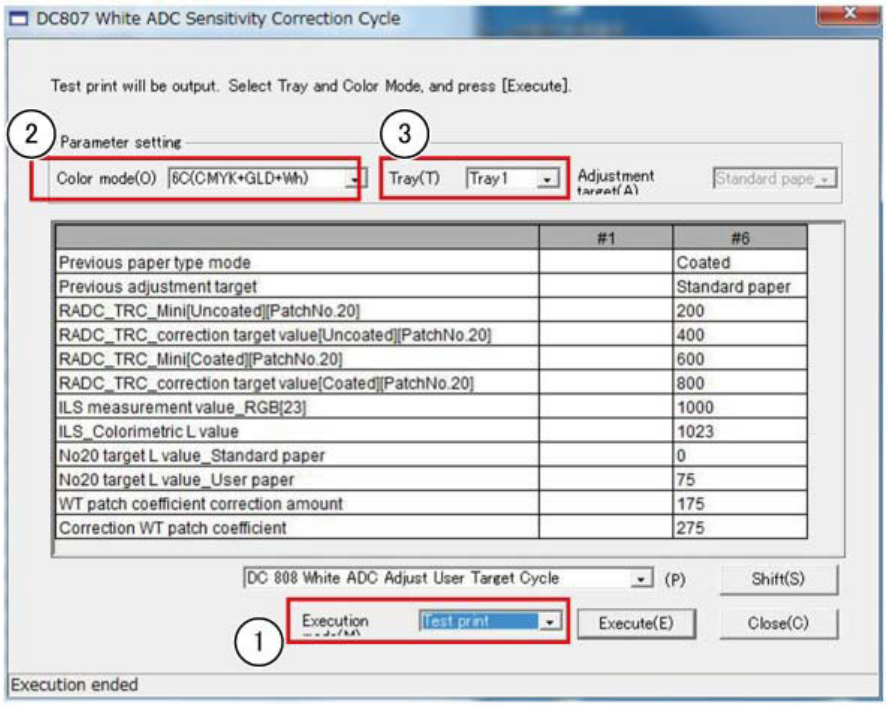


Figure 3 e0cx418607

3. Click [Execute] in DC807 White ADC Sensitivity Correction Cycle screen.
4. Among the prints which are output, use a colorimeter (ES-3000) to measure the patches L* of WHT#1 and WHT#6 of ProconPG# 1, 6 shown in Figure 3, and go to Step 9 is L* is within 70 to 74. If L* is less than 70, go to Step 5. If it exceeds 74, go to Step 6.

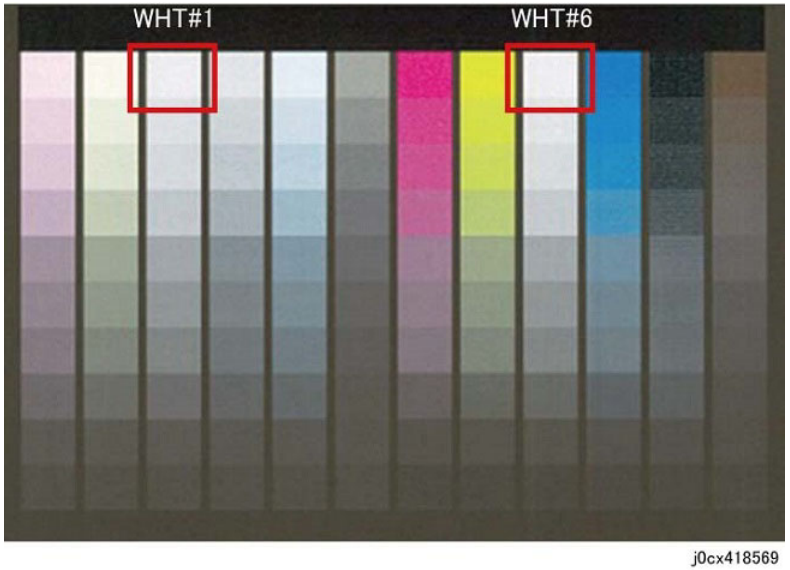


Figure 4 j0cx418569

5. Enter [DC612 Color Test Pattern Print] (6.3.5.1), and click [Execute] with the following settings.
   - Contact Engine: 1C (target engine)
   - Halftone: 80%
   - Printed Side: 2 Sided
   - Tray: A3 blank paper (recommended J paper)
   - No. of Prints: 30 sheets

   NOTE:
   - *Use paper other than black paper for printing (J paper is recommended)*
   - *If you use paper media and set the Transfer Bias to 200%, you can shorten the time required to raise and lower the fusing temperature. (Beware of paper wrinkles/jam)*
6. Enter [DC801 User Dmax Adjustment] (ADJ 18.1.14), increase or decrease the density level of the target engine by 1 Step, and click [Execute].
7. Enter [DC938 PROCON CHECK] (ADJ 18.1.7), set the color mode to [6C], the execution mode to [CheckPG], and click [Execute].

   NOTE: *Use black paper for printing.*
8. Measure L* of the patch again (Steps 1 to 4), and if L* is within 70 to 74, go to Step 9.

   NOTE: *If lightness is not within the range of 70 to 74 even when the density level is at the upper limit (or the lower limit) with DC801*
   - *If the lightness is too high, it is OK.*
   - *If the lightness is too low, replace the developing powder and confirm lightness from Step 1.*

     **It is assumed that the case of developing powder replacement is rare.*
9. <Start of Final Action>

   Enter DC131 NVM Read / Write and check the following NVM value.
   - NVM [515-490] (Correction WT Patch Coefficient [#1])
   - NVM [515-491] (Correction WT Patch Coefficient [#6])

   *: Where to save numerical values for actions, such as NVM initialization/overwriting.
10. Print 1 sheet of the following image from Print Server.
    - White_Toner_Density_Check_Pattern_A3.pdf

    NOTE: *Use black paper for printing.*

    NOTE: **Output sample should be saved for reference.*

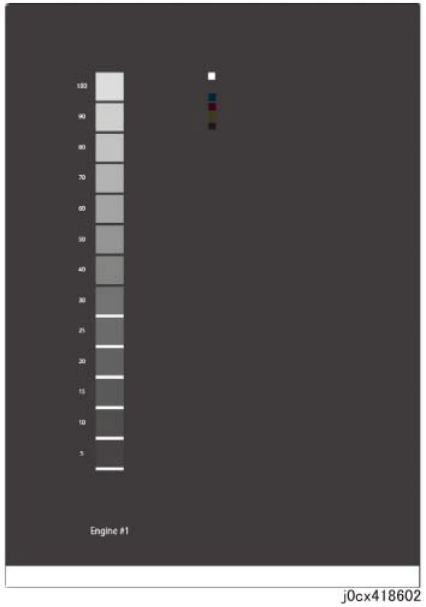


Figure 5 j0cx418602

<Print Server procedure>

(1) Log in as Administrator.

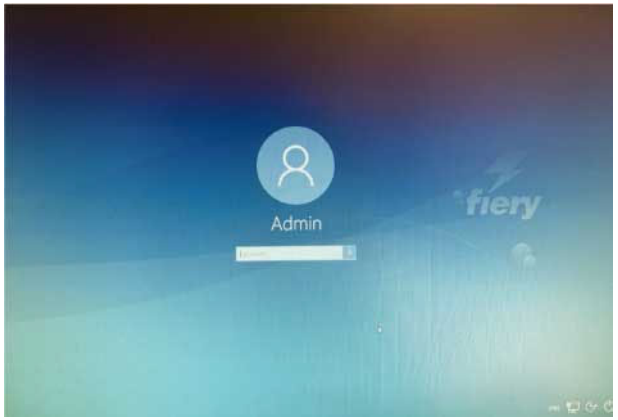


Figure 6 dar418501

(2) Select "Device Center" from Command WorkStation's Server menu.

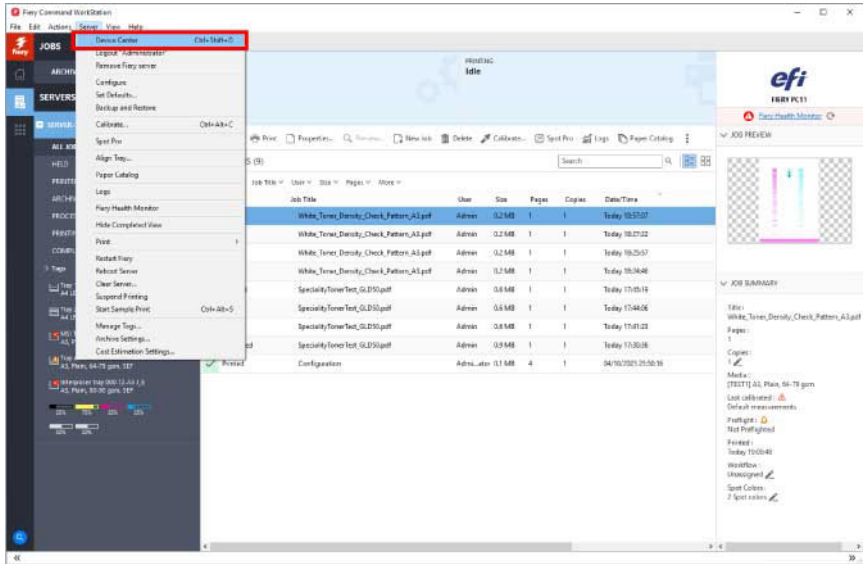


Figure 7 dar418502

(3) Select "Specialty Colors" in RESOURCES.

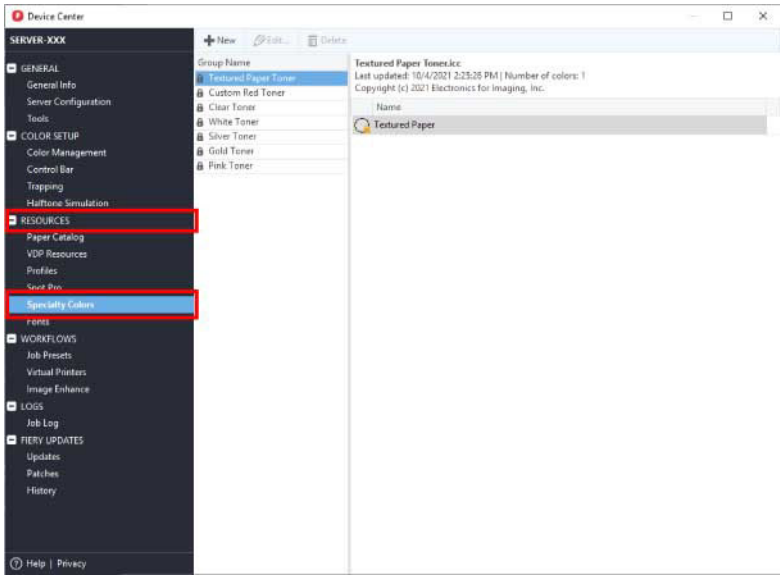


Figure 8 dar418503

(4) Select White Toner shown in the colors in Group Name.

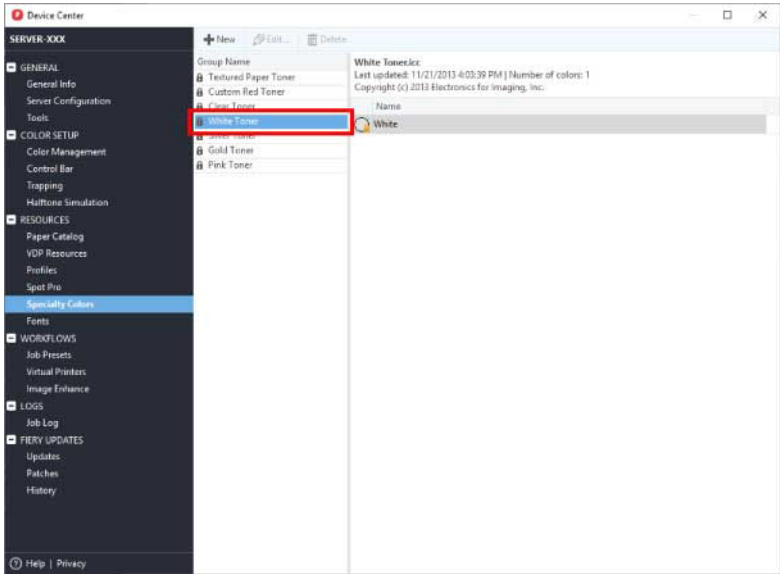


Figure 9 dar418504

(5) Click "+New" icon on Group Name, and then add "white1" and "white6".

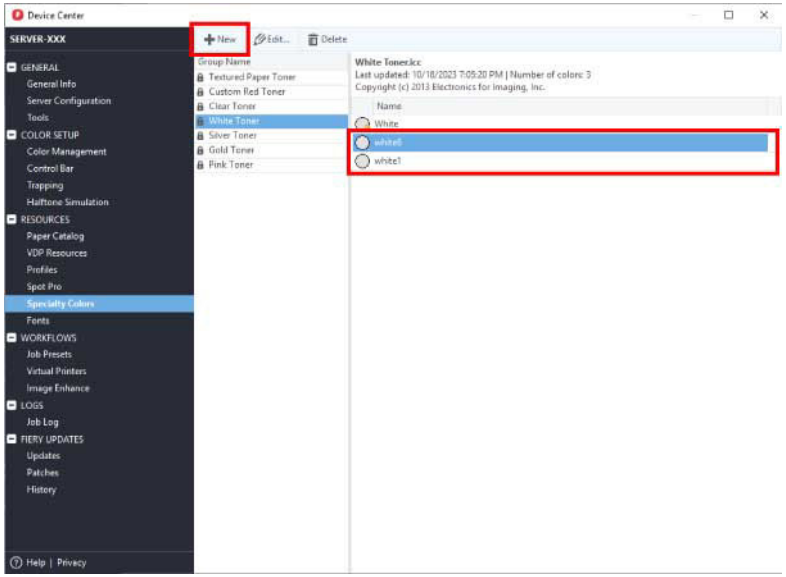


Figure 10 dar418505

(6) Select "Import Job" from Command WorkStation's File menu.

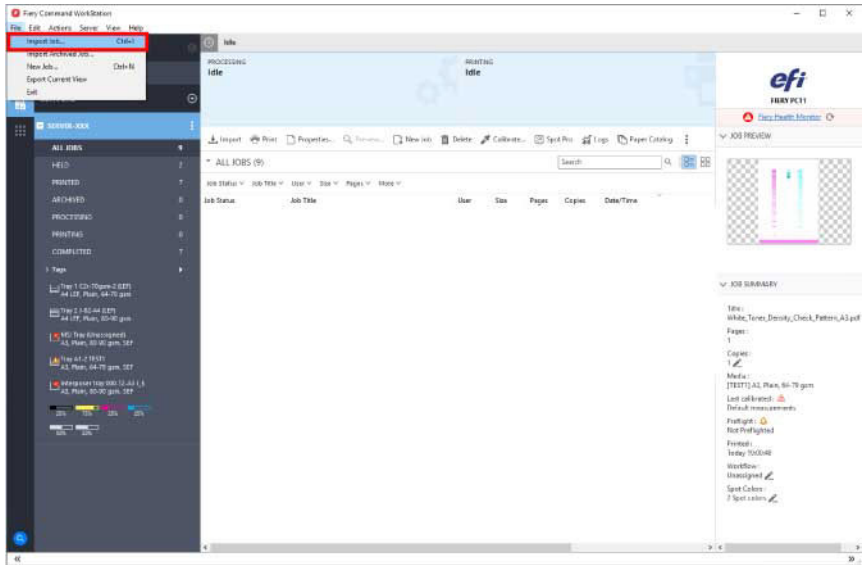


Figure 11 dar418506

(7) Go to J:> ColorJob, and select "White_Toner_Density_Check_Pattern_A3.pdf" and click "Open" on the right below.

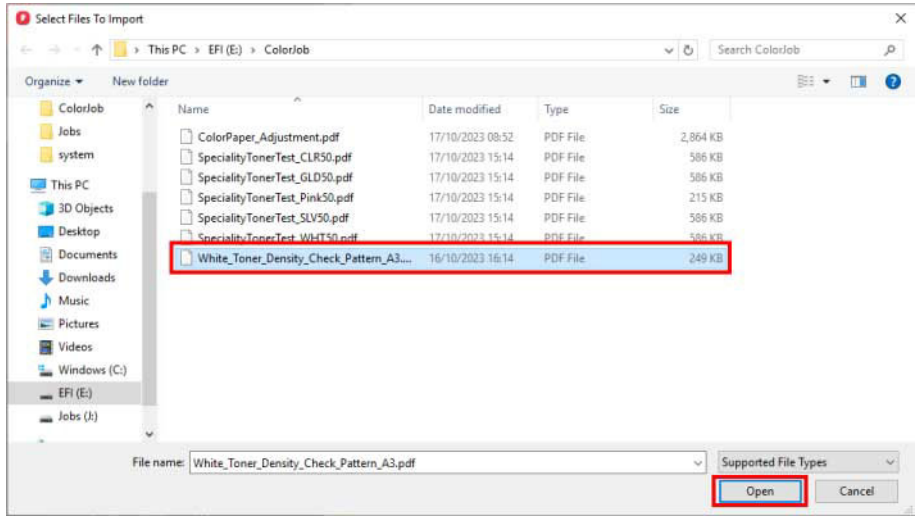


Figure 12 dar418507

(8) Click "Hold" on the right below when Import Files is opened.

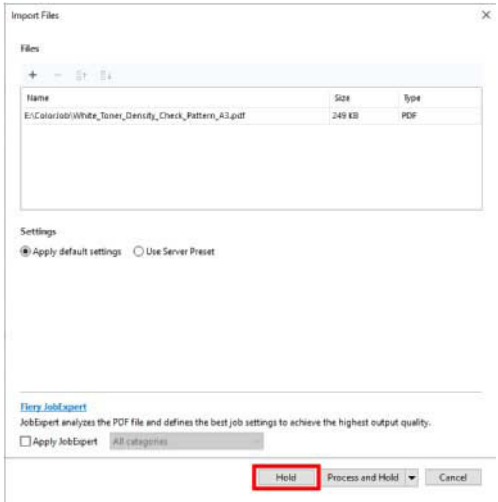


Figure 13 dar418508

(9) Right-click the applicable Job in Command WorkStation's Job area and select Properties.

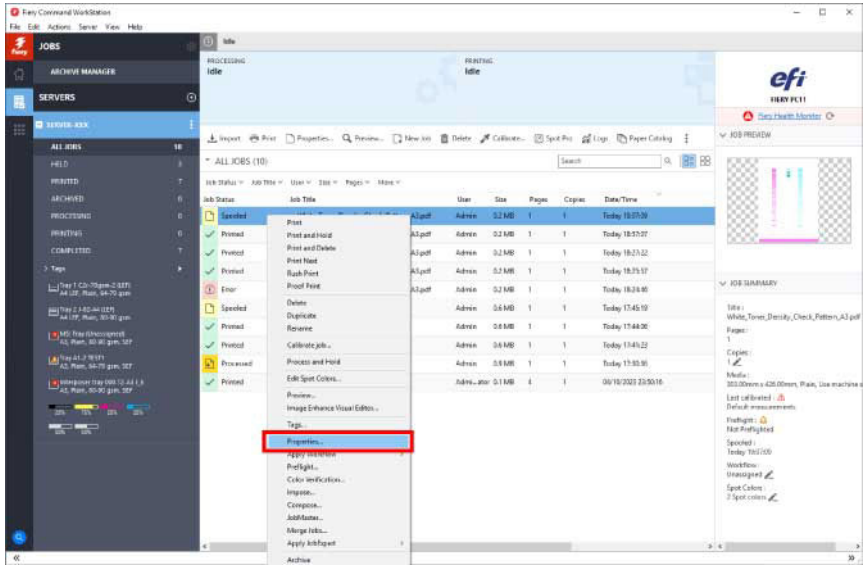


Figure 14 dar418509

(10) Select SPECIALTY COLORANT, which is on the left side of Job Properties window.

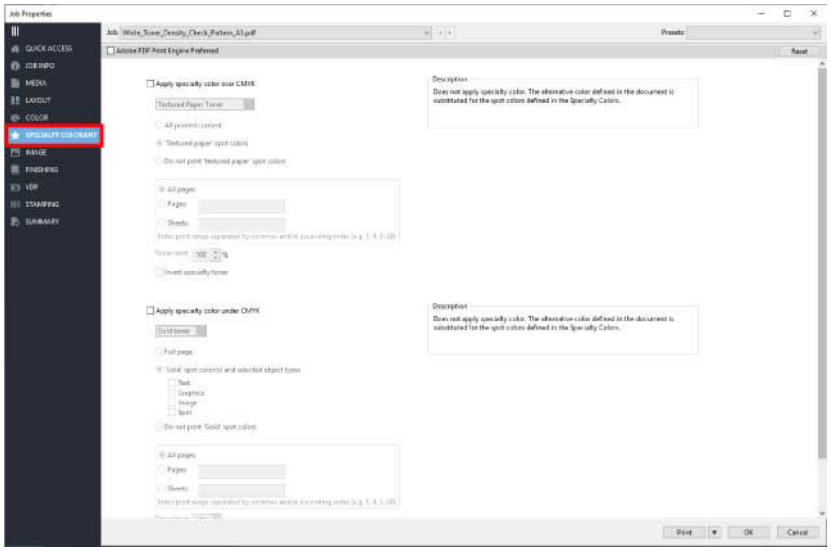


Figure 15 dar418510

(11) If White toner is installed in #1 engine (right), check "Apply specialty color over CMYK" and select White toner from Pull-down menu.

If White toner is installed in #6 engine (left), check "Apply specialty color under CMYK" and select White toner from Pull-down menu.

If White toner is installed in both #1 and #6 engines, follow the step 12 to obtain a print sample for each over/under setting.

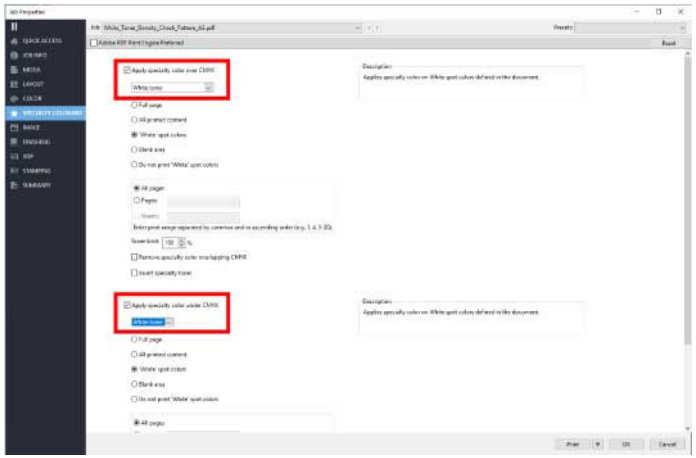


Figure 16 dar418511

(12) Select MEDIA on the left side of Job Properties, and then select A3 standard black paper from Paper Catalog. Set Media color to black and Paper size to A3, and then click Print on the right below. Packaged black standard paper is 124gsm.

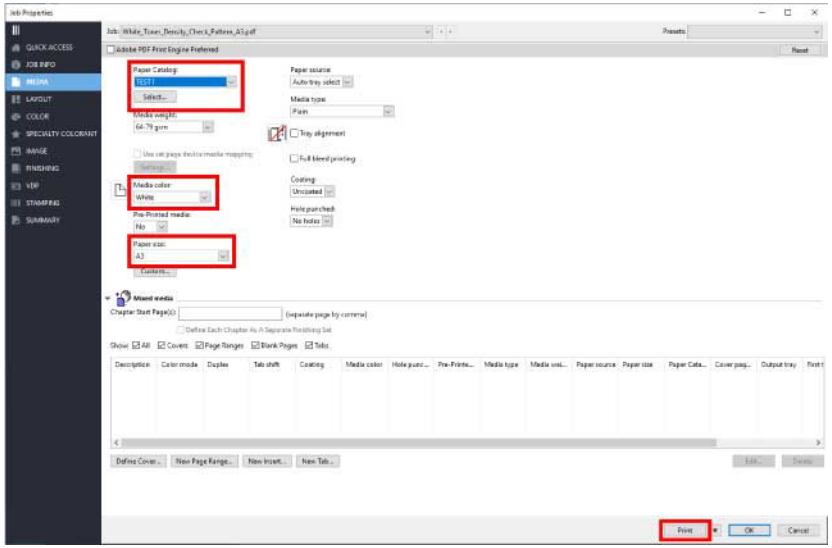


Figure 17 dar418512

(13) Print a sheet of the following image. Printed sample is kept as a sample. (In the case of both #1 and #6, keep both.)

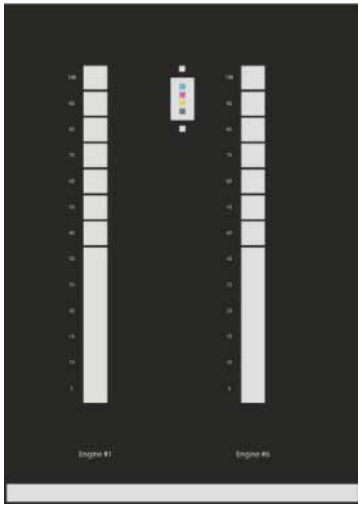


Figure 18 dar418513

11. End of Final Action.

ADJ 20.1.1 Application Operation Check CTRACS

Purpose

Check whether the ILS installation work was performed successfully by the printing operation.

Procedure

1. From the controller screen, click [Logon] to enter the Administrator mode. Enter the Administrator password, and click [OK].

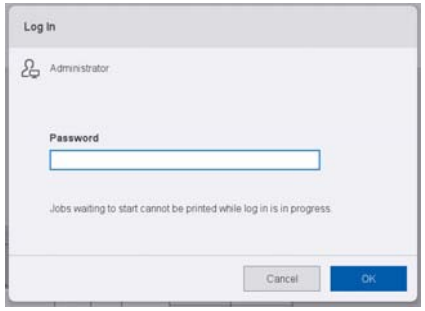


Figure 1 dar418521

2. Select [System] as [Administrator Mode] is displayed on the screen.

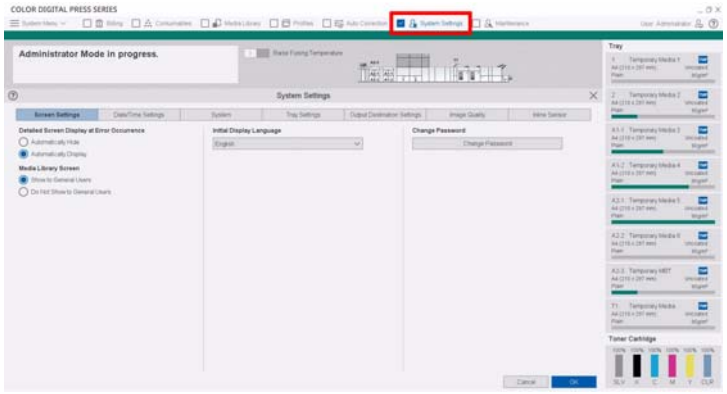


Figure 2 dar418522

3. Select [Inline Sensor] from the System Settings screen, and click the [Auto Tone Correction] button.

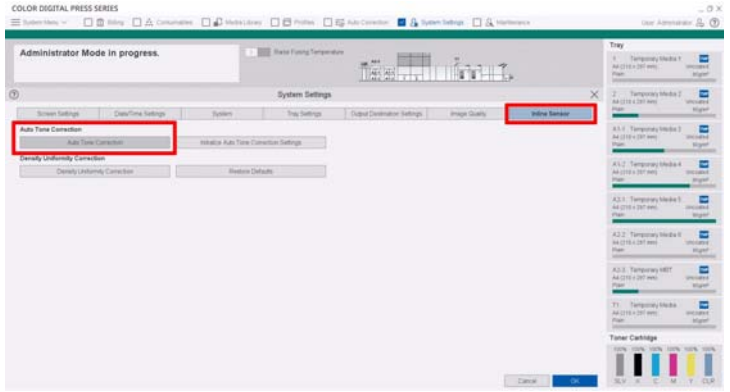


Figure 3 dar418523

4. In the Auto Tone Correction Setup screen, set [Tray], [Halftone], [Correction Mode], [Target], and [Color Mode] by referring to the information in the table below, and when you click the [Start] button, multiple test prints will be performed.

Table 1 Setting Data

Item	Settings
Tray	Tray 1
Halftone	200 dot/175 dot/150 dot
Correction Mode	Simple Correction
Target	Uncoated
Color Mode	CMYK

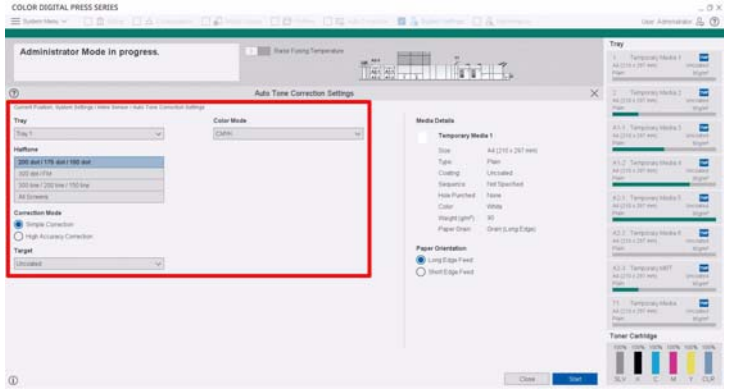


Figure 4 dar418524

5. Information during the adjustment is displayed as shown in the figure.

Figure 5 dar418525

6. If you want to print a sample with Auto Tone Correction Test Print, check that the paper displayed in [Media Details] is loaded in the tray, and then click the [Print] button to start printing.

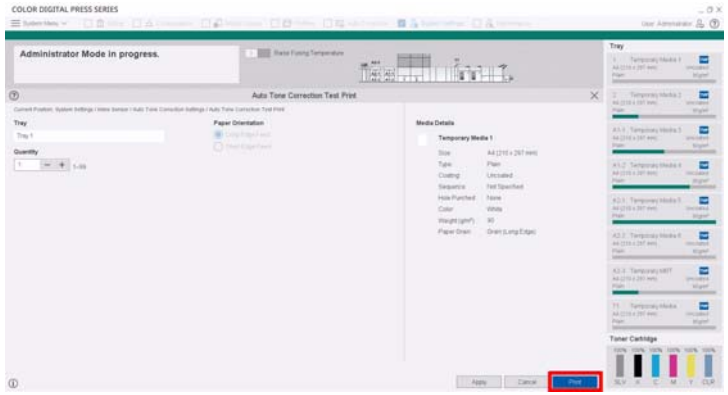


Figure 6 dar418526

7. Visually check the printed paper and result. If the quality is improved, press the [Apply] button. If the quality is not improved, press the [Cancel] button.

ADJ 20.1.2 Image Quality Adjustment Procedure using ILS

Purpose

The image quality adjustment using ILS is for the engineer to visually check the density and gradation on paper, and perform the NVM adjustment automatically from PC-DIAG and Tools.

The outline of the image quality adjustment features related to ILS will be described below.

1. DC971 ILS CTRACS Adjustment
   Feature to control gradation on paper using ILS
2. DC972 Impression Density Adjustment Cycle
   Feature to adjust impression unevenness in FS direction using ILS
3. DC974 ILS CTRACS Manual Adjustment
   Feature for manual adjustment of LUT calculated automatically by DC971
4. DC975 ILS CTRACS User Target Set
   Feature to set a target value for user paper for correction to be executed in DC971

Procedure

1. The figure below shows the image of IILS image quality adjustment. (Figure 1)

   NOTE: *It should be performed after installation/adjustment of ILS is completed.*

   NOTE: *Depending on the state of impression density, DC972 Impression Density Adjustment Cycle (refer to ADJ 20.1.6) should be completed before DC971 ILS CTRACS Adjustment (Auto Tone Correction (refer to ADJ 20.1.3)) or DC975 ILS CTRACS User Target Set (refer to ADJ 20.1.5).*

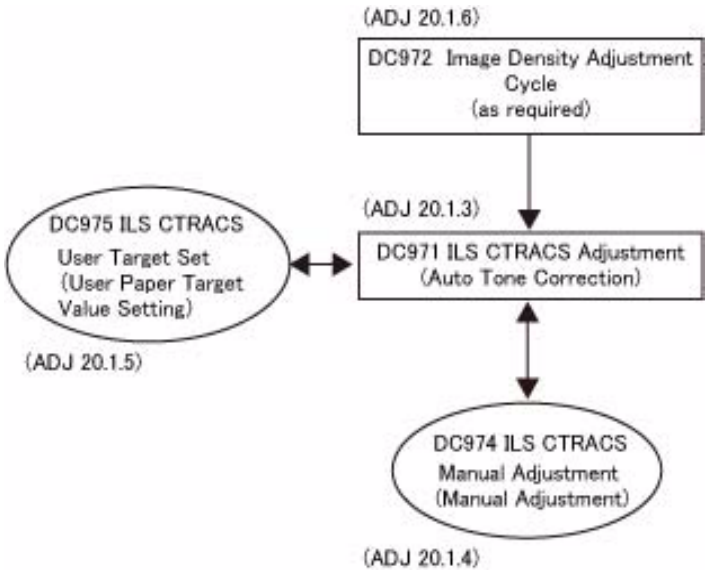

(ADJ 20.1.6)
DC972 Image Density Adjustment Cycle (as required)
(ADJ 20.1.3)
DC971 ILS CTRACS Adjustment (Auto Tone Correction)
DC975 ILS CTRACS User Target Set (User Paper Target Value Setting)
(ADJ 20.1.5)
DC974 ILS CTRACS Manual Adjustment (Manual Adjustment)
(ADJ 20.1.4)

Figure 1 e0ko420540

2. Perform [DC972 Impression Density Adjustment Cycle] (ADJ 20.1.6) as required.
3. DC971 ILS CTRACS Adjustment (Auto Tone Correction) (refer to ADJ 20.1.3). If manual adjustment is found to be necessary during checking, perform DC974 ILS CTRACS Manual Adjustment (manual adjustment) (see ADJ 20.1.4).

NOTE: *Since the value set is overlapping regardless of the result of CTRACS in manual adjustment, be careful when using it. Do not use as far as possible except when unavoidable, such as for troubleshooting. (Since there is a possibility of over-adjustment when the state of IOT changes over time.)*

NOTE: *When performing DC971 ILS CTRACS Adjustment (Auto Tone Correction), if there is a request to change to paper specified by the user, use DC975 ILS CTRACS User Target Set (refer to ADJ 20.1.5) to change the target value.*

ADJ 20.1.3 DC971 ILS CTRACS Adjustment

Purpose

Detect the deviation from the target value of the density on the paper using ILS which is successfully installed, obtain the adjustment value (LUT), and automatically adjust the NVM of the IOT.

Simple Auto Tone Correction Mode: Calculates the adjustment value (LUT) with 1 detection. (Default setting)

High Accurate Automatic Tone Correction Mode: Patch image output -> detection by ILS -> calculation of adjustment value is repeated until the adjustment result converges.

NOTE: *If ILS is not connected, this feature cannot be activated.*

NOTE: *Use paper size of A4/Letter LEF (length 279.4 mm x width 210.0 mm) or more.*

Procedure

1. Select [Image Quality Adjustment] on the PC Diag screen.
2. Select DC971 on the Image Quality Adjustment menu screen.
3. On the DC971 ILS CTRACS Adjustment screen, set the current ILS target value RGB, ILS measurement value RGB, and [Set parameters. Start Auto Tone Correction by pressing [Execute]] will be displayed. (Figure 1)

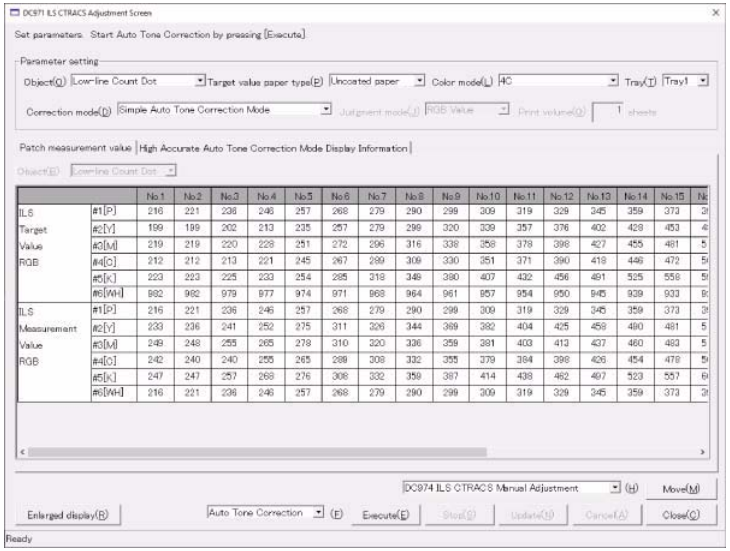


Figure 1 e0ko420521

4. Simple Auto Tone Correction Mode Operation

Set the following parameter setting fields, and click the [Execute] button. (Figure 2) (It can be stopped with the Stop button)

Table 1 Setting Data

Item	Setting Data
Object	The default is Low-line Count Dot ***NOTE:*** *All screen groups cannot be selected at once for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *All screen groups cannot be selected at once for the Color Mode [White Correction].*
Target value paper type	Uncoated paper, coated paper, user paper (Default setting is NVM [Paper Type (Target) Information during Measurement] for each screen group. This NVM will be updated when High Accurate Auto Tone Correction is performed.) ***NOTE:*** *Coated paper cannot be selected for the Color Mode [White Correction].*
Color Mode	The default is 4C. When the Gold or Silver Toner is installed, 5C and 6C can also be selected ***NOTE:*** *White Correction can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *White Correction cannot be selected for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *White Correction cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *White Correction cannot be selected for [Coated Paper] paper type.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction]. [Kishu Bond Black Paper] recommended*
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected.
Correction mode	Simple Auto Tone Correction Mode (Default) ***NOTE:*** *High Accurate Auto Tone Correction Mode cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *High Accurate Auto Tone Correction Mode cannot be selected for the Color Mode [White Correction].*

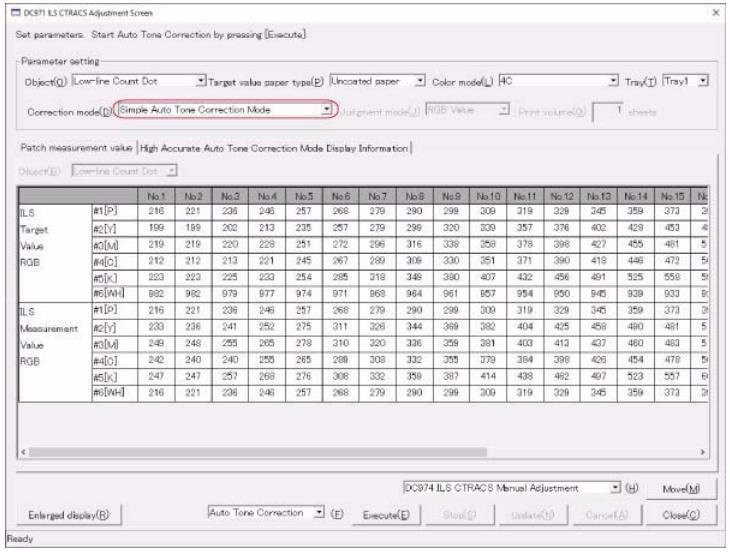


Figure 2 e0ko420522

NOTE: *If necessary, manual adjustment of Tone Correction is also possible. Click [Move] to proceed with DC974 ILS CTRACS Manual Adjustment. (Figure 3) (For details on the adjustment procedure, refer to [ADJ 20.1.4 DC974 ILS CTRACS Manual Adjustment]). Manual adjustment cannot be performed for engines containing white*

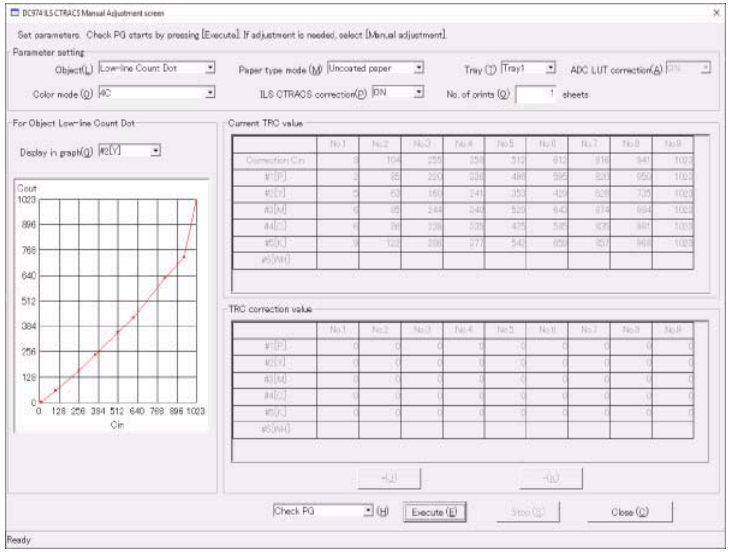

DC974 ILS CTRACS Manual Adjustment screen
Set parameters. Check PG starts by pressing [Execute]. If adjustment is needed, select [Manual adjustment].
Parameter setting
Object(L) Low-line Count Dot
Paper type mode (M) Uncoated paper
Tray (T) Tray1
ADC LUT correction(A)
Color mode (Q) 4C
ILS CTRACS correction(P) ON
No. of prints (Q) 1 sheets
For Object Low-line Count Dot
Display in graph(G) #2[Y]
Current TRC value
TRC correction value
Check PG
Execute (E)
Close (C)
Ready

Figure 3 e0ko420525

When the execution has completed, the message, [Correction is ended. Set the correction result by pressing [Update]. Start confirmation print by pressing [Execute].] and the ILS measurement value will be displayed. (Figure 4) Proceed to 6. Confirmation Print/Update Processing.

If the measurement result is NG, a fail message will be displayed and the ILS measurement value column becomes gray, so execute again after cancellation, or execute the ILS troubleshooting procedure of Chapter 2 FIP.

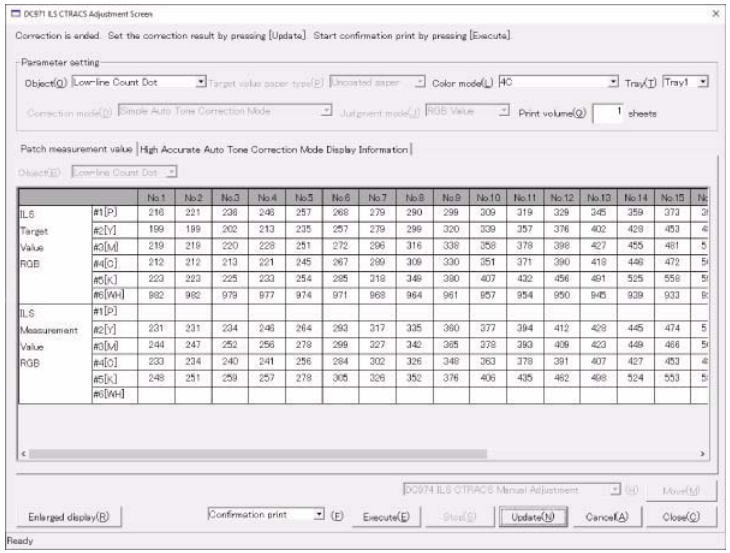


Figure 4 e0ko420526

Table 2 Display Data Content

Display Data Name		Displayed Contents
Object/Color Mode/Tray		Same setting as correction execution
No. of Prints		1 to 9999 sheets (Default 1 sheet)
ILS Target Value RGB		Display ILS target value RGB for each engine according to the specified screen and paper type
	Engine	#1 to #6
	Tone Patch No.	No. 1 to No. 24 (Value: 0 to 1023)
ILS Measurement Value RGB		Display ILS measurement value RGB after correction execution
	Engine	#1 to #6
	Tone Patch No.	No. 1 to No. 24 (Value: 0 to 1023)

NOTE: *Columns of uninstalled engines are grayed out and values are blank.*

NOTE: *Columns of engines installed with Clear Toner are grayed out and values are blank.*

NOTE: *Measured values of engines that do not correspond to the designated color mode at the time of execution will not be displayed.*

5. High Accurate Auto Tone Correction Mode Operation

   Set the following parameter settings, and click the [Execute] button. (Figure 5)

Table 3 Setting Data

Item	Setting Data
Object	The default is Low-line Count Dot ***NOTE:*** *All screen groups cannot be selected at once for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *All screen groups cannot be selected at once for the Color Mode [White Correction].*
Target value paper type	Uncoated paper, coated paper, user paper (Default setting is NVM [Paper Type (Target) Information during Measurement] for each screen group. This NVM will be updated when Auto Tone Correction is performed.) ***NOTE:*** *Coated paper cannot be selected for the Color Mode [White Correction].*
Color Mode	The default is 4C. When the Gold or Silver Toner is installed, 5C and 6C can also be selected ***NOTE:*** *White Correction can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *White Correction cannot be selected for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *White Correction cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *White Correction cannot be selected for [Coated Paper] paper type.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction]. [Kishu Bond Black Paper] recommended*
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected.
Correction mode	High Accurate Auto Tone Correction Mode ***NOTE:*** *High Accurate Auto Tone Correction Mode cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *High Accurate Auto Tone Correction Mode cannot be selected for Color Mode [White Correction].*
Judgment mode	It can be set only in High Accuracy Auto Tone Correction Mode. RGB value, Lab value (E (delta) value by L*a*b), density value can be set, and although the default is RGB value, the mode selected as the judgment mode will be displayed as the default from the next time.

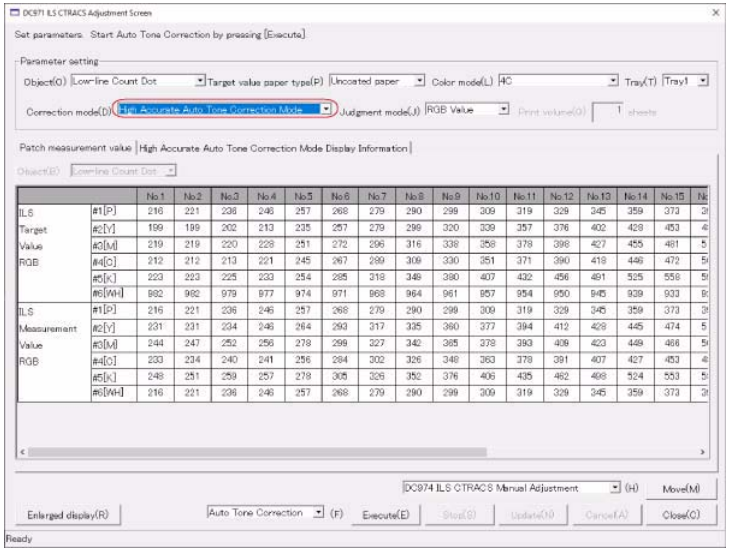


Figure 5 e0ko420527

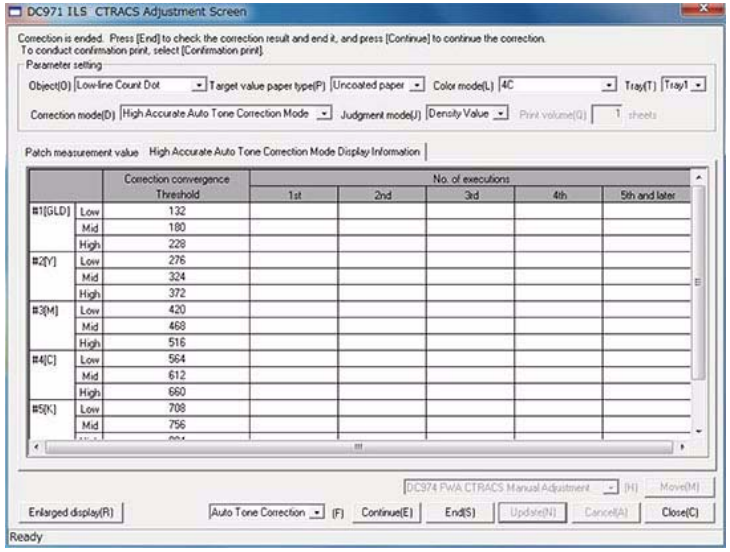

DC971 ILS CTRACS Adjustment Screen
Correction is ended. Press [End] to check the correction result and end it, and press [Continue] to continue the correction.
To conduct confirmation print, select [Confirmation print].
Parameter setting
Object(O) Low-line Count Dot
Target value paper type(P) Uncoated paper
Color mode(L) 4C
Tray(T) Tray1
Correction mode(D) High Accurate Auto Tone Correction Mode
Judgment mode(J) Density Value
Print volume(Q) 1 sheets
Patch measurement value
High Accurate Auto Tone Correction Mode Display Information
Correction convergence Threshold
No. of executions
1st 2nd 3rd 4th 5th and later
#1[GLD] Low 132
Mid 180
High 228
#2[Y] Low 276
Mid 324
High 372
#3[M] Low 420
Mid 468
High 516
#4[C] Low 564
Mid 612
High 660
#5[K] Low 708
Mid 756
DC974 FWA CTRACS Manual Adjustment (H) Move(M)
Enlarged display(R) Auto Tone Correction (F) Continue(E) End(S) Update(N) Cancel(A) Close(C)
Ready

Figure 6 e0ko420528

When the execution has ended, the message, [Correction is ended. Press [End] to check the correction result and end it, and press [Continue] to continue correction. To conduct confirmation print, select [Confirmation print].], as well as under the High Accurate Auto Tone Correction Mode Display Information, the correction convergence threshold value and the value during execution will be displayed. (Figure 6)

Table 4 Display Data Content

Display Data Name		Displayed Contents
Object/Target Value Paper Type/Color Mode/Tray/Correction Mode/Judgment Mode		Setting value during correction execution
Display Value		Displays the correction convergence threshold and the display value according to the judgment mode. The display value displays the 1st to 4th values during repeated execution and the latest value after the 5th time.
	Engine	#1 to #6
	Area	Low, Medium, High
	Correction Convergence Threshold Value	
	Repeated Execution Count	1 to 5 or more (0 to 65535)

NOTE: *When the low/medium/high region of each color falls below the value of the correction convergence threshold or when the result has reached its limit after the 1st and 2nd times (the value does not decrease any more even after repeating), select [Continue] to end.*

NOTE: *Although it is possible to repeat it 5 times, repeated gradation will decrease causing a tone jump, etc. It is recommended to repeat it within 3 times. Basically, it is recommended to use the simple adjustment.*

6. Confirmation Print/Update

After confirming that [Confirmation print] is selected in the bottom left window, specify the number of prints (Default: 1 sheet (setting: 1 to 9999 sheets)) in the parameter setting, and click the [Execute] button. (Figure 7)

When Updating: Clicking the Update button writes the correction value to NVM.

When Not Updating: Clicking the Cancel button discards the correction value.

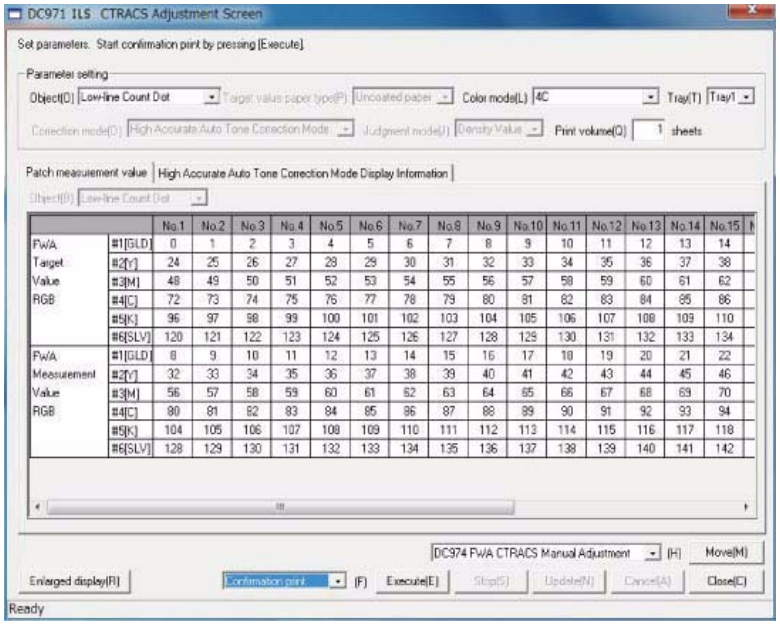

DC971 ILS CTRACS Adjustment Screen
Set parameters. Start confirmation print by pressing [Execute].
Parameter setting
Object(O) Low-line Count Dot
Target value paper type(P) Uncoated paper
Color mode(L) 4C
Tray(T) Tray1
Correction mode(D) High Accurate Auto Tone Correction Mode
Judgment mode(J) Density Value
Print volume(Q) 1 sheets
Patch measurement value
High Accurate Auto Tone Correction Mode Display Information
Object(B) Low-line Count Dot
No.1 No.2 No.3 No.4 No.5 No.6 No.7 No.8 No.9 No.10 No.11 No.12 No.13 No.14 No.15
FWA #1[GLD] 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
Target #2[Y] 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38
Value #3[M] 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62
RGB #4[C] 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86
#5[K] 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110
#6[SLV] 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134
FWA #1[GLD] 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Measurement #2[Y] 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46
Value #3[M] 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70
RGB #4[C] 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94
#5[K] 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118
#6[SLV] 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142
DC974 FWA CTRACS Manual Adjustment
(H)
Move(M)
Enlarged display(R)
Confirmation print
(F)
Execute(E)
Stop(S)
Update(N)
Cancel(A)
Close(C)
Ready

Figure 7 e0ko420529

NOTE: *Pattern output in Execute/Confirmation print is output with the following contents.*

Table 5 Execution of Auto Tone Correction

Color Mode	Object (Screen Group)	PG Pattern	Paper Output per Correction (*2) (m: Dummy Output Sheet Count (*3)
4C	Low-line Count Dot High-line Count Dot Line Screen	CTRACS Adjustment PG (PG-1)	m + 1 sheets
	ALL (batch) (*1)		m + 3 (3 types of screens x 1 sheet)
5C (#1) /5C (#6) /6C	Low-line Count Dot High-line Count Dot Line Screen	CTRACS Adjustment PG (PG-1) CTRACS Adjustment PG (PG-2)	m + 2 sheets (2 PG patterns x 1 sheet)
	ALL (batch) (*1)		m + 6 sheets (3 screens x 2 PG patterns x 1 sheet)
White Correction	Low-line Count Dot High-line Count Dot Line Screen	CTRACS ADC Adjustment (White) PG	m+1 sheets (perform White Correction only)

- Color Mode: The color of the engine selected in color mode
- Printed side: Simplex
- Paper Size for Automatic Tone Correction: A4/Letter LEF or larger (length of 279.4 mm x width of 210 or more) can be executed

*1: Output in sequence the representative screen (200C) of low-line count Dot, the representative screen (FM) of the high-line count Dot, and the representative screen (200R) of the line screen. For High Accurate Auto Tone Correction Mode, ALL (batch) cannot be selected.

*2: In the case of the high accurate automatic tone correction mode, it is repeatedly output until the correction is completed. In the 1st iteration of correction, the number of output sheets is 2 times.

*3: In the case of auto tone correction, perform dummy print before adjustment print. The dummy output sheet count is maintained by NVM.

Table 6 Execution of Confirmation Print

Color Mode	Object (Screen Group)	PG Pattern	Output Paper (n: Number of printed sheets)
4C	Low-line Count Dot High-line Count Dot Line Screen	CTRACS Adjustment PG (PG-3)	n sheets (1 PG pattern x n sheets)
	ALL (batch) (*1)		7 x n sheets (7 screens x n sheets)
5C (#1) /5C (#6) /6C	Low-line Count Dot High-line Count Dot Line Screen	CTRACS Adjustment PG (PG-3) CTRACS Adjustment PG (PG-4)	2 x n sheets (2 PG patterns x n sheets)
	ALL (batch) (*1)		14 x n sheets (7 screens x 2 PG patterns x n sheets)
White Correction	Low-line Count Dot High-line Count Dot Line Screen	CTRACS ADC Adjustment (White) PG	n sheets (perform White Correction only)

- Color Mode: The color of the engine selected in color mode
- Printed side: Simplex

*1: Output in the order of 200C, 175C, 150C, 300C, FM, 200R, 150R. For High Accurate Auto Tone Correction Mode, ALL (batch) cannot be selected.

7. Return to the DC971 ILS CTRACS Adjustment screen with the Close button. (Figure 8)

   At this time, if the update is not being performed, the confirmation dialog, [Do you want to update the correction result? Press [Yes] to update and end. Press [No] to end without updating.] will be displayed, therefore, select Yes, No, or Cancel.

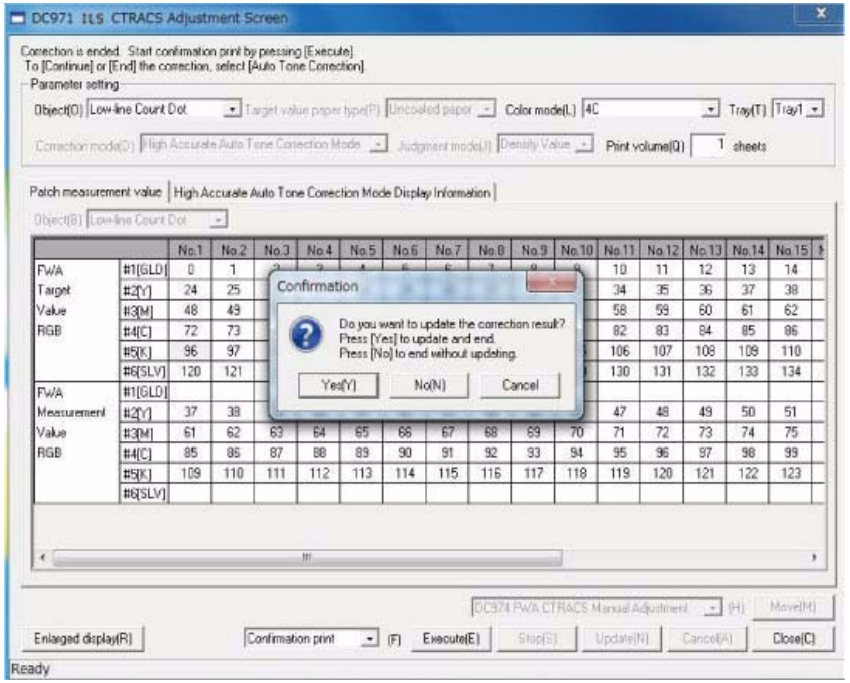


Figure 8 e0ko420530

ADJ 20.1.4 DC974 ILS CTRACS Manual Adjustment

Purpose

Adjust the Procon TRC (LUT), which is the result calculated by ILS CTRACS, manually as required.

NOTE: *If ILS is not connected, this feature cannot be activated.*

NOTE: *Since the value set is overlapping regardless of the result of CTRACS in manual adjustment, be careful when using it. Do not use as far as possible except when unavoidable, such as for troubleshooting. (Since there is a possibility of over-adjustment when the state of IOT changes over time.)*

NOTE: *Unable to be performed with white toner.*

Procedure

1. Select [Image Quality Adjustment] on the PC Diag screen.
2. Select DC974 on the Image Quality Adjustment menu screen.
3. DC974 ILS CTRACS Manual Adjustment screen is displayed. (Figure 1)

   As the current data will be displayed, select [Manual adjustment] in the box at the bottom of the screen. (At the beginning, display Check PG)

   The message, [Set Correction value. Adjustment starts by pressing [Execute]] is displayed.

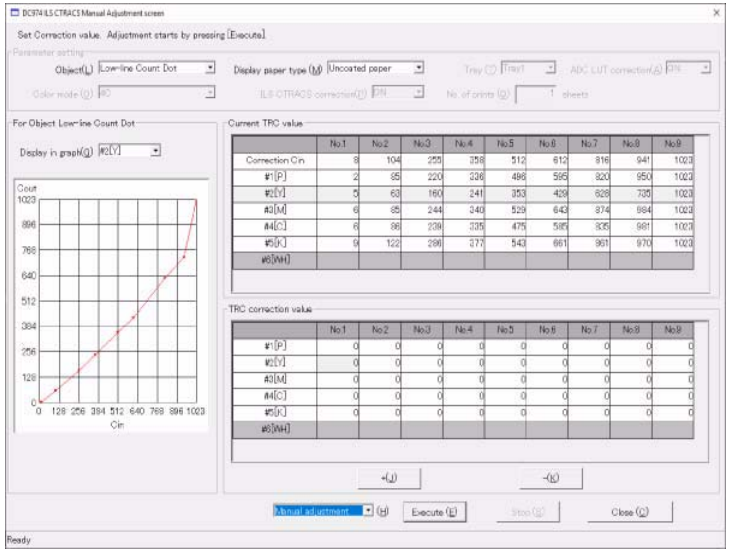


Figure 1 e0ko420531

4. Execution of Manual Adjustment

   Check the parameters in Table 1, change the TRC correction value field as required, and click [Execute].

   Calculate the Procon LUT based on the correction value, display it as the current TRC value, and display on the screen the graph with direct interpolation of 10 points after adding 9 points of the current LUT value + the origin (Cin=0, Cout=0) of the selected screen group, paper type and engine.

NOTE: *Cancellation of operation is not possible during execution.*

Table 1 Setting Data

Item	Setting Data
Object	Low-line Count Dot is the default.
Paper Type Mode	Uncoated, Coated
Graph Display	Select the color you want to display on the graph.
TRC Correction Value	Change when adjustment is necessary (range: -512 to 511), enter the numerical value with the [+] and [-] buttons (or ten key) for the selected TRC correction value.

<CTRACS Manual Adjustment display information>

Table 2 Display Data Content

Display Data Name	Parameter Range	Description
Object	Low-line count Dot/high-line count Dot/line screen	Specify screen during adjustment
Paper Type Display	Uncoated/Coated	Paper type during adjustment
<Current TRC Value>		
TRC Corrected Cin	0 to 1023	No. 1 to No. 9
Engine	0 to 1023	(#1 to #6) x (No. 1 to No. 9)
<TRC Correction Value>		
Engine	-512 to 511	(#1 to #6) x (No. 1 to No. 9)
Graph Display		Default is Screen: 200C, Paper Type: Uncoated, Engine: #3 [Y]

NOTE: *The TRC values for Engines that are not installed and Engines installed with Clear and White Toners will be grayed out with blank value display.*

5. Execution of Check PG

   Change the box at the bottom of the left screen from Manual adjustment to [Check PG], set the required parameters, and click [Execute]. (Figure 2)

   For all installed colors of the color mode, the number of prints (n sheets) specified by Simplex is output. (4C: n sheets, 5C (#2), 6C: 2 x n sheets) If Check PG is executed before Manual adjustment, apply the currently set correction value and output.

   Cancellation during execution is possible.

   PG Pattern of Color Mode 4C: CTRACS Adjustment PG (PG-3)

Table 3 Setting Data

Item	Setting Data
Object	Screen group you want to reference/change, and default is low-line count Dot.
Paper Type Mode	Uncoated (Default), Coated

Table 3 Setting Data

Tray (T)	Tray 1 is default. Tray 3, 4 can be selected only when HCF A3 (Option) is connected. Tray 5, 6 can be selected only when 2nd HCF A3 (Option) is connected. MBT can be selected only when HCF A3 (Option) is connected.
Color Mode	The default is 4C, and Color Mode that includes Clear Toner and White Toner Engine is unavailable When the Gold or Silver Toner is installed, 5C and 6C can also be selected.
ILS CTRACS Correction	Yes: ON (Default)/No: OFF
No. of prints	1 sheet is Default (1 to 9999 sheets)
Graph Display	Select the color you want to display on the graph.
Show ADC LUT status	ADC LUT status is ON, ADC LUT status is OFF

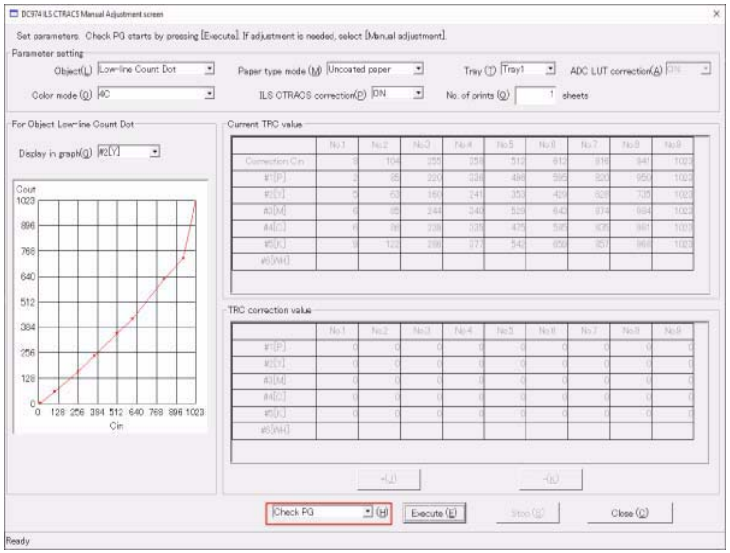


Figure 2 e0ko420523

6. Saving Data

   Select [Save] in the box at the bottom left of the screen, and click [Execute] to save the changed data. (You cannot save unless CTRACS Manual adjustment is performed.)

7. Press the Close button to return to the initial screen.

   At this time, if data has not been saved, the confirmation dialog, [Adjustment result is not saved. Do you want to save the result of adjustment and end it?] will be displayed, therefore, select Yes/No. (Figure 3)

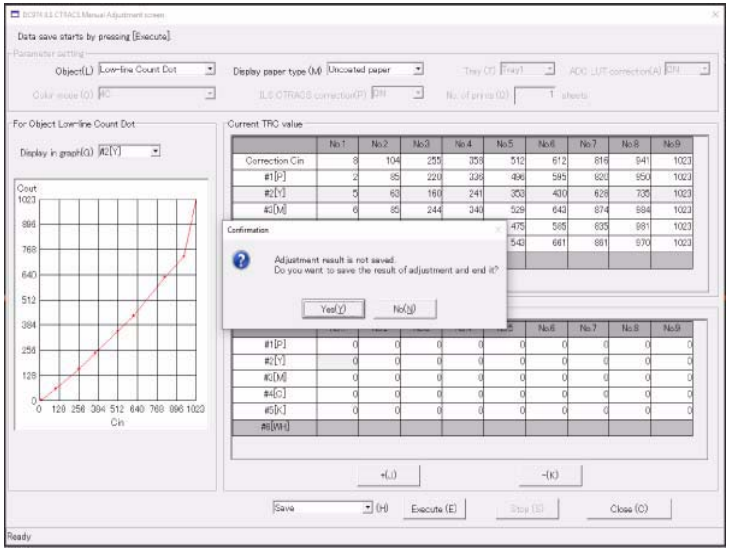


Figure 3 e0ko420532

ADJ 20.1.5 DC975 ILS CTRACS User Target Set

Purpose

In order to set the target value of the user paper (condition in which the tone and color (gray balance) including reproduction of highlights and Dmax are adjusted) in ILS CTRACS, the test pattern which is adjusted to the target condition using user paper is detected by ILS, and that value is stored as the target value.

Procedure

1. Select [Image Quality Adjustment] on the PC Diag screen.
2. Select DC975 on the Image Quality Adjustment menu screen.
3. DC975 ILS CTRACS User Target Set: Check PG & Adjust screen is displayed.

   As the current data will be displayed, select [Manual adjustment] in the box at the bottom of the screen. (At the beginning, display Check PG)

   The message, [Enter numerical values to Color/Density areas to be adjusted. Adjustment starts by pressing [Execute]. Select [Check PG] and confirm the correction.] will be displayed. (Figure 1)

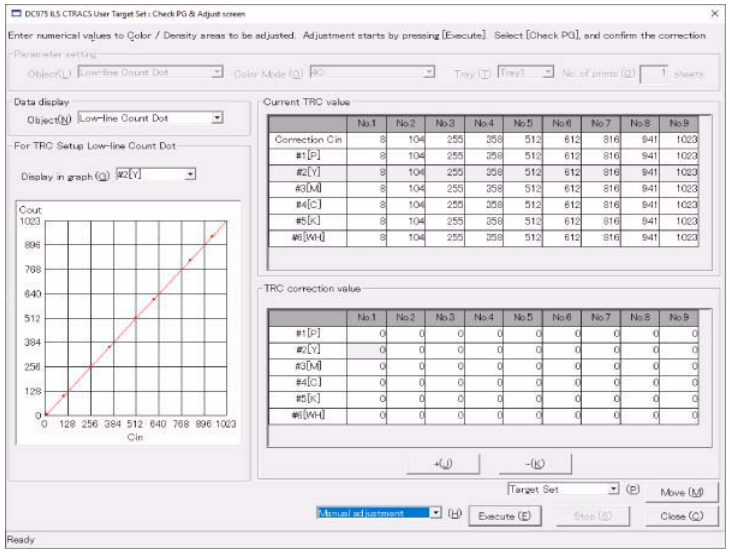

DC975 ILS CTRACS User Target Set : Check PG & Adjust screen
Enter numerical values to Color / Density areas to be adjusted. Adjustment starts by pressing [Execute]. Select [Check PG], and confirm the correction
Data display
Object(N)
Low-line Count Dot
For TRC Setup Low-line Count Dot
Display in graph (G)
#2[Y]
Current TRC value
TRC correction value
Target Set
Move (M)
Manual adjustment
Execute (E)
Close (C)
Ready

Figure 1 e0ko420533

4. Manual Adjustment

Select the corresponding screen group, and select the color for which you want to display the graph. Change the TRC correction value field, and click [Execute]. (Contents of Table 1) Calculate the LUT for the CTRACS User Target Set based on the correction value and display it as the current TRC value, and display on the screen the graph with direct interpolation of 10 points after adding 9 points of the current LUT value + the origin (Cin=0, Cont=0) of the selected screen group, and engine. Cancellation of operation is not possible during execution.

Table 1 Parameter Settings

Item	Setting Data
Object	Low-line Count Dot is the default.
Graph Display	Select the color you want to display on the graph.
TRC Correction Value	Change when adjustment is necessary (range: -512 to 511), enter the numerical value with the [+] and [-] buttons (or ten key) for the selected TRC correction value.

<CTRACS User Target Set Display Information>

Table 2 Display Data Content

Display Data Name	Parameter Range	Remarks
Object	Low-line count Dot/ high-line count Dot/line screen/all screen groups batch	Specify the screen group during adjustment.
<Current TRC value>		
TRC corrected Cin	0 to 1023	No. 1 to No. 9
Engine	0 to 1023	(#1 to #6) x (No. 1 to No. 9)
<TRC Correction Value>		
Engine	-512 to 511	(#1 to #6) x (No. 1 to No. 9)
Graph Display		Default is Screen: 200C, Engine: #3 [Y]

Note) TRC values of uninstalled engines and engines with clear toner installed are grayed out and values are blank.

5. Check PG

Change the box at the bottom of the left screen from Manual adjustment to Check PG, set the required parameters (Table 3), and click [Execute]. For all installed colors of the color mode, the number of prints (n sheets) specified by Simplex is output, and the LUT value is displayed. (4C: n sheets) If Check PG is executed before Manual adjustment, apply the currently set LUT value and output. (Figure 2)

Cancellation during execution is possible.

Table 3 Parameter Settings

Item	Setting Data

Table 3 Parameter Settings

Parameter Object	The screen group to be referenced/changed; the default is Low-line Count Dot ***NOTE:*** *[All Screen Groups] cannot be selected for the Color Mode [White Correction].*
Color Mode	The default is 4C. When the Gold or Silver Toner is installed, 5C and 6C can also be selected ***NOTE:*** *[White Correction] Mode can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction].*
Tray (T)	Tray 1 is default. Tray 3, 4 can be selected only when HCF A3 (Option) is connected. Tray 5, 6 can be selected only when 2nd HCF A3 (Option) is connected. MBT can be selected only when HCF A3 (Option) is connected.
No. of prints	1 sheet is Default (1 to 9999 sheets)
Data Display Object	Low-line count Dot/high-line count Dot/line screen
Graph Display	Select the color you want to display on the graph.

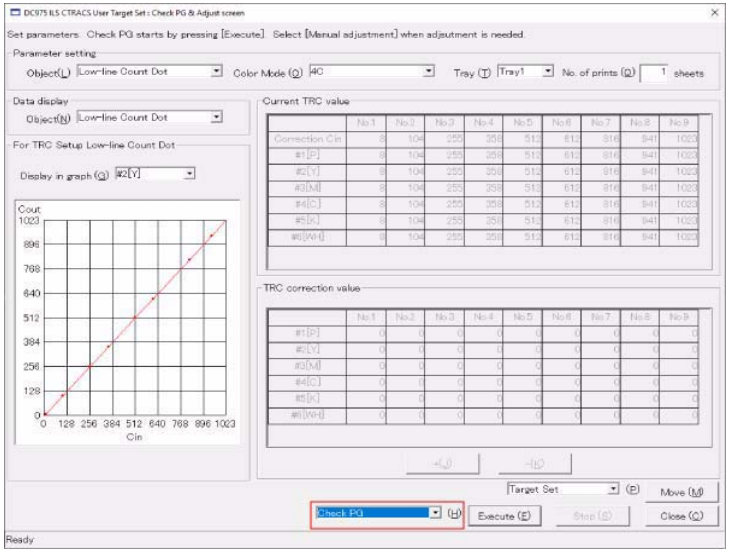


Figure 2 e0ko420524

6. Target Set

If [Move] is clicked while the bottom right window is [Target Set], DC975 ILS CTRACS User Target Set: Target Set screen will be displayed. Set the parameters (Table 4), and click the [Execute] button. (Figure 3)

Create a patch on the paper with ILS CTRACS User Target Set LUT turned on after executing MiniSetup with the screen group and color mode selected by the parameter. (Patch creation and detection are performed by setting the potential according to the paper setting of the tray and LUT ON by ADC tone correction.)

For all installed colors of the color mode, 1 sheet is output, and the measured value is displayed. Use print paper size of A4/Letter LEF (279.4 mm x 210.0 mm) or more.

Cancellation during execution is possible.

When the measurement result is NG, a message (Fail code) is displayed, and the measurement value field is displayed in blank and cannot be changed.

Table 4 Parameter Settings

Item	Setting Data
Target Value Setting Object	The screen group to be referenced/changed; the default is Low-line Count Dot ***NOTE:*** *[All Screen Groups] cannot be selected for the Color Mode [White Correction].*
Target value setting color Mode	The default is 4C and Color Mode that includes Clear Toner Engine is unavailable. When the Gold or Silver Toner is installed, 5C and 6C can also be selected. ***NOTE:*** *White Correction Mode can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction].*
Tray (T)	Tray 1 is default. Tray 3, 4 can be selected only when HCF A3 (Option) is connected. Tray 5, 6 can be selected only when 2nd HCF A3 (Option) is connected. MBT can be selected only when HCF A3 (Option) is connected.
CTRACS User Target Set Object	Same as target value setting object.

Note) Target/measured values of uninstalled engines and engines with clear toner installed are grayed out and values ??are blank.

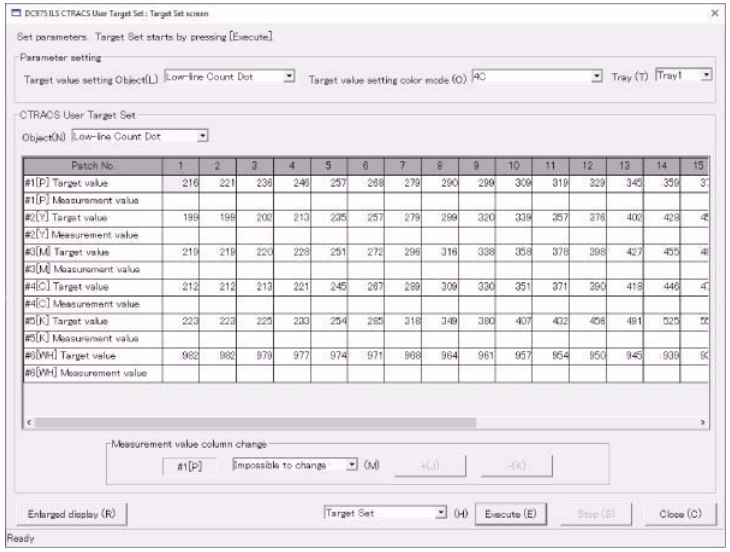


Figure 3 e0ko420534

7. Set Target Value

   Set the target value. (Enable change with the value, "Possible to change" in the measurement value column.)

   Change the Target Set box of the target value to [Target Set], and click [Execute].

   Update and display the ILS measurement value as the ILS target value.

   <CTRACS User Target Set Display/Change Information>

Table 5 Display Data Content

Display Data Name	Parameter Range	Description
<#1 to #6>		
Target values (No. 1 to No. 24)	0 to 1023	Enter the numerical value with the [+] and [-] buttons (or ten key) for the selected target value.
Measurement values (No. 1 to No. 24)	0 to 1023	Enter the numerical value with the [+] and [-] buttons (or ten key) for the selected measurement values.

Note) For the change of measurement value field, change the measurement value according to Possible to change/Impossible to change (blank measurement value column) for each engine of each screen group. If the measurement value can be changed even for 1 engine among the screen groups, the target value setting can be executed.

When you switch to possible to change manually, the same value as the target value is displayed in the measurement value column. Switching is possible even before Target Set is executed.

After executing the Target Set, the measured value of the screen group and the engine of the color mode selected by the parameter setting is displayed, and it switches to possible to change automatically.

8. Return to the DC975 ILS CTRACS User Target Set: Check PG & Adjust screen with the Close button. At this time, if Target Set has not been performed, the confirmation dialog, [Setting has not been done. Press [Yes] to execute setting. Press [No] to end without setting] will be displayed.

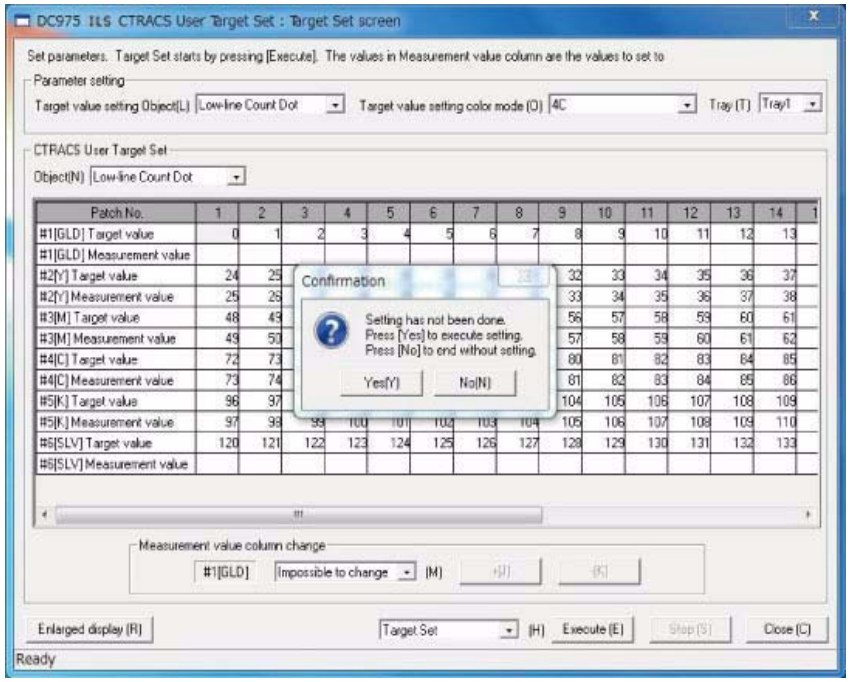


Figure 4 e0ko420535

9. Select the Close button to exit.

ADJ 20.1.6 DC972 Within Page Density Adjustment Cycle

Purpose

- Mainly used during shipment and field installation to automatically adjust the uneven density within image area in FS direction for standard paper by using ILS Sensor.
- Readjustment of SS direction (paper orientation) is necessary for exchange of YMCK Drum Cartridge/Developer or MMA Assembly attachment/detachment.

NOTE: *It also can perform corrections while being limited to individual colors (Single Color, Secondary Color, Process Color). The correction values are saved in the IOT NVM.*

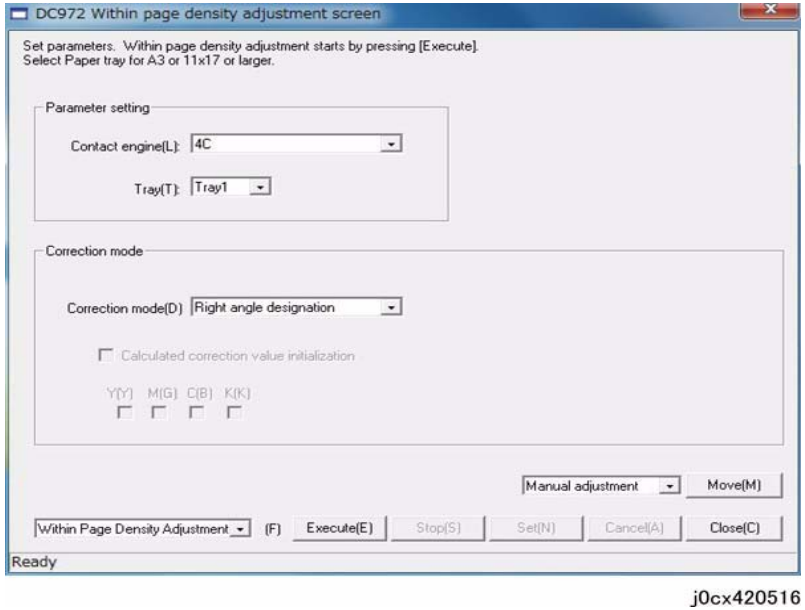
NOTE: *Gold and Silver Toner are supported in FS direction (right angle designation) only*

NOTE: *Clear Toner is not supported.*

Procedure

[Within page density adjustment in FS direction (right angle designation)]

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment menu screen, select DC972.
3. The DC972 Within page density adjustment screen is displayed to start the adjustment. (Figure 1)
   The "Set parameters. Within page density adjustment starts by pressing [Execute].
   Select Paper tray for A3, or 11x17 or larger." message is displayed.



j0cx420516

Figure 1 j0cx420516

4. Within page density adjustment

At the bottom left of the screen, check that the box shows [Within Page Density Adjustment], set the parameters (Table 1), select [Right angle designation] for Correction mode, and click [Execute].

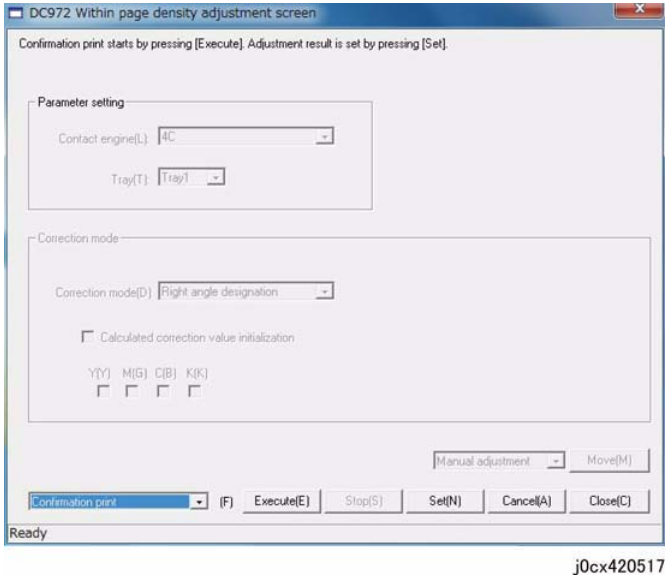
Table 1 Parameter Settings Content

Item	Setting Data
Contact Engine	4C [Default]
Tray	Tray 1 (default) to Tray 6. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected. The paper has to be A3, or 11x17 or larger.

5. Process after performing Within page density adjustment

   (1) If it has completed successfully: The "Confirmation print starts by pressing [Execute]. Adjustment result is set by pressing [Set]." message is displayed. (Figure 2)

   (2) If it has completed with an error: A Fail Code and message will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.



j0cx420517

Figure 2 j0cx420517

6. Perform the confirmation print.

   With the box at the bottom left of the screen remaining as [Confirmation print], click [Execute]. (The parameters for Contact engine and Tray also remains as how they were set during Within page density adjustment) If it has completed with an error, a Fail Code will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.

7. To reflect the correction value that was obtained by using the Within page density adjustment calculation result into the IOT NVM, click [Set].

8. To end without updating the Within page density adjustment calculation result, click [Cancel].

9. If [Close] was selected.

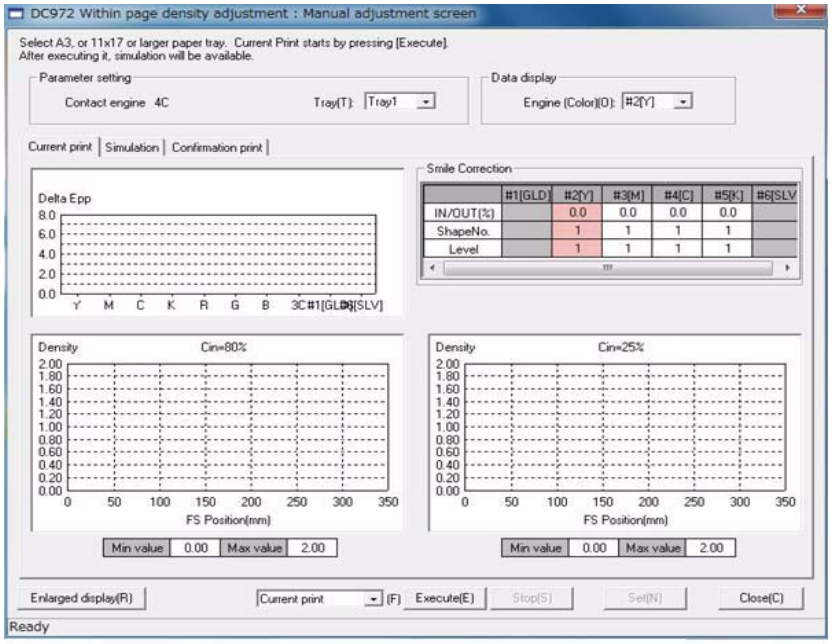
   Follow the instruction: "Set the setting values? Press [Yes] to set and end, press [No] to end without setting." that is displayed on a dialog box and end.

   - Yes: Update (same as 7.)

   - No: Do not update (same as 8.)

10. Performing Manual Adjustment

    On the DC972 Within page density adjustment screen, set the bottom right box to [Manual adjustment] and click [Move]. The screen changes to DC972 Within page density adjustment: Manual adjustment screen and the current Smile setting values (Smile Correction) are displayed. (Figure 3)



j0cx420518

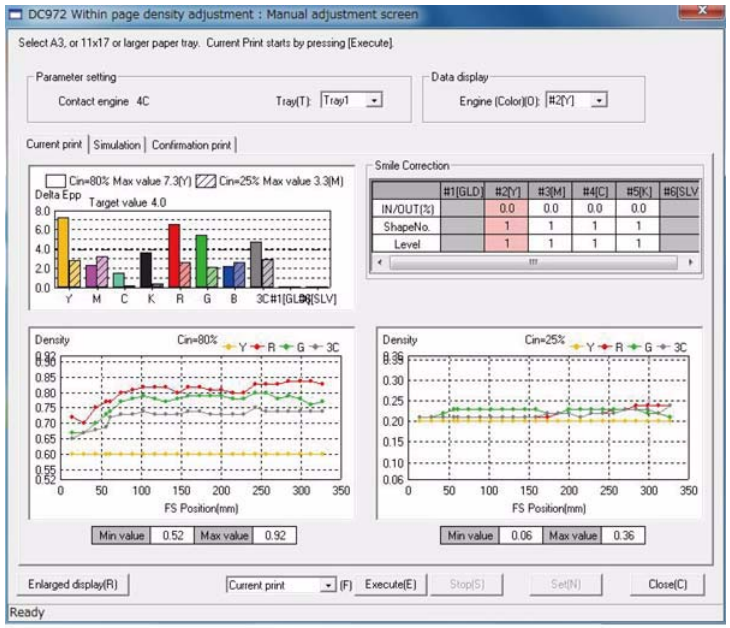
Figure 3 j0cx420518

11. Instruct to perform Current Print

    The "Select A3, or 11x17 or larger paper tray. Current Print starts by pressing [Execute]. After executing it, simulation will be available." message is displayed. Select the Tray and Engine (Color), then click [Execute] to print by using the current correction value.

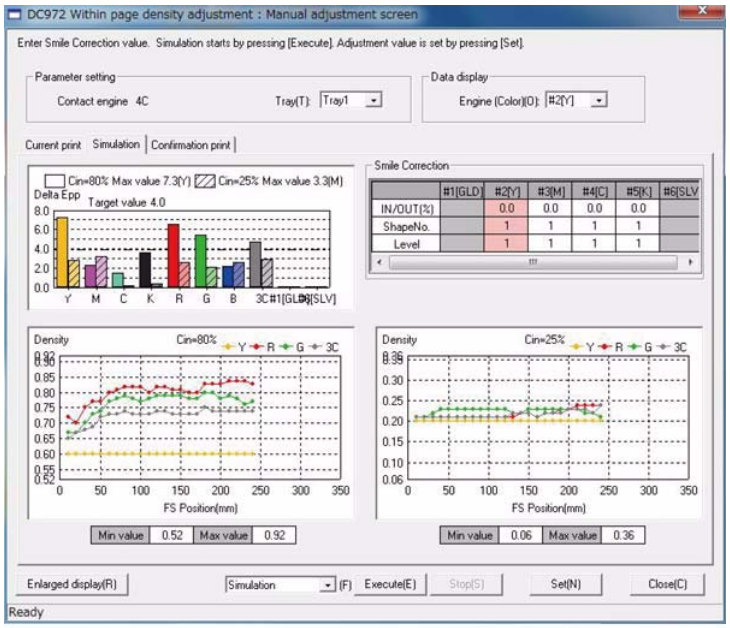
    (1) If the adjustment result is OK, the ILS detection result is displayed in a density distribution graph and a Delta E confirmation graph, and the simulation can now be performed. (Figure 4)

    (2) If it has completed with an error, a Fail Code and message will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.



j0cx420519

Figure 4 j0cx420519



j0cx420520

Figure 5 j0cx420520

12. Instruct to perform Simulation

    Upon selecting [Simulation] in the box at the bottom of the screen, the "Enter Smile correction value. Simulation starts by pressing [Execute]." message is displayed.

    Set the various items (IN/OUT (%), Shape No., Level) for Smile Correction according to the following settings content and click [Execute]. (Figure 5)

Table 2 Parameter Settings Content

Item	Setting Data
IN/OUT correction amount	Sets the In/Out correction amount. -32.8 to 32.8%. In 0.1% units.
Correction Shape No.	Select any one of the No. 1 to No. 10 correction shapes.
Correction Level	Select any one of the 1 to 9 correction levels.

The recalculated predicted density distribution graph and Delta E graph are displayed.

Corresponding relationship between Spape parameter and correction shape

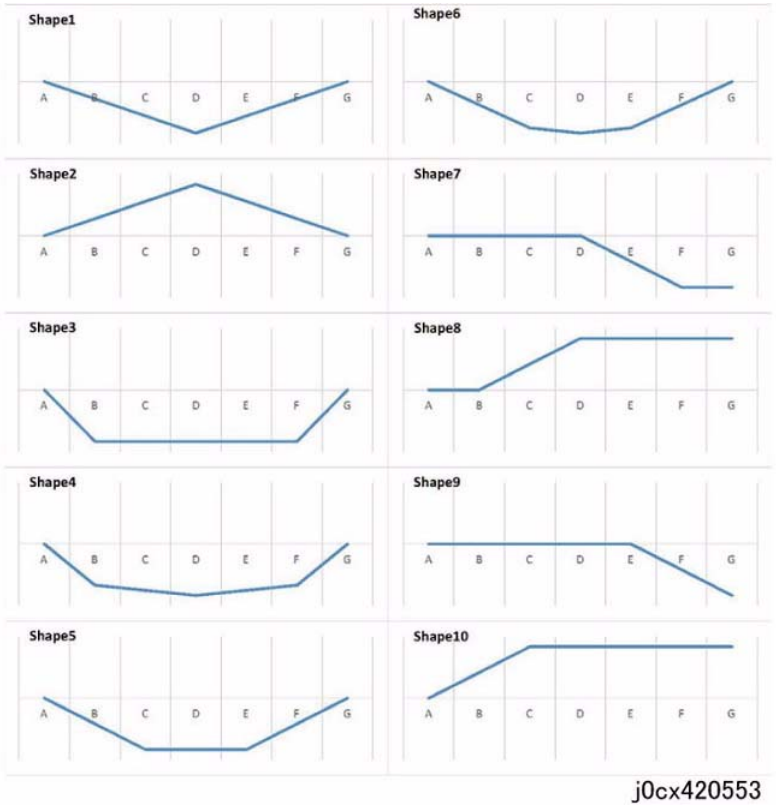


Figure 6 j0cx420553

13. Instruct to perform Confirmation Print

    Upon selecting [Confirmation print] in the box at the bottom of the screen, the "Enter Smile correction value, select A3, or 11x17 or larger paper tray. Confirmation print starts by pressing [Execute]. Adjustment value is set by pressing [Set]." message is displayed. Reflect the correction value and perform the print.

    (1) If the adjustment result is OK, the ILS detection result is displayed in a density distribution graph and a Delta E confirmation graph, and the settings operation becomes available. (Figure 6)

    (2) If it has completed with an error, a Fail Code and message will be displayed. Click [Close].

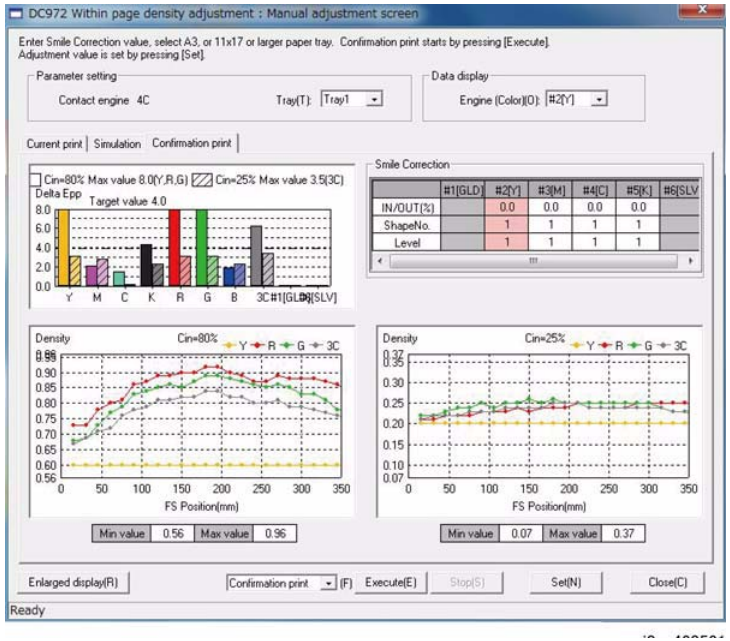


Figure 7 j0cx420521

14. Performing Settings

    To reflect the correction value after performing the last simulation or confirmation print into the NVM, click [Set].

15. Setting when clicking [Close]

    If [Close] was clicked without performing settings, the message: "Set the setting values? Press [Yes] to set and end, press [No] to end without setting." will be displayed on a dialog box. Select an operation.

    - Yes: Update
    - No: Do not update
    - Cancel: Do not update

    NOTE: *About differential fine adjustment (DC882 feature equipped)*

    In the Digital Full Color Production Printer DC972 Manual adjustment feature and part of conventional DC882 feature is covered, DC882 feature is removed. The differential fine adjustment that could be performed with the UI below is not covered by DC972, but the same adjustment is possible with NVM change. (As adjustment results in "Paper Direction Specification" mode described below will be affected, unevenness may be worse depending on circumstances. Basically its use is not recommended)

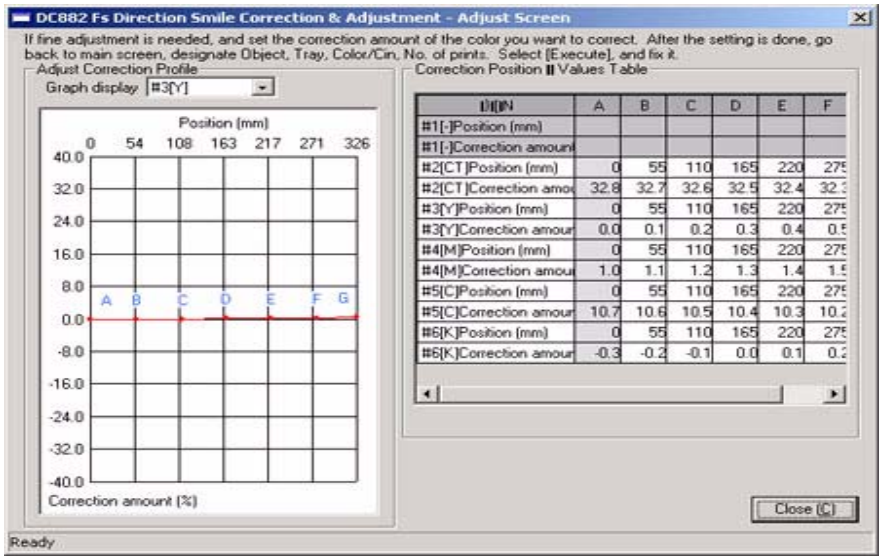

DC882 Fs Direction Smile Correction & Adjustment - Adjust Screen
If fine adjustment is needed, and set the correction amount of the color you want to correct. After the setting is done, go back to main screen, designate Object, Tray, Color/Cin, No. of prints. Select [Execute], and fix it.
Adjust Correction Profile
Graph display #3[Y]
Position (mm)
0 54 108 163 217 271 326
40.0 32.0 24.0 16.0 8.0 0.0 -8.0 -16.0 -24.0 -32.0 -40.0
A B C D E F G
Correction amount (%)
Correction Position & Values Table
Close (C)
Ready

Figure 8 j0cm402102

Table 3 Each engine (#1 to 6), NVM for fine adjustment of correction amount at the position of A to G

Chain-Link	Meaning	Default Value
776-019	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark A) (#1)	0
776-020	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark B) (#1)	0
776-021	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark C) (#1)	0
776-022	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark D) (#1)	0
776-023	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark E) (#1)	0
776-024	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark F) (#1)	0
776-025	Correction Amount of each mark of Smile Correction Horizontal Scanning during Maxsetup(MarkG)(#1)	0
776-026	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark A) (#2)	0

Table 3 Each engine (#1 to 6), NVM for fine adjustment of correction amount at the position of A to G

Chain-Link	Meaning	Default Value
776-027	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark B) (#2)	0
776-028	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark C) (#2)	0
776-029	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark D) (#2)	0
776-030	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark E) (#2)	0
776-031	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark F) (#2)	0
776-032	Correction Amount of each mark of Smile Correction Horizontal Scanning during Maxsetup(MarkG)(#2)	0
776-033	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark A) (#3)	0
776-034	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark B) (#3)	0
776-035	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark C) (#3)	0
776-036	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark D) (#3)	0
776-037	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark E) (#3)	0
776-038	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark F) (#3)	0
776-039	Correction Amount of each mark of Smile Correction Horizontal Scanning during Maxsetup(MarkG)(#3)	0
776-040	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark A) (#4)	0
776-041	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark B) (#4)	0
776-042	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark C) (#4)	0
776-043	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark D) (#4)	0
776-044	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark E) (#4)	0
776-045	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark F) (#4)	0
776-046	Correction Amount of each mark of Smile Correction Horizontal Scanning during Maxsetup(MarkG)(#4)	0

Table 3 Each engine (#1 to 6), NVM for fine adjustment of correction amount at the position of A to G

Chain-Link	Meaning	Default Value
776-047	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark A) (#5)	0
776-048	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark B) (#5)	0
776-049	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark C) (#5)	0
776-050	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark D) (#5)	0
776-051	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark E) (#5)	0
776-052	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark F) (#5)	0
776-053	Correction Amount of each mark of Smile Correction Horizontal Scanning during Maxsetup(MarkG)(#5)	0
776-054	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark A) (#6)	0
776-055	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark B) (#6)	0
776-056	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark C) (#6)	0
776-057	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark D) (#6)	0
776-058	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark E) (#6)	0
776-059	Correction Amount of each mark of Smile Correction Fast Scan during MAX Setup (Mark F) (#6)	0
776-060	Correction Amount of each mark of Smile Correction Horizontal Scanning during Maxsetup(MarkG)(#6)	0

NOTE: *Up to +/-328 can be entered. It is recommended to change by 20 each.*

Table 4 Each engine (#1 to 6), NVM for fine adjustment of correction position at the position of A to G

Chain-Link	Meaning	Default Value
776-657	Smile Correction Fast Scan Area Split Position (A) (#1)	0
776-658	Smile Correction Fast Scan Area Split Position (B) (#1)	54
776-659	Smile Correction Fast Scan Area Split Position (C) (#1)	109
776-660	Smile Correction Fast Scan Area Split Position (D) (#1)	163
776-661	Smile Correction Fast Scan Area Split Position (E) (#1)	217
776-662	Smile Correction Fast Scan Area Split Position (F) (#1)	272

Table 4 Each engine (#1 to 6), NVM for fine adjustment of correction position at the position of A to G

Chain-Link	Meaning	Default Value
776-663	Smile Correction Fast Scan Area Split Position (G) (#1)	326
776-664	Smile Correction Fast Scan Area Split Position (A) (#2)	0
776-665	Smile Correction Fast Scan Area Split Position (B) (#2)	54
776-666	Smile Correction Fast Scan Area Split Position (C) (#2)	109
776-667	Smile Correction Fast Scan Area Split Position (D) (#2)	163
776-668	Smile Correction Fast Scan Area Split Position (E) (#2)	217
776-669	Smile Correction Fast Scan Area Split Position (F) (#2)	272
776-670	Smile Correction Fast Scan Area Split Position (G) (#2)	326
776-671	Smile Correction Fast Scan Area Split Position (A) (#3)	0
776-672	Smile Correction Fast Scan Area Split Position (B) (#3)	54
776-673	Smile Correction Fast Scan Area Split Position (C) (#3)	109
776-674	Smile Correction Fast Scan Area Split Position (D) (#3)	163
776-675	Smile Correction Fast Scan Area Split Position (E) (#3)	217
776-676	Smile Correction Fast Scan Area Split Position (F) (#3)	272
776-677	Smile Correction Fast Scan Area Split Position (G) (#3)	326
776-678	Smile Correction Fast Scan Area Split Position (A) (#4)	0
776-679	Smile Correction Fast Scan Area Split Position (B) (#4)	54
776-680	Smile Correction Fast Scan Area Split Position (C) (#4)	109
776-681	Smile Correction Fast Scan Area Split Position (D) (#4)	163
776-682	Smile Correction Fast Scan Area Split Position (E) (#4)	217
776-683	Smile Correction Fast Scan Area Split Position (F) (#4)	272
776-684	Smile Correction Fast Scan Area Split Position (G) (#4)	326
776-685	Smile Correction Fast Scan Area Split Position (A) (#5)	0
776-686	Smile Correction Fast Scan Area Split Position (B) (#5)	54
776-687	Smile Correction Fast Scan Area Split Position (C) (#5)	109
776-688	Smile Correction Fast Scan Area Split Position (D) (#5)	163
776-689	Smile Correction Fast Scan Area Split Position (E) (#5)	217
776-690	Smile Correction Fast Scan Area Split Position (F) (#5)	272
776-691	Smile Correction Fast Scan Area Split Position (G) (#5)	326
776-692	Smile Correction Fast Scan Area Split Position (A) (#6)	0
776-693	Smile Correction Fast Scan Area Split Position (B) (#6)	54
776-694	Smile Correction Fast Scan Area Split Position (C) (#6)	109
776-695	Smile Correction Fast Scan Area Split Position (D) (#6)	163
776-696	Smile Correction Fast Scan Area Split Position (E) (#6)	217
776-697	Smile Correction Fast Scan Area Split Position (F) (#6)	272
776-698	Smile Correction Fast Scan Area Split Position (G) (#6)	326

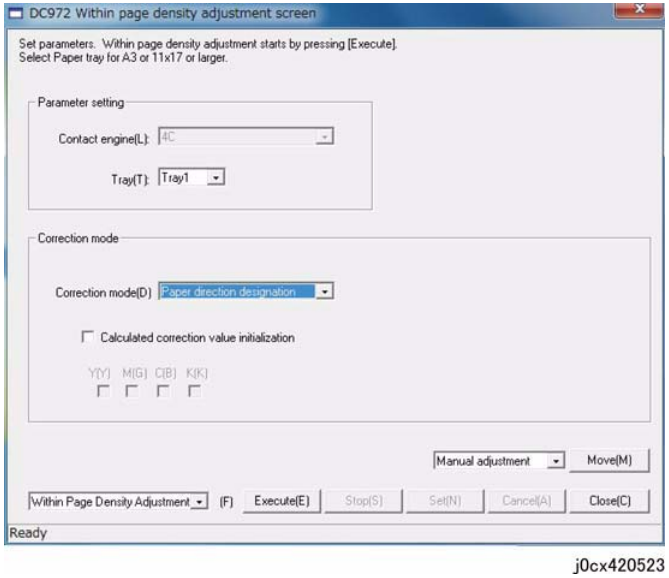
NOTE: *0 to 326 can be entered. It is recommended to change by 20 each.*

Procedure

[Within page density adjustment in SS direction (paper direction designation)]

NOTE: *When inserting/removing the MM Assembly, as the Correction Value is not automatically initialized, it is necessary to initialize the Correction Value by the following method.*

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment menu screen, select DC972.
3. The DC972 Within page density adjustment screen is displayed to start the adjustment. (Figure 7)
   The "Set parameters. Within page density adjustment starts by pressing [Execute].
   Select Paper tray for A3 or 11x17 or larger." message is displayed.



j0cx420523

Figure 9 j0cx420523

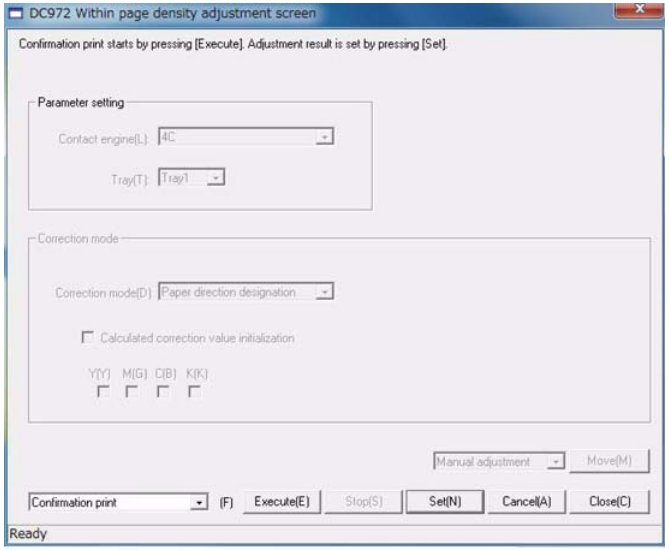
4. Within page density adjustment
   At the bottom left of the screen, check that the box shows [Within Page Density Adjustment], set the parameters (Table 1), select [Paper direction designation] for Correction mode, and click [Execute].

Table 5 Parameter Settings Content

Item	Setting Data
Contact Engine	4C
Tray	Tray 1 (default) to Tray 6. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected. The paper has to be A3, 11x17" or larger.

NOTE: *When initializing the correction value, put check marks at [Calculated correction value initialization] and the checkbox of the applicable color.*

5. Process after performing Within page density adjustment
   (1) If it has completed successfully: The "Confirmation print starts by pressing [Execute]. Adjustment result is set by pressing [Set]." message is displayed. (Figure 8)
   (2) If it has completed with an error, a Fail Code and message will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.



j0cx420524

Figure 10 j0cx420524

6. Perform the confirmation print.
   With the box at the bottom left of the screen remaining as [Confirmation print], click [Execute]. (The parameters for Contact engine and Tray also remains as how they were set during Within page density adjustment) If it has completed with an error, a Fail Code will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.
7. To reflect the correction value that was obtained by using the Within page density adjustment calculation result into the IOT NVM, click [Set].
8. To end without updating the Within page density adjustment calculation result, click [Cancel].
9. If [Close] was selected.
   Follow the instruction: "Set the setting values? Press [Yes] to set and end, press [No] to end without setting." that is displayed on a dialog box and end.
   - Yes: Update (same as 7.)
   - No: Do not update (same as 8.)

ADJ 20.1.7 ILS Adjustment

Purpose

Perform the necessary item based on the order in the figure and adjustment necessity decision.

NOTE: *Download the ILS latest software to IOT in advance.*

NOTE: *Perform this process with the IOT-R front cover closed.*

NOTE: *Update the version of IOT/SYS SW before performing this task. Refer to [ADJ 18.1.2 Update Firmware Version].*

The following are the requirements for this adjustment: (This adjustment is already performed at the time of shipment)

- When replacing ILS related parts
- When replacing and removing ILS Assy
- When replacing ILS Lamp Assy
- When replacing WR Roll Assy
- When ILS malfunction occurs

<ILS Adjustment Flow>

Indicates the whole ILS inspection process flow. (Figure 1, 2, 3)

NOTE: *This procedure manual explains the process of Coloring.*

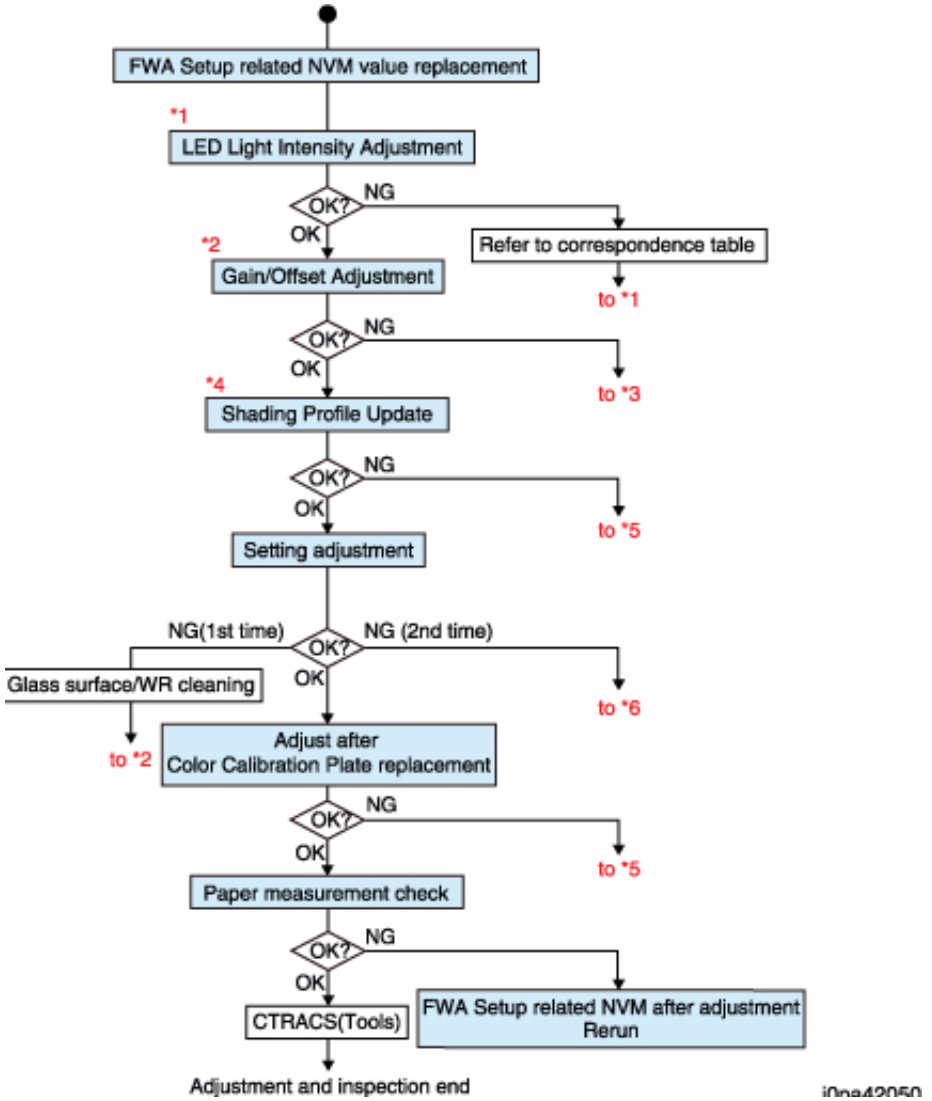
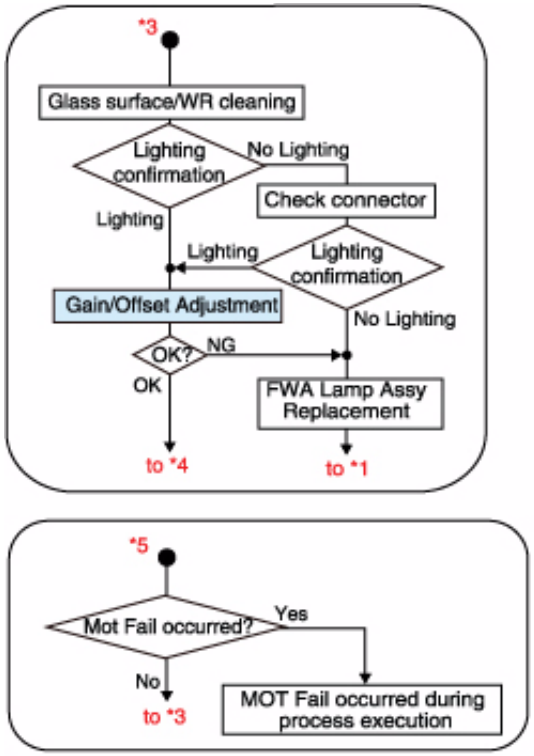
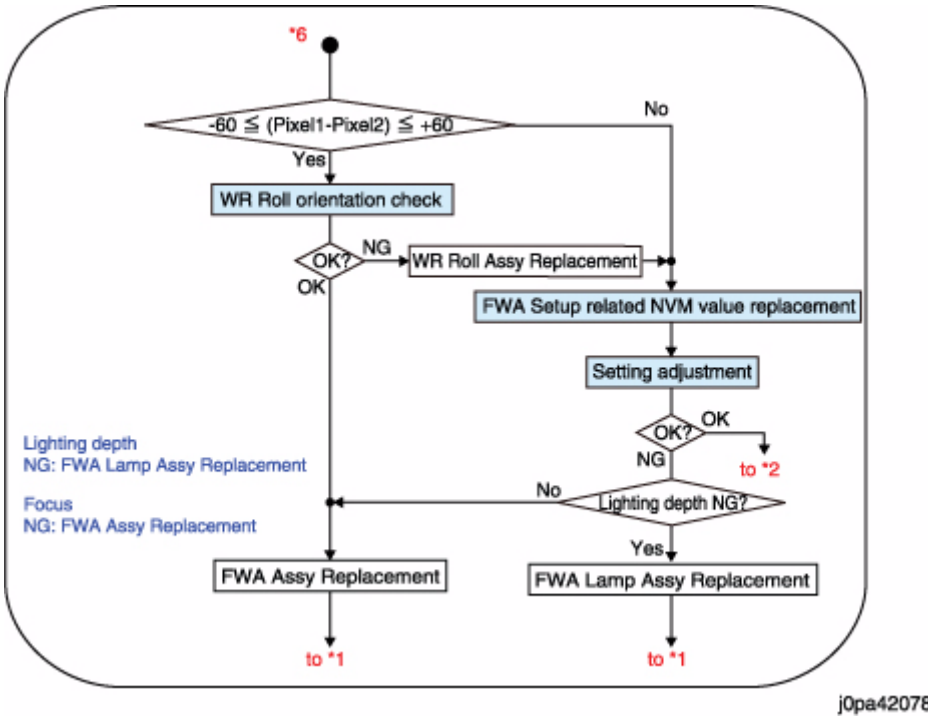


Figure 1 j0pa42050



j0pa42077

Figure 2 j0pa42077



j0pa42078

Figure 3 j0pa42078

NOTE: *Perform this process with the IOT-R front cover closed.*

NOTE: *Download the latest ILS firmware before performing this process.*

NOTE: *Perform this process after rewriting the related NVM to the latest value as well.*

Note that [ADJ 20.1.8 ILS Setup Related NVM Value Rewrite] may be done at anytime before the adjustment.

ADJ 20.1.8 How to rewrite ILS Setup Related NVM Value

<How to Rewrite ILS Setup Related NVM Value>

Procedure

1. Rewrite the following NVM value.
   NVM (782-330) value: 1 (ILS is connected)
   NVM (782-338) value: 20500
   NVM (782-339) value: 4400
2. Check the value linked to WR Roll Assy.
3. Rewrite the following NVM value based on the value written on the 3 seals on the WR Roll Assy side. (Figure 1)
   NVM (782-822) value: WR Adjustment Seal A
   NVM (782-848) value: Y Reference Board Seal B
   NVM (782-849) value: Y Reference Board Seal B
   NVM (782-850) value: Y Reference Board Seal B
   NVM (782-851) value: Y Reference Board Seal B
   NVM (782-852) value: Y Reference Board Seal B
   NVM (782-843) value: W Reference Board Seal C
   NVM (782-844) value: W Reference Board Seal C
   NVM (782-845) value: W Reference Board Seal C

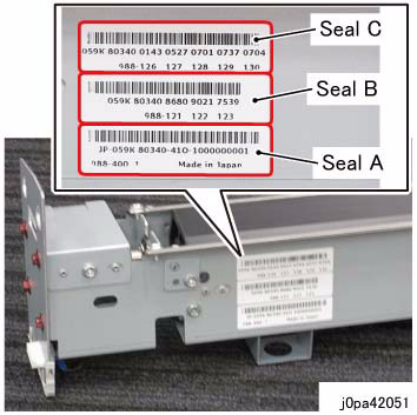


Figure 1 j0pa42051

4. Check the value linked to ILS Lamp Assy.
5. Rewrite the following NVM value based on the value written on the seal on the ILS Lamp Assy side. (Figure 2)
   NVM (782-859) value: LED Correction Rank Seal D

Figure 2 j0pa42052

6. Turn the Power OFF and ON.

ADJ 20.1.9 LED Light Amount Adjustment: DC970

ADJ 20.1.9.1 How to Adjust LED Light Amount

Procedure

1. In the ILS Standard Setup screen, select [LED Light Amount Adjustment]. (Figure 1)

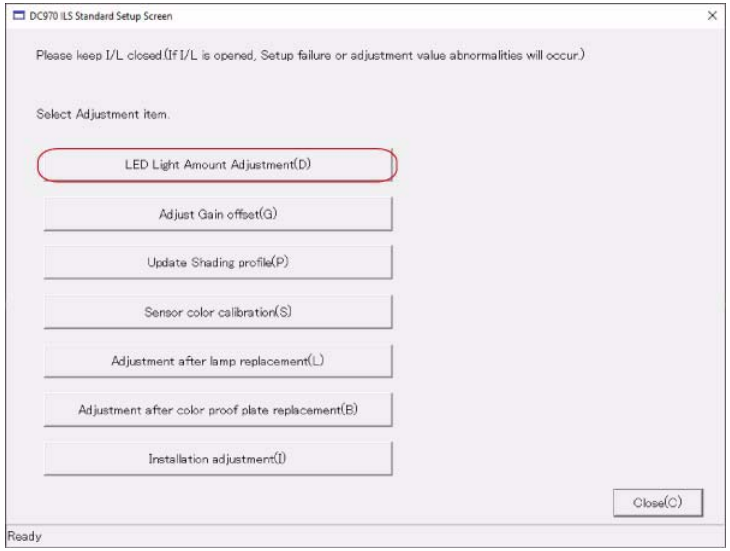

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko420501

2. Click [Execute] to perform the light amount adjustment for LED 1. (Figure 2)

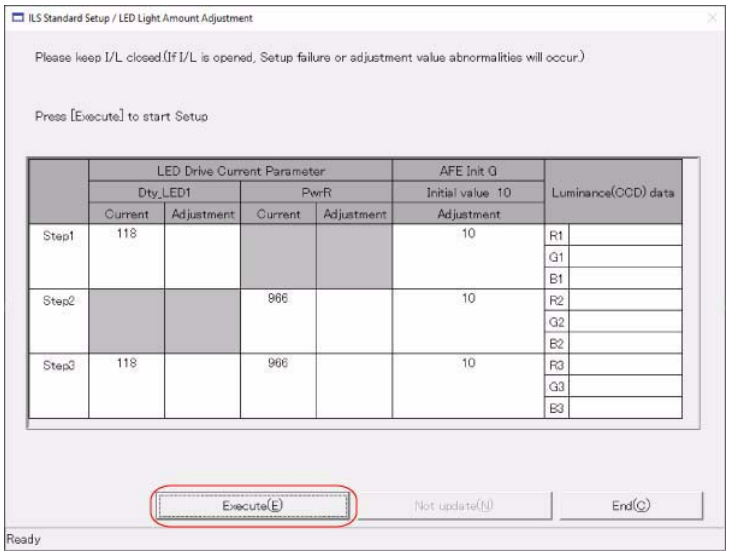


Figure 2 e0ko420502

3. Click [Update and then Execute] to perform the light amount adjustment for LED 2. (Figure 3)

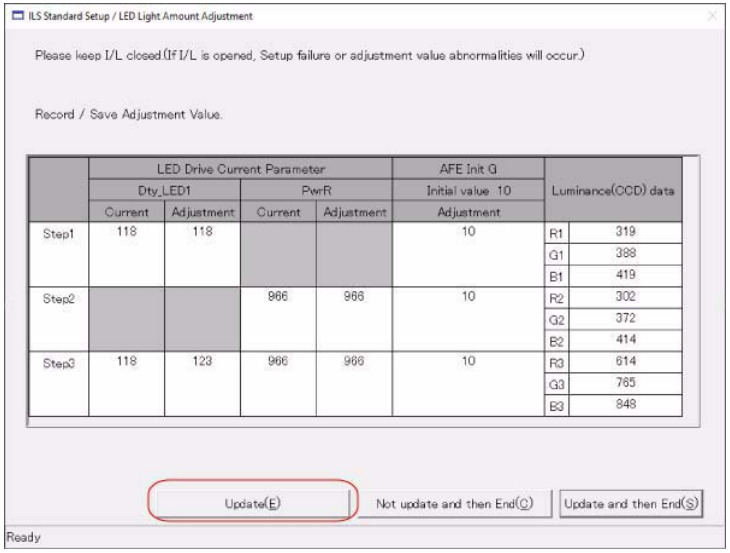

ILS Standard Setup / LED Light Amount Adjustment
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Record / Save Adjustment Value.
LED Drive Current Parameter
AFE Init G
Dty_LED1
PwrR
Initial value 10
Luminance(CCD) data
Current
Adjustment
Current
Adjustment
Adjustment
Step1 118 118 10 R1 319 G1 388 B1 419
Step2 966 966 10 R2 302 G2 372 B2 414
Step3 118 123 966 966 10 R3 614 G3 765 B3 848
Update(E)
Not update and then End(C)
Update and then End(S)
Ready

Figure 3 e0ko420503

4. Perform the light amount adjustment for LED1/2 by clicking [Update and then Execute] again and click [Update and then End] after completing the process. (Figure 4)

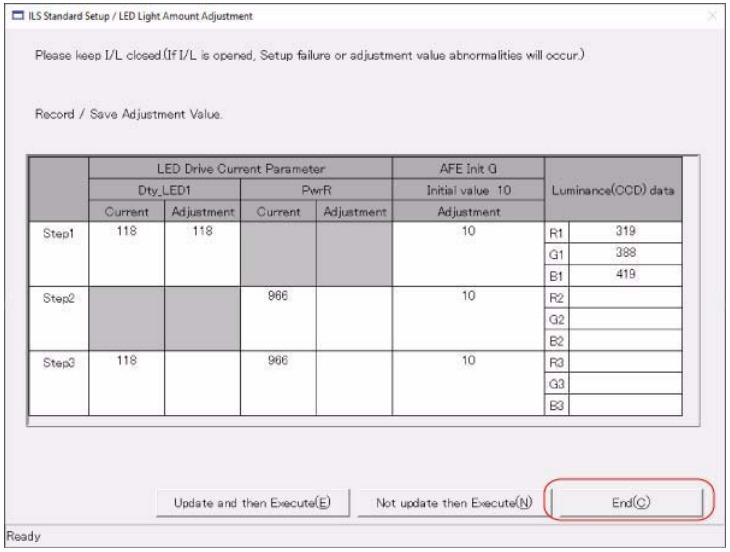


Figure 4 e0ko420504

5. If there is no NG, proceed to the next Step [ADJ 1.10 Adjust Gain Offset].
   If there is NG, perform [ADJ 20.1.16.2 Process when Abnormal - LED Light Amount Adjustment].

ADJ 20.1.9.2 Process when Abnormal - LED Light Amount Adjustment

Identify the cause of the malfunction using the Response Chart by the following LED Light Amount Adjustment Result Code stored in NVM: 782-827 and take corrective action.

Table 1

Error Code	Meaning		Corrective Actions	
51	Lack of Light	Step 1 ILS Lamp 1(B)	Gain up CCD (AFE) and perform readjustment.	
54		Step 2 ILS Lamp 2(B)	ILS Lamp 2 Error	Unable to respond by Gain Adjustment If this occurs in Step 2 after Step 1 is completed normally. (Gain of CCD is common)
57		Step 3 ILS Lamp 1 & 2(B)	Gain up CCD (AFE) and perform readjustment.	
52	Excess Light Quantity	Step 1 ILS Lamp 1(B)	Lower CCD (AFE) gain and adjust again.	
55		Step 2 ILS Lamp 2(B)	ILS Lamp 2 Error	Unable to resolve with Gain Adjustment.
58		Step 3 ILS Lamp 1 & 2(B)	Lower CCD (AFE) gain and adjust again.	

Table 1

Error Code	Meaning		Corrective Actions	
50	R, B, G Unbalance	Step 1 ILS Lamp 1	ILS Lamp 1 Error	ILS Lamp 1 PWBA Malfunction CCD PWBA Malfunction
53		Step 2 ILS Lamp 2	ILS Lamp 2 Error	ILS Lamp 2 PWBA Malfunction CCD PWBA Malfunction
56		Step 3 ILS Lamp 1&2	ILS Lamp 1&2 Abnormality	Perform Steps 1 and 2 and check individually.

ADJ 20.1.10 Gain Offset Adjustment: DC970

ADJ 20.1.10.1 How to Adjust Gain Offset

Procedure

1. In the ILS Standard Setup screen, select [Adjust Gain Offset]. (Figure 1)

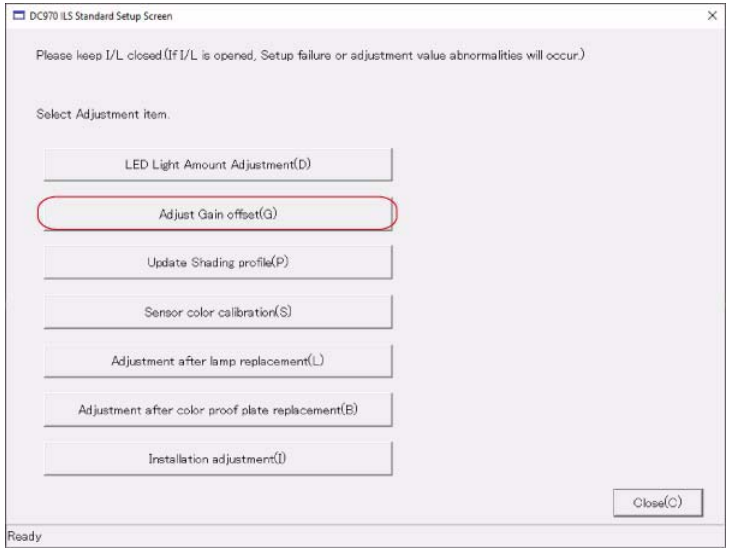

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko420505

2. Click [Execute] to perform the gain offset adjustment.
3. Check to see whether the adjusted value of [Gain] and [Offset] is within the range. (Figure 2)
   - [Gain]
     OK if adjustment value is within 5 to 55.
   - [Offset]
     OK if the adjustment value is between the lower limit value and the upper limit value.

NOTE: *The IOT performs determination on the adjustment value and it will display any NG values in red.*

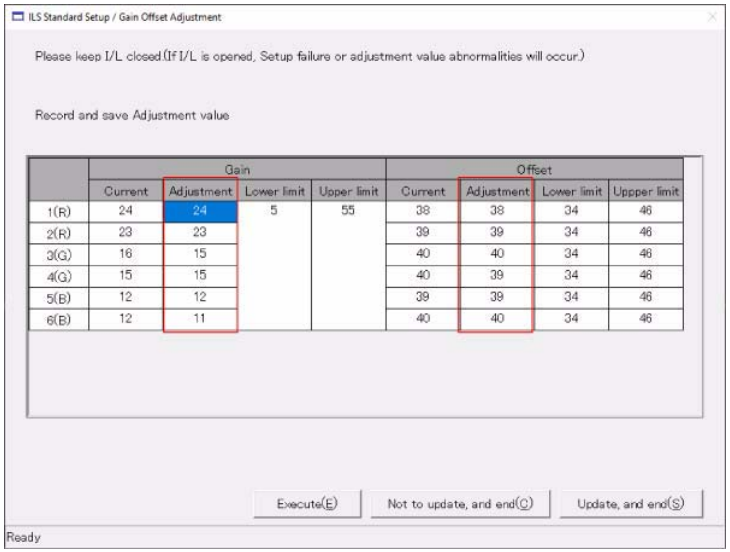

ILS Standard Setup / Gain Offset Adjustment
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Record and save Adjustment value
Gain
Offset
Current
Adjustment
Lower limit
Upper limit
Current
Adjustment
Lower limit
Uppper limit
1(R) 24 24 5 55 38 38 34 46
2(R) 23 23 39 39 34 46
3(G) 16 15 40 40 34 46
4(G) 15 15 40 39 34 46
5(B) 12 12 39 39 34 46
6(B) 12 11 40 40 34 46
Execute(E)
Not to update, and end(Q)
Update, and end(S)
Ready

Figure 2 e0ko420506

4. If all the adjustment values are OK, click [Update, and end] and proceed to the next Step [ADJ 20.1.11 Update Shading Profile].
5. If any of the adjustment value is NG, click [Not to update, and end] and perform [ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset].

ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset

Procedure

1. Turn OFF the Power and wipe both sides of the ILS Lamp Assy Window with a dry cloth. For heavy cleaning of the outer side, use a lens cleaner and wipe with a silicon cloth.
2. Wipe the WR Roll of WR Roll Assy with a dry cloth.
3. Open the IOT-R Front Right Cover and cheat the IOT-R F-Cover Interlock Switch R. Enter Component Check and turn the Lamp ON. Check to see if the ILS Front/Rear Lamp is turned ON.
   (1) If it turned ON -> Proceed to Step 7
   (2) If it did not turn ON -> Proceed to Step 4
4. If it did not turn ON, perform [Connector Check].
   (1) If there is a poor connection -> Proceed to Step 5
   (2) If there is no poor connection -> Proceed to Step 6
5. If there is poor connection of the Connector, perform process after [Connector Unplug/Plug Inspection].
6. If there is no poor connection of the Connector, perform [ILS Lamp Assy Replacement].
7. If the light turned ON, perform [ADJ 20.1.10 Adjust Gain Offset] again.

(1) If all adjusted values are OK -> Proceed to Step 8

(2) If the adjusted values include NGs -> Proceed to Step 9

8. If all the adjustment values are OK, click [Update, and end] and proceed to the next Step [ADJ 20.1.11 Update Shading Profile].
9. If the adjusted values still include NGs, perform escalation to the Support Dept.

ADJ 20.1.11 Updating Shading Profile: DC970

ADJ 20.1.11.1 How to Update Shading Profile

Procedure

1. In the ILS Standard Setup screen, select [Update Shading Profile]. (Figure 1)

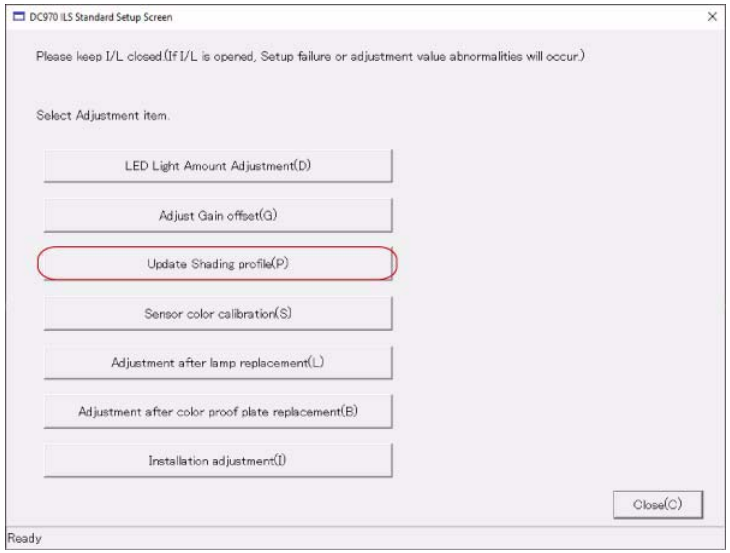

DC970 ILS Standard Setup Screen
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko420507

2. Click [Execute] to update the Shading Profile. (Figure 2)

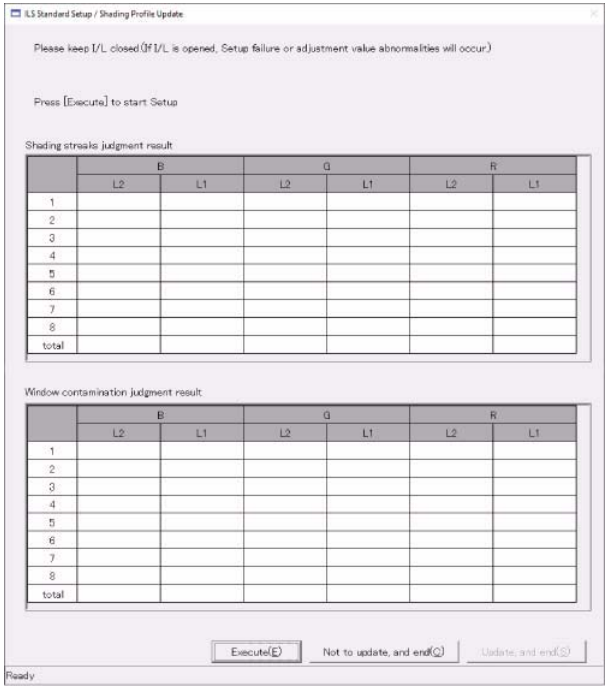

ILS Standard Setup / Shading Profile Update
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [Execute] to start Setup
Shading streaks judgment result
Window contamination judgment result
Execute(E)
Not to update, and end(Q)
Update, and end(S)
Ready

Figure 2 e0ko420508

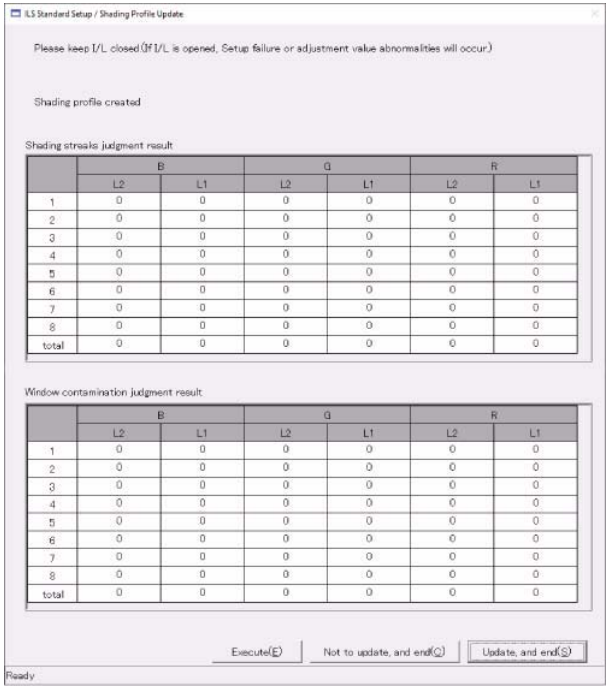

ILS Standard Setup / Shading Profile Update
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Shading profile created
Shading streaks judgment result
Window contamination judgment result
Execute(E)
Not to update, and end(Q)
Update, and end(S)
Ready

Figure 3 e0ko420509

3. If the values of R (L2), G (L2), B (L2) in the [Window contamination judgment result] and [Shading streaks judgment result] results display are not all 0 (zero), perform Steps 1 and 2 of [ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset]. (Figure 3)

   Perform Update Shading Profile again after that and check to see if the value is 0 (zero).

   NOTE: *Hidden Fail (052-600) will occur if the value is other than 0 (zero), indicating that the ILS Lamp is dirty or scratched.*

4. If there is no abnormality, click [Update, and end] and proceed to the next Step [ADJ 20.1.12 Installation Adjustment].
5. If there is an abnormality, perform [ADJ 20.1.11.2 Update Shading Profile - When Result is Abnormal].

ADJ 20.1.11.2 Update Shading Profile - When Result is Abnormal

Procedure

1. Enter Shutdown History and check to see if ILS WR Motor Fail has occurred or not.
   (1) If it occurred -> Proceed to Step 2
   (2) If it did not occur -> Proceed to Step 3
2. If ILS WR Motor Fail has occurred, proceed to the applicable FIP.
3. If ILS WR Motor Fail did not occur, perform [ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset].
4. If the results display screen has L2 values that are 1 or higher, perform [ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset].

ADJ 20.1.12 Installation Adjustment: DC970

ADJ 20.1.12.1 Installation Adjustment Value Verification Method

Procedure

1. In the ILS Standard Setup screen, select [Installation Adjustment]. (Figure 1)

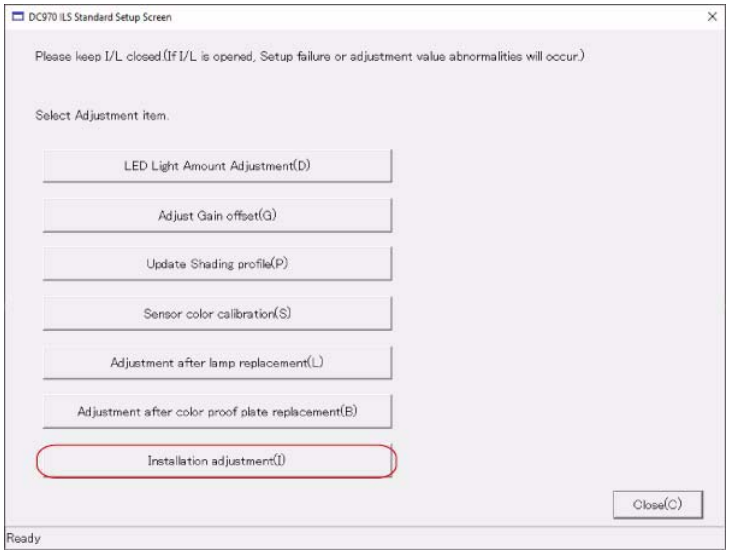

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko420510

2. Upon selection, the process simultaneously starts and the result will be displayed.
3. Clicking [View the value of judgment] displays the judgment values. (Figure 2)

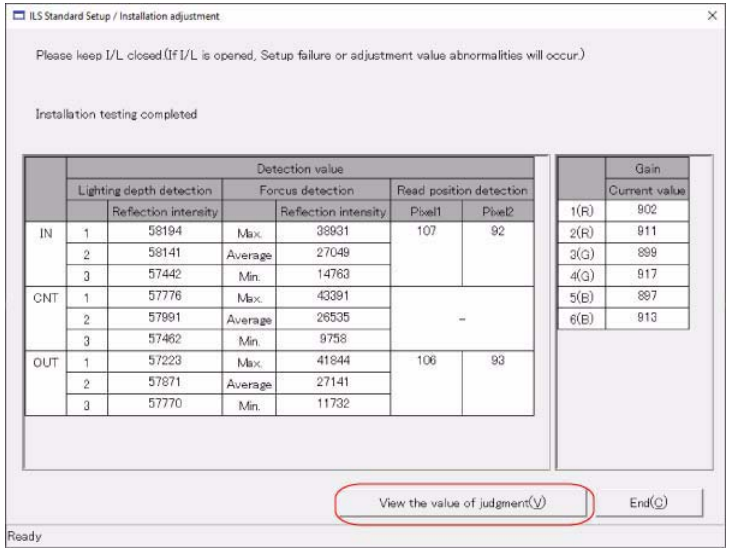


Figure 2 e0ko420511

4. Clicking [View the value of detection] displays the detection values. (Figure 3)

NOTE: *The IOT performs determination on the adjustment value and it will display any NG values in red.*

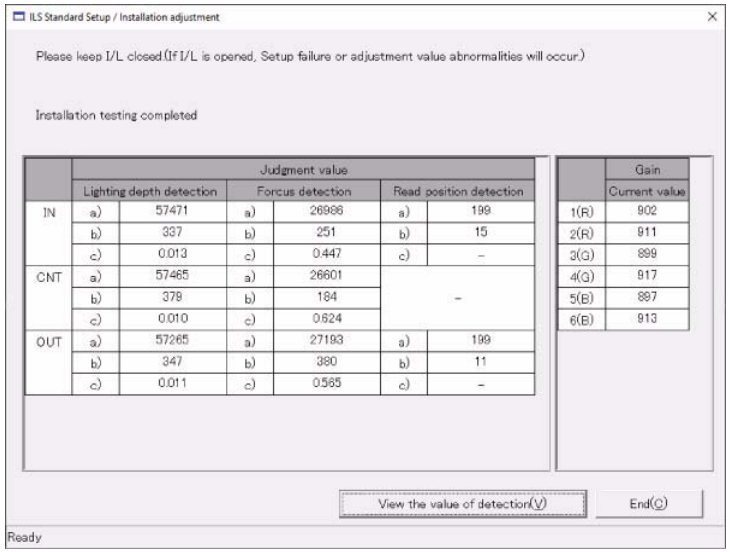

ILS Standard Setup / Installation adjustment
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Installation testing completed
Judgment value
Lighting depth detection
Focus detection
Read position detection
IN a) 57471 a) 26986 a) 199
b) 337 b) 251 b) 15
c) 0.013 c) 0.447 c) -
CNT a) 57465 a) 26601 -
b) 379 b) 184
c) 0.010 c) 0.624
OUT a) 57265 a) 27193 a) 199
b) 347 b) 380 b) 11
c) 0.011 c) 0.565 c) -
Gain
Current value
1(R) 902
2(R) 911
3(G) 899
4(G) 917
5(B) 897
6(B) 913
View the value of detection(V)
End(O)
Ready

Figure 3 e0ko420512

5. [Lighting depth detection]

   Perform judgment for IN, CNT, and OUT lines 1 to 3 from the adjustment result.

   - a): Check the Min value - if it is 30000 or higher, it is OK
   - b): Subtract from 2 (average of 1 and 3) - if the absolute value is 1500 or lower, it is OK
   - c): If the value of (difference between Max and Min in 1 to 3) divided by (average of Max and Min) is 0.04 or lower, it is OK

6. [Focus detection]

   Perform judgment for Max/Avg/Min of IN, CNT, and OUT line from the Adjustment result.

   - a): OK if the average is 15000 or higher
   - b): OK if ((Max+Min)/2-Average) is 5000 or lower
   - c): OK if ((Max-Min)/(Max+Min)) is 0.2 or higher

7. [Read position detection]

   Perform judgment for IN, OUT line from the adjustment value.

   - a): OK if (Pixel 1 + Pixel 2) is within 197 +/-10
   - b): OK if (Pixel 1 - Pixel 2) is within +/-35

   NOTE: *[Gain] will be checked in separate Step and is not necessary at this point.*

8. Click [End].
9. If all is OK, proceed to the next Step [ADJ 20.1.13 Adjustment after Color Proof Plate Replacement].

   If there is any NG, perform [ADJ 20.1.12.2 Installation Adjustment Value Verification - When Result is Abnormal].

ADJ 20.1.12.2 Installation Adjustment Value Verification - When Result is Abnormal

Procedure

- For the first time

  Clean the Window/White Reference Surface/Detection Side and perform [ADJ 20.1.10 Adjust Gain Offset] again.

- For the 2nd time

1. First, check the adjustment result of the Read Position Detection Side and perform the following according to the situation.

   (1) If Read Position Detection Side is NG and (Pixel 1 - Pixel 2) is not within +/-60

   -> Go to Step 2

   (2) If Read Position Detection Side is NG and (Pixel 1 - Pixel 2) is within +/-60

   -> Go to Step 3

   (3) If Read Position Detection Side is OK

   -> Go to Step 4

2. Check the position of WR Roll for Step 1-(1).

   NOTE: *Refer to [ADJ 20.1.12.3 WR Roll Position Verification Method] for the verification method.*

   (1) If the WR Roll position is NG, replace the WR Roll Assy. -> Go to Step 3

   (2) If the WR Roll position is OK, replace the ILS main unit Assy. -> Go to Step 6

3. For Step 1-(2) or Step 2-(1), rewrite NVM value based on the following calculation.

   If the average value of IN line and OUT line of Pixel 1 is A, calculate Adjustment Value = (A-100)x100/34 (rounding to the nearest whole number).

   Add the above calculation result to and rewrite the current value of NVM (782-822) and run [ADJ 20.1.12 Installation Adjustment] again and check the result. Perform the following based on the result.

   (1) If adjusted results are OK -> Proceed to Step 5

   (2) If adjusted results are NG -> Proceed to Step 4

4. For Step 1-(3) or Step 3-(2), perform the following operation.

   (1) If lighting depth detection is NG, replace ILS Lamp Assy. -> Go to Step 5

   (2) If the Focus detection is NG, replace the ILS Main Unit Assy. -> Go to Step 6

5. For Step 3-(1) or Step 4-(1), perform from [ADJ 20.1.10 Adjust Gain Offset] again.
6. For Step 2-(2) or Step 4-(2), proceed from [ADJ 20.1.9 Adjust LED Intensity] again.

ADJ 20.1.12.3 WR Roll Position Verification Method

Procedure

This is for checking the Roll position in Step 2 of [ADJ 20.1.12.2 Installation Adjustment Value Verification - When Result is Abnormal]. (Figure 4)

Pull out the Exit Drawer and measure from the edge of the Shoot to the WR Roll hollow part axis, and replace WR if 17.5>A, 23.5<A, and replace ILS Assy Top if 17.5 < = A < = 23.5.

OK: 17.5 < = A < = 23.5

NG: 17.5 > A, 23.5 < A

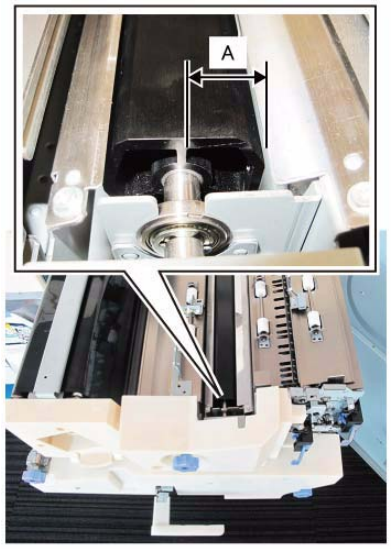


Figure 4 j0ko420540

ADJ 20.1.13 Adjust Replaced Color Calibration Plate: DC970

ADJ 20.1.13.1 How to Process Color Proof Plate Replacement

Procedure

1. In the ILS Standard Setup screen, select [Adjustment after color proof plate replacement]. (Figure 1)

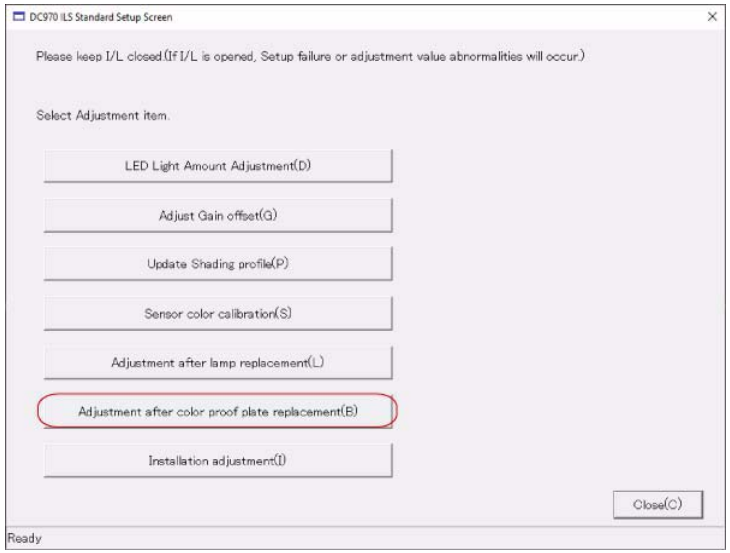

DC970 ILS Standard Setup Screen
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko420513

2. Click [View the result of 60%]. (Figure 2)

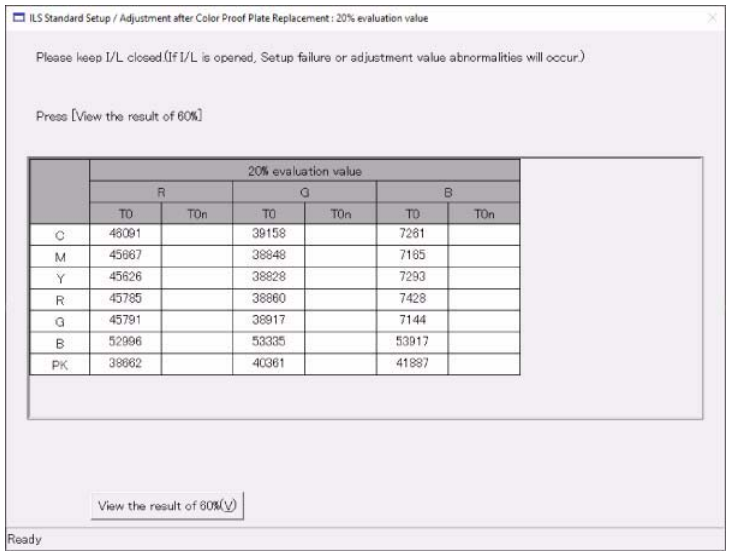

ILS Standard Setup / Adjustment after Color Proof Plate Replacement : 20% evaluation value
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [View the result of 60%]
20% evaluation value
R
G
B
T0
T0n
C 46091 39158 7261
M 45667 38848 7165
Y 45626 38828 7293
R 45785 38860 7428
G 45791 38917 7144
B 52996 53335 53917
PK 38662 40361 41887
View the result of 60%(V)
Ready

Figure 2 e0ko420514

3. Click [Execute]. (Figure 3)

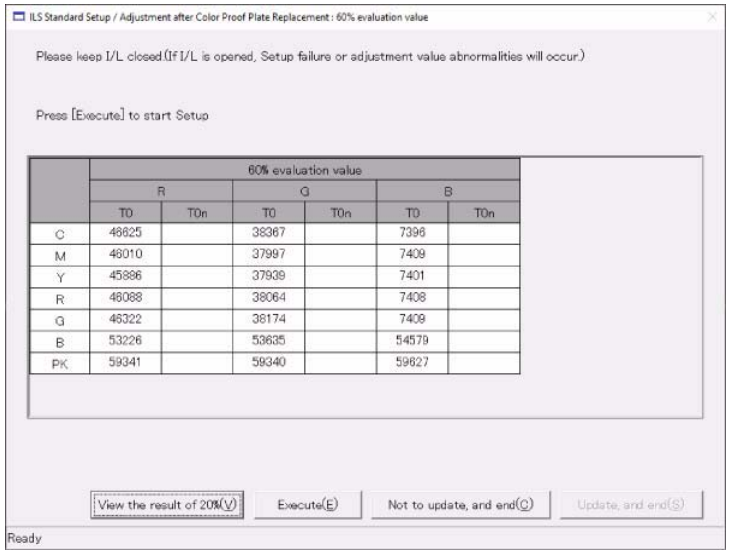

ILS Standard Setup / Adjustment after Color Proof Plate Replacement : 60% evaluation value
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [Execute] to start Setup
60% evaluation value
R
G
B
T0
T0n
C 46625 38367 7396
M 46010 37997 7409
Y 45886 37939 7401
R 46088 38064 7408
G 46322 38174 7409
B 53226 53635 54579
PK 59341 59340 59627
View the result of 20%(V)
Execute(E)
Not to update, and end(C)
Update, and end(S)
Ready

Figure 3 e0ko420515

4. If all is OK, click [Update, and end] and proceed to the next Step [ADJ 20.1.14 Paper Length Check/Corner Position Adjustment].

NOTE: *The machine will automatically decide the adjustment value and it will be displayed in red when NG.*

5. If there is any NG, perform [ADJ 20.1.13.2 Color Proof Plate Replacement - When Result is Abnormal].

ADJ 20.1.13.2 Color Proof Plate Replacement - When Result is Abnormal

Procedure

1. Perform [ADJ 20.1.11.2 Update Shading Profile - When Result is Abnormal].

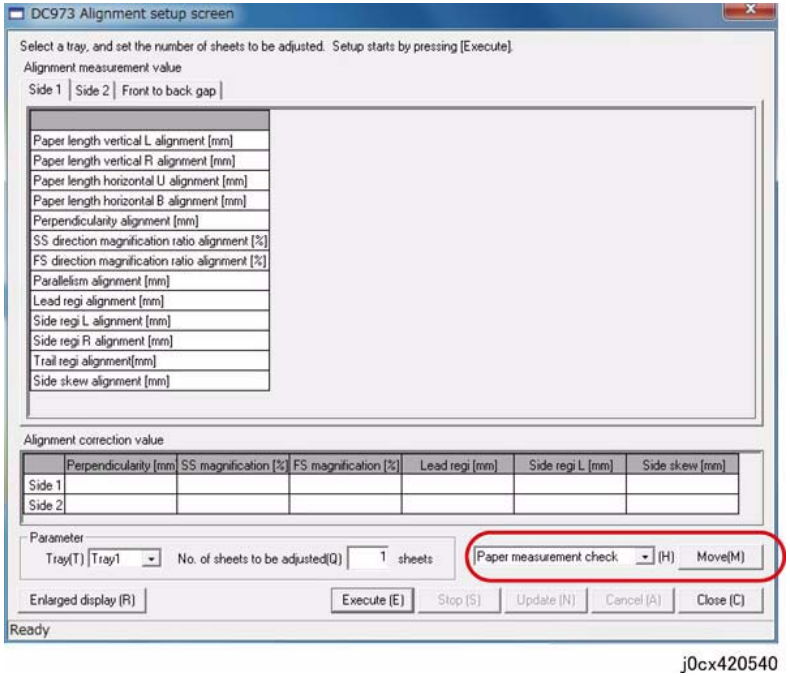
ADJ 20.1.14 Alignment Setup (Paper Length Check/Corner Position Adjustment): DC973

Purpose

When ILS is installed, the paper measurement check is used to verify whether the ILS installation operation was performed correctly by checking the shift amount and dispersion against the specified paper from the paper corner detection.

Procedure

1. On the PC Diag screen, select [Sub-System Check].
2. On the [Sub-System Check] screen, select [DC973].
3. On the DC973 Alignment Setup screen, the message, [Select a tray, and set the number of sheets to be adjusted. Setup starts by pressing [Execute].] is displayed.
4. Make sure that the move item at the bottom right is [Paper measurement check] and then click [Move]. (Figure 1)



j0cx420540

Figure 1 j0cx420540

5. The DC973 Paper Measurement Check screen is displayed. Select the [Paper length (Side 1)] tab, set the Tray loaded with paper, number of sheets to be adjusted, to execute paper corner position correction, and click [Execute]. (Figure 2)

Table 1 Setting Data

Item	Settings
Tray	Tray that was loaded with the paper
No. of sheets to be adjusted	3 sheet
Execute Paper corner position correction	Put a check mark (execute)
Printing sides	1 Sided
Paper Size to be used	A3 (J paper)

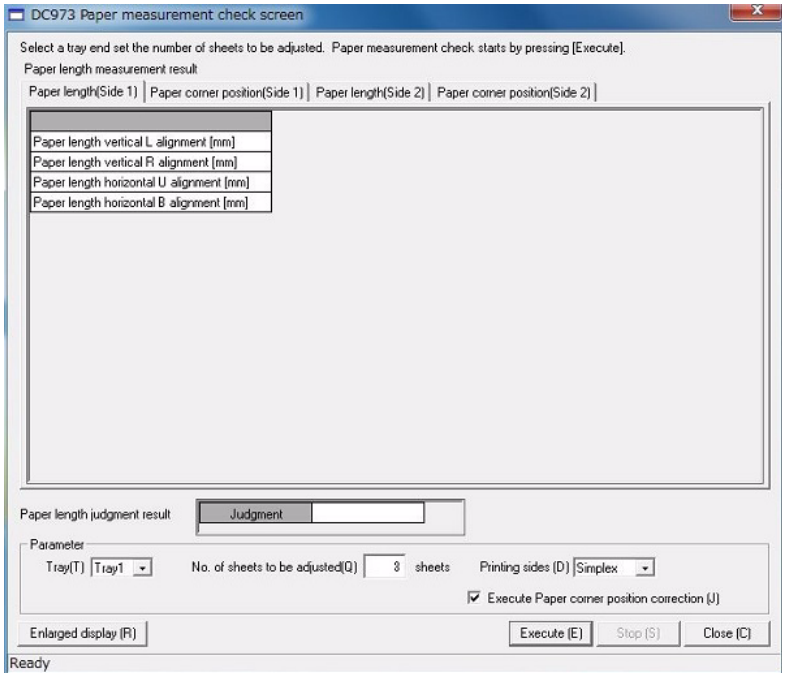


Figure 2 j0cx420541

6. Check that the judgment result is [OK]. (Figure 3)

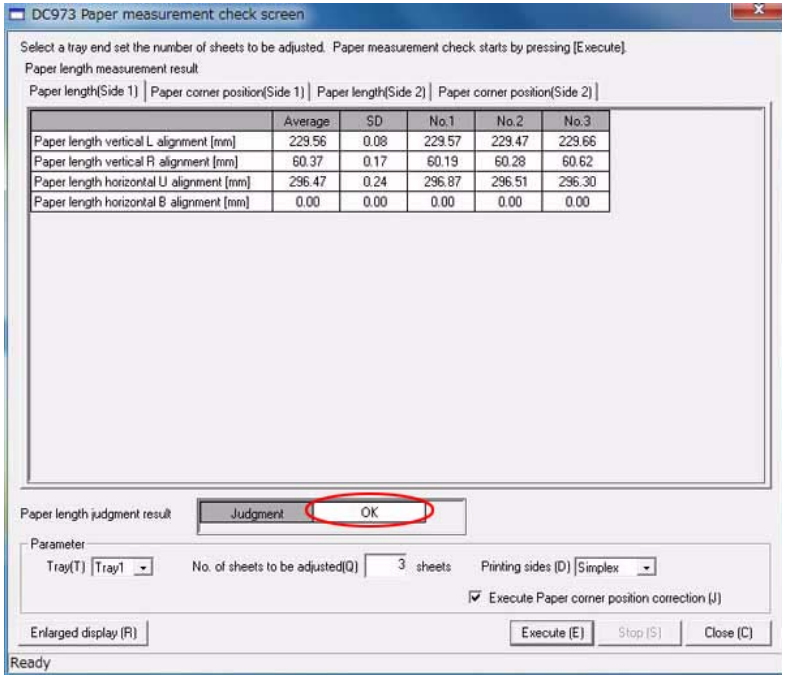


Figure 3 j0cx420542

NOTE: *Putting a check mark at [Execute Paper corner position correction] makes it possible to perform both measurement and adjustment for the paper length and paper corner position correction.*

7. If the judgment result is NG, perform the adjustment again.
8. If the judgment result is OK, switch to the [Paper corner position (Side 1)] tab, remove the check mark from [Execute Paper corner position correction], and then click [Execute] again. The [Paper length judgment result] will display the judgment (OK or NG). (Figure 4)

NOTE: *Removing the check mark from [Execute Paper corner position correction] performs the judgment without performing any paper corner position correction.*

Table 2 Setting Data

Item	Settings
Tray	Tray that was loaded with the paper
No. of sheets to be adjusted	3 sheet
Execute Paper corner position correction	Remove the check mark (do not execute)
Printing sides	1 Sided
Paper Size to be used	A3 (J paper)

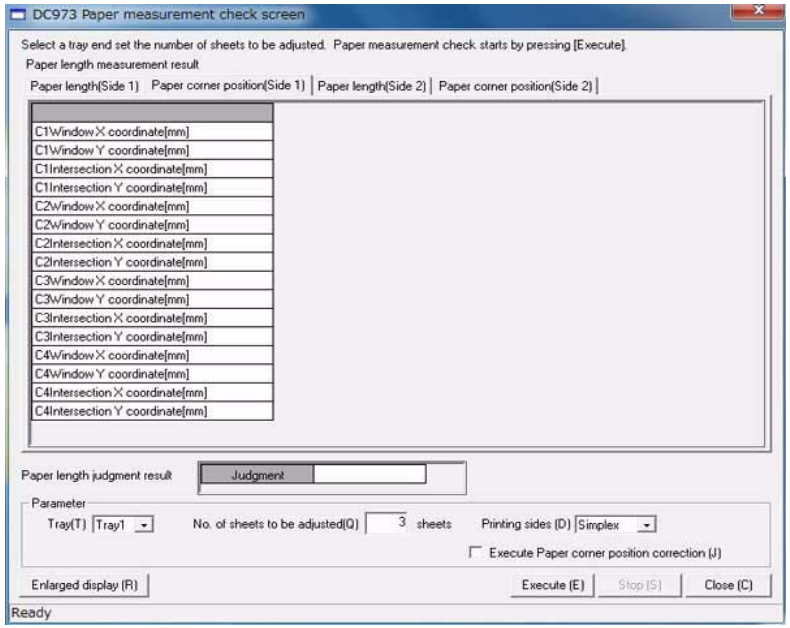


Figure 4 j0cx420543

9. If the judgment result is NG, perform the adjustment again.
   (1) For the 1st time it is NG, initialize the following NVM.
   - DC131 [NVM782-338: ILS Scan First Pixel Position] Value: 20,500 (Default)
   - DC131 [NVM782-339: Start Scan Gap] Value: 4,400 (Default)

   Perform paper measurement check again.

   (2) For the 2nd time it is NG, display the [Paper corner position (Side 1)], refer to the following formula to change the NVM, and then perform the paper measurement check again.

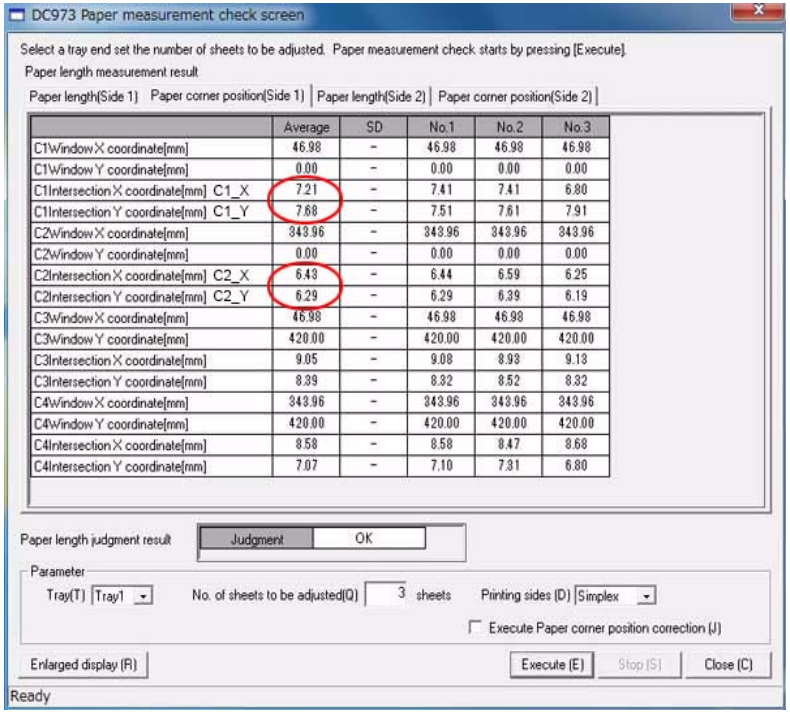

DC973 Paper measurement check screen
Select a tray end set the number of sheets to be adjusted. Paper measurement check starts by pressing [Execute].
Paper length measurement result
Paper length(Side 1)
Paper corner position(Side 1)
Paper length(Side 2)
Paper corner position(Side 2)
Average
SD
No.1
No.2
No.3
C1Window X coordinate[mm] 46.98 - 46.98 46.98 46.98
C1Window Y coordinate[mm] 0.00 - 0.00 0.00 0.00
C1Intersection X coordinate[mm] C1_X 7.21 - 7.41 7.41 6.80
C1Intersection Y coordinate[mm] C1_Y 7.68 - 7.51 7.61 7.91
C2Window X coordinate[mm] 343.96 - 343.96 343.96 343.96
C2Window Y coordinate[mm] 0.00 - 0.00 0.00 0.00
C2Intersection X coordinate[mm] C2_X 6.43 - 6.44 6.59 6.25
C2Intersection Y coordinate[mm] C2_Y 6.29 - 6.29 6.39 6.19
C3Window X coordinate[mm] 46.98 - 46.98 46.98 46.98
C3Window Y coordinate[mm] 420.00 - 420.00 420.00 420.00
C3Intersection X coordinate[mm] 9.05 - 9.08 8.93 9.13
C3Intersection Y coordinate[mm] 8.39 - 8.32 8.52 8.32
C4Window X coordinate[mm] 343.96 - 343.96 343.96 343.96
C4Window Y coordinate[mm] 420.00 - 420.00 420.00 420.00
C4Intersection X coordinate[mm] 8.58 - 8.58 8.47 8.68
C4Intersection Y coordinate[mm] 7.07 - 7.10 7.31 6.80
Paper length judgment result
Judgment
OK
Parameter
Tray(T) Tray1
No. of sheets to be adjusted(Q) 3 sheets
Printing sides (D) Simplex
Execute Paper corner position correction (J)
Enlarged display (R)
Execute (E)
Stop (S)
Close (C)
Ready

Figure 5 j0cx420544

A: Formula

- mv_x = (C1_x * 100 + C2_x * 100)/2 - 700
- mv_y = (C1_y * 100 + C2_y * 100)/2 - 700
- First_Pos (new) = First_Pos (old NVM value) + mv_x
- ILS_Lead_Gap (new) = ILS_Lead_Gap (old NVM value) + mv_y

B: Use the calculation result from A and change the value of the applicable NVM.

- Chain-Link No. 782-338: First_Pos (new)
- Chain-Link No. 782-339: LS_Lead_Gap (new)

Perform paper measurement check again.

(3) For the 3rd and subsequent time it is still NG, check the paper feed timing and skew.

Perform paper measurement check again.

10. When the judgment result becomes OK, click [Close].

ADJ 20.1.15 Alignment Setup (Alignment Adjustment): DC973

Purpose

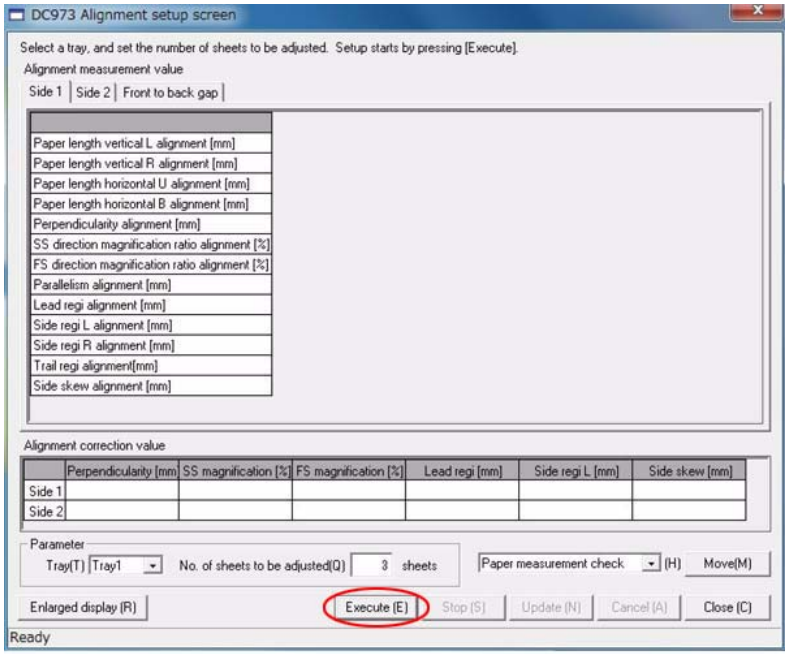
Alignment adjustment method using ILS will be described.

Procedure

1. On the PC Diag screen, select [Sub-System Check].
2. On the [Sub-System Check] screen, select [DC973].
3. On the DC973 Alignment Setup screen, the message, [Select a tray, and set the number of sheets to be adjusted. Setup starts by pressing [Execute].] is displayed.
4. Set the Tray loaded with paper and the number of sheets to be adjusted, and click [Execute]. (Figure 1)

Table 1 Setting Data

Item	Settings
Tray	Tray that was loaded with the paper
No. of sheets to be adjusted	3 sheet
Paper Size to be used	A3 (J paper)



j0cx420552

Figure 1 j0cx420552

5. After execution, check misalignment from the output of the last page printed, confirm that the misalignment has improved, and click the [Update] button. When the update button is clicked, the NVM values of correction values for various alignment will be updated.

   NOTE: *DC131 NVM: 742-306/742-314 Lead Correction Amount (Side 1/Side 2) is the standard correction amount for 81 to 105 gsm, but it is necessary to set the standard value also for the NVM of other paper types (gsm). (The same correction value is set for all paper types until individual change is made.) When the value of NVM: 742-306/742-314 has changed, change also the other NVMs in the table below together.*

Table 2

gsm	55-80	81-105	106-135	136-150	151-186	187-220	221-256	257-
Side 1 NVM	742-305	742-306	742-307	742-308	742-309	742-310	742-311	742-312
Side 2 NVM	742-313	742-314	742-315	742-316	742-317	742-318	742-319	742-320

Chapter 5 Parts List

5.1.1 How to Use the Parts List

Chapter 5 Parts List contains information on spare parts.

To use the parts list correctly, read the description below carefully.

<How to find out parts No needed>

To shorten the time for searching the Parts No., a navigation screen (illustration) is provided to search the relevant part in the illustration. When you have already identified a part to be checked, search for the relevant part on this screen (illustration) to perform servicing efficiently. For how to use the navigation, refer to '5.1.5 Using Parts Navigation'.

5.1.2 Precautions

- To make the illustration easy to see, hardware such as screws are shown in alphabets. Their shapes are not shown.

- Read notes in the Description column carefully before ordering and replacing parts.

- SCC followed by part name in the DESCRIPTION column represents Safety Critical Component. As to replacement of any component designated SCC, the complete component unit must be replaced. It must never be disassembled or no individual internal parts of it must be replaced. However, even the parts specified as SCC can be disassembled if they include spare parts at the lower level. Installation of any part other than the ones designated by our company shall be strictly prohibited because it cannot be guaranteed in quality and safety.

- ISC followed by part name in the DESCRIPTION column represents Important Information Stored Component that stores important customer information. To replace and discard an ISC, follow the procedure for it described in chapter 4.

5.1.3 Plate Composition

【PL18.2】 ←——— (1)
IOT-L Right PWB Chassis Assembly ←——— (2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD960K1526X/	BB	PH 2 Sensor PWB (Upper)
	0TD960K1526X/	BB	PH 2 Sensor PWB (Upper)
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD960K4324X/	CG	(SCC) NVM PWB
7	-----	-----	
8	0TD960K4385X/	CE	PH ADC PWB
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	

(3) (4) (5) (6)

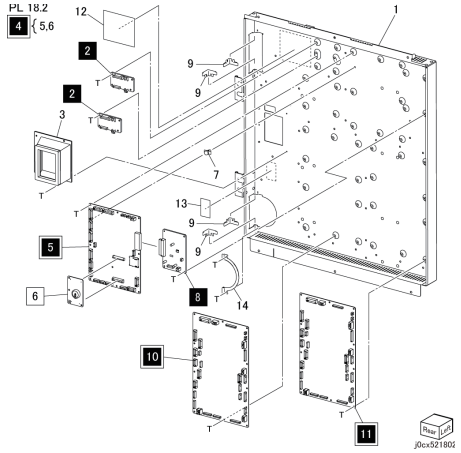


Figure 1 e510001

Table 1

	Section Name	Chapter 5 Section Name
(1)	PLATE NO.	Indicates the Parts List Reference No. shown in each chapter. (Sample Display: PL 1.2)
(2)	PLATE NAME	Indicates the title name of the illustration, which shows the mechanism of the sub system. (Display example: Platen Glass)
(3)	ITEM	Indicates the item number. Matches the number in the illustration.
(4)	PARTS CODE	Indicates the parts code. The number to be used for ordering parts and filling in the service report.
(5)	PRICE RANK	Shows the selling price of each part. (Same as regular SHARP products) Please contact the supplier for the price of parts marked as “KIT”.
(6)	DESCRIPTION	Describes the parts name, code and note, etc.

5.1.4 Terminology and Symbols

Table 1

Terminology and Symbols	Description
Figure 1 5002	The adjustment procedure for the relevant parts is described in Chapter 4 Disassembly/Assembly and Adjustment.
Figure 2 5001	The removal, installation and replacement procedures for the relevant parts are described in Chapter 4 Disassembly/Assembly and Adjustment.
Figure 3 5003	The removal, installation, replacement and adjustment procedures for the relevant parts are described in Chapter 4 Disassembly/Assembly and Adjustment.
3 {4-10	Indicates configuration of the parts. In this notation example, Item 3 is an assembled part configured with parts of Items 4 to 10. It is written in the illustration.
(1/4PCS)	Indicates that four identical parts are installed but that only one of them is shown in the illustration.
-----	If the PARTS CODE column is "-----" or blank, it indicates that the part is not a spare part.
(P/O Item 5)	If this notation appears in the DESCRIPTION column, it indicates that even parts that are not spare parts can be purchased as higher-level parts. This notation example indicates that Item 5 can be PART ORDER.
(SCC) Fusing Unit	SCC followed by part name in the DESCRIPTION column represents Safety Critical Component.
(ISC) NVM PWB	ISC followed by part name in the DESCRIPTION column represents Important Information Stored Component that stores important customer information.

5.1.5 Using Parts Navigation

This section describes how to use the Navigation screen (illustrated)

The Navigation screen is divided into three layers, under which there is another layer of PLs.

- The first (top) layer
  - Navi 1.1

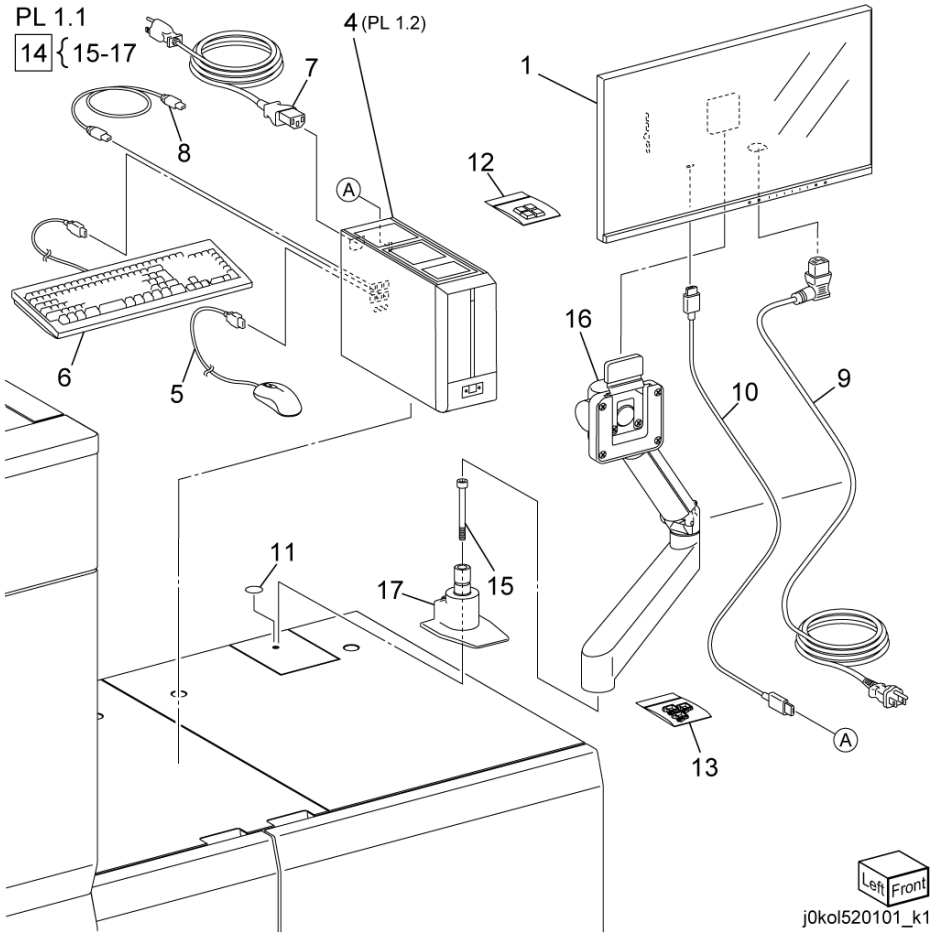
    The whole is divided into the modules, and each module is plainly classified in the figure.
- The second layer
  - Navi 2.1 to X.X

    The module found in Navi 1.1 is divided into more modules.

    The screen here uses PLXX to show all the parts in the detailed module. Click on the applicable item, and you will see the illustration of the applicable PL. Find the desired part in the PL illustration to learn the part's item no.

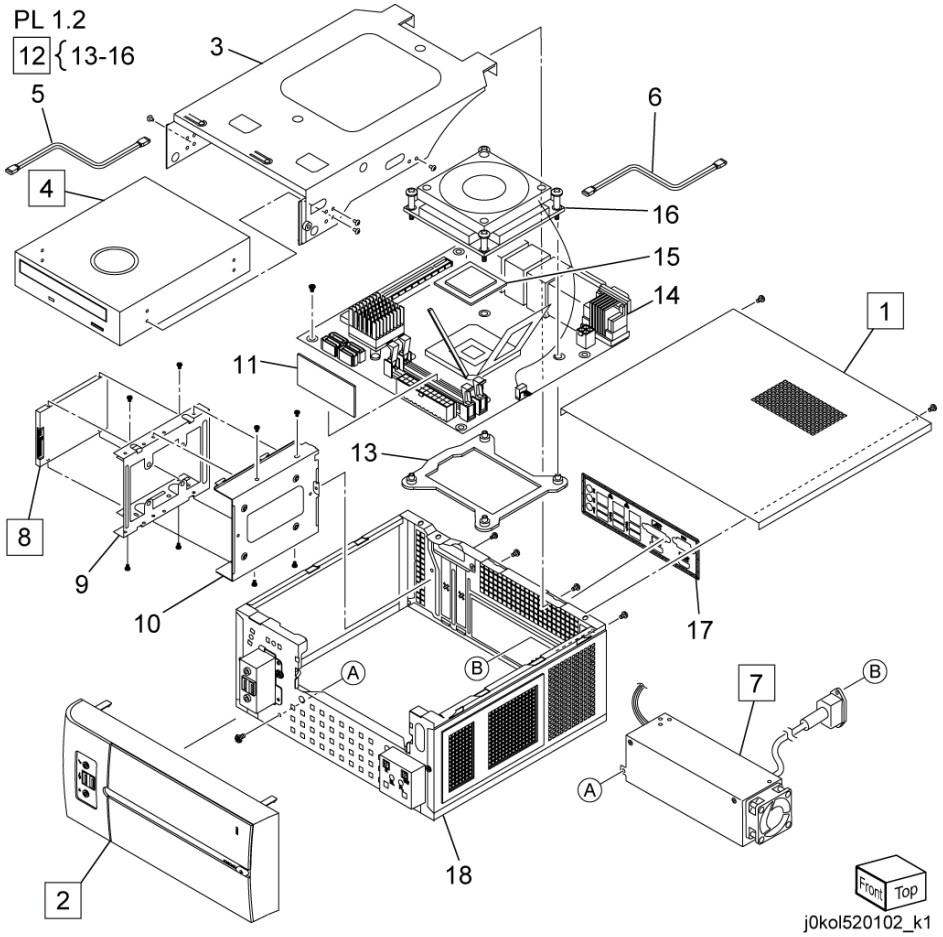
【PL1.1】
PC-UI (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
	– – – – –	-----	
7	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	0TD117E4248X／	BV	Video Cable
11	0TD970E9916X／	BA	LABEL-TOP
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	– – – – –	-----	
17	– – – – –	-----	



【PL1.2】
PC-UI (2 of 2)

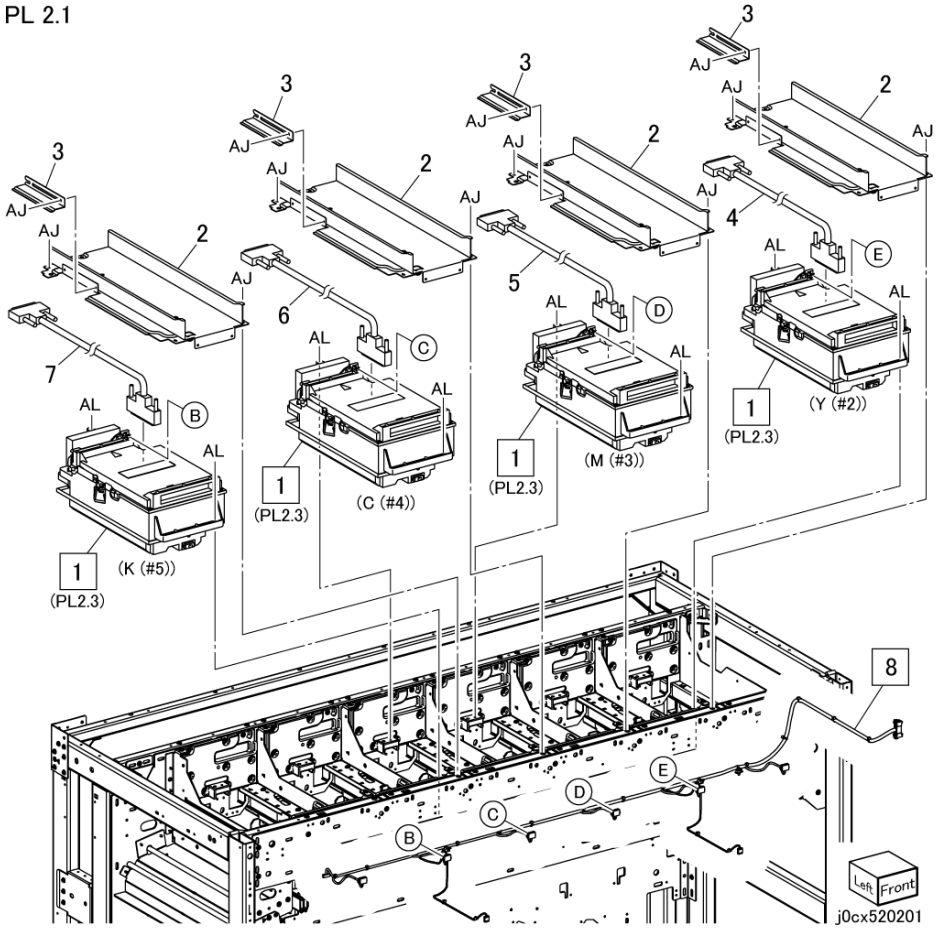
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	0TD121K6220X／	CE	DISC ASSY DVD DRIVE GPC700
5	– – – – –	-----	
6	– – – – –	-----	
7	0TD105K3514X／	CB	LVPS GPC 700
8	0TD121K6219X／	CK	DISC ASSY HDD 500GB GPC700
9	– – – – –	-----	
10	– – – – –	-----	
11	0TD961K1408X／	CE	DRAM GPC700
12	0TD961K1410X／	EL	MOTHERBOARD?GPC700
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	– – – – –	-----	
17	– – – – –	-----	
18	– – – – –	-----	



【PL2.1】
ROS Component (Y (#2)/ M (#3)/ C (#4)/ K (#5))

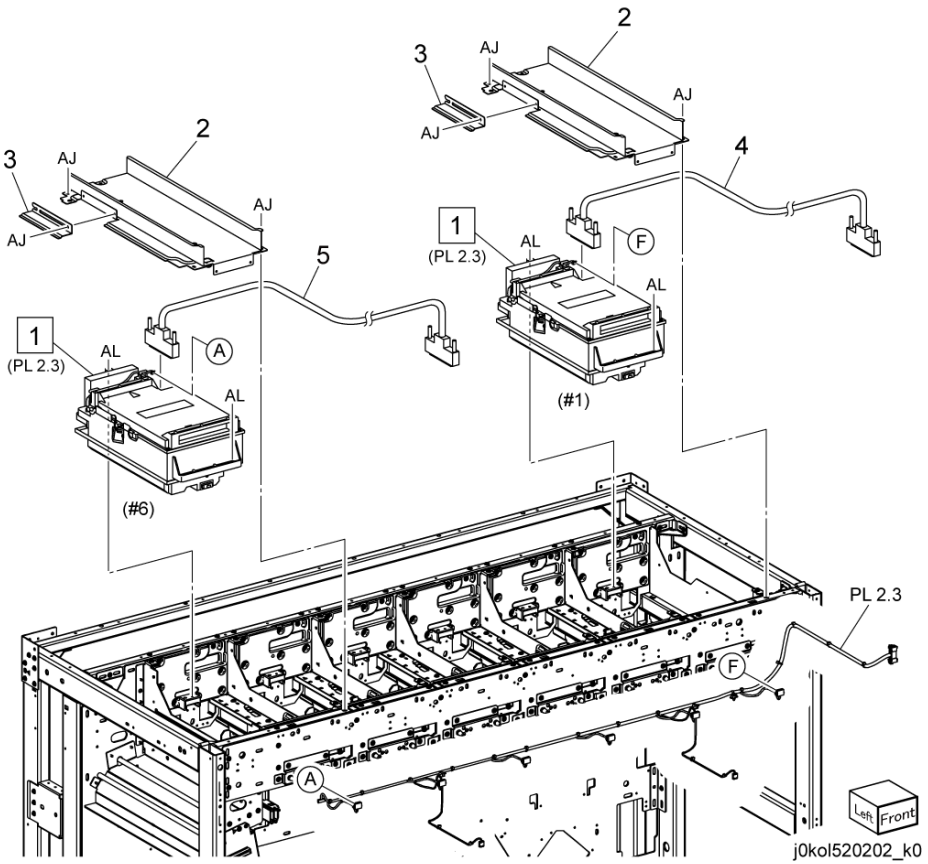
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD062K3200X／	DN	ROS ASSY-NB
	0TD062K3200X／	DN	ROS ASSY-NB
	0TD062K3200X／	DN	ROS ASSY-NB
	0TD062K3200X／	DN	ROS ASSY-NB
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD952K3614X／	BZ	ROS Cable 2 (Y (#2))
5	0TD952K3615X／	CA	ROS Cable 3 (M (#3))
6	0TD952K3616X／	CB	ROS Cable 4 (C (#4))
7	0TD952K3674X／	CB	ROS Cable 5 (K (#5))
8	0TD952K2992X／	BH	(SCC) Wire Harness (ROS)

PL 2.1



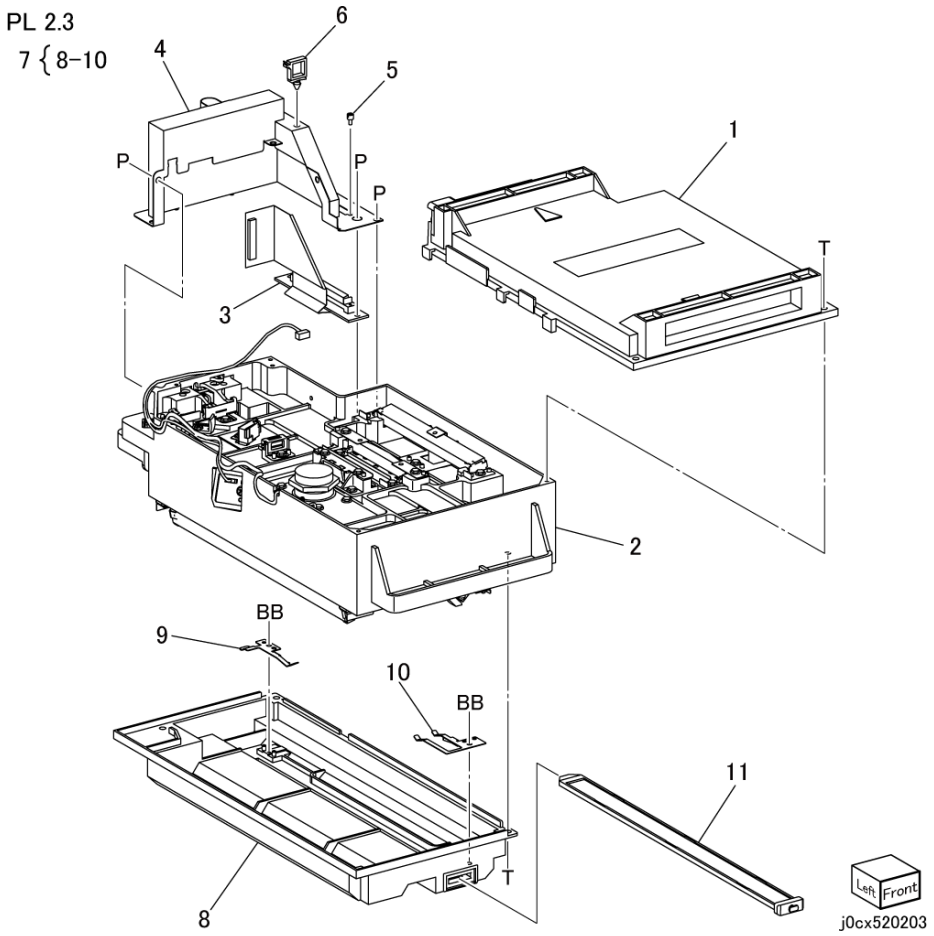
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD062K3020X／	DS	ROS Assembly (Y (#2))
	0TD062K3020X／	DS	ROS Assembly (Y (#2))
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD952K3613X／	CA	ROS Cable 1 (#1)
5	0TD952K3675X／	CB	ROS Cable 6 (#6)

PL 2.2



【PL2.3】
ROS Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

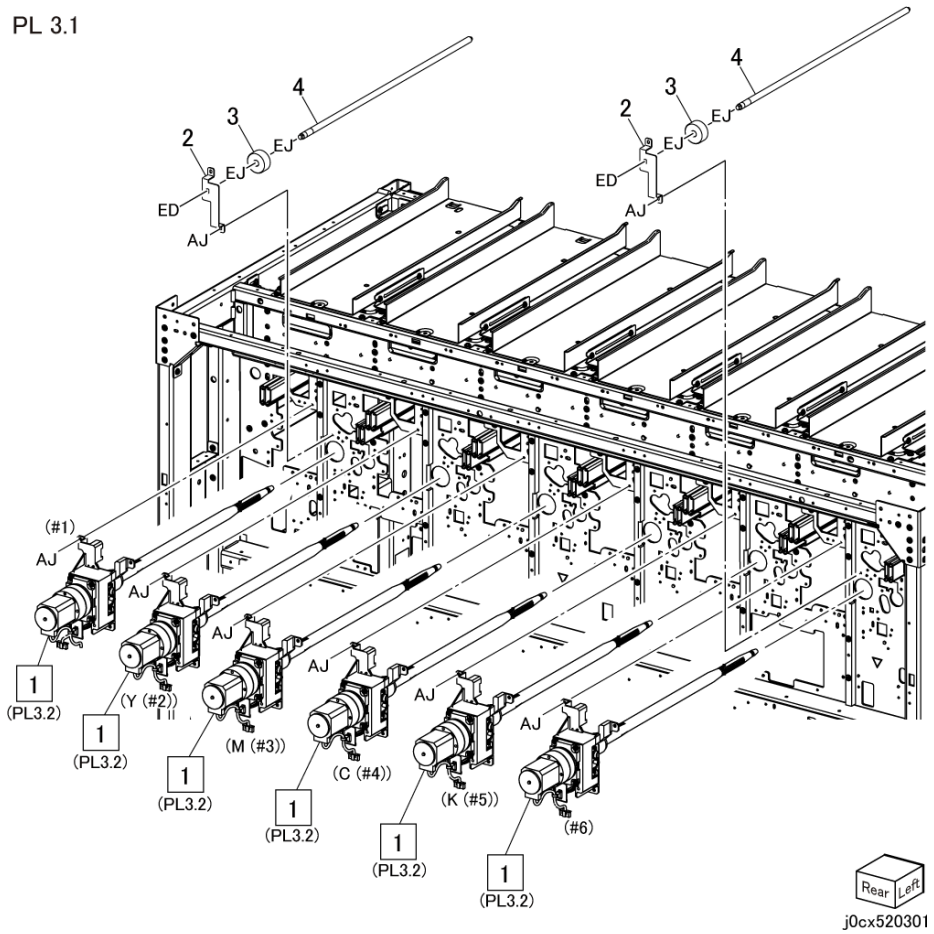
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	0TD062K1462X／	BD	Window Assembly



【PL3.1】
Drum Drive Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

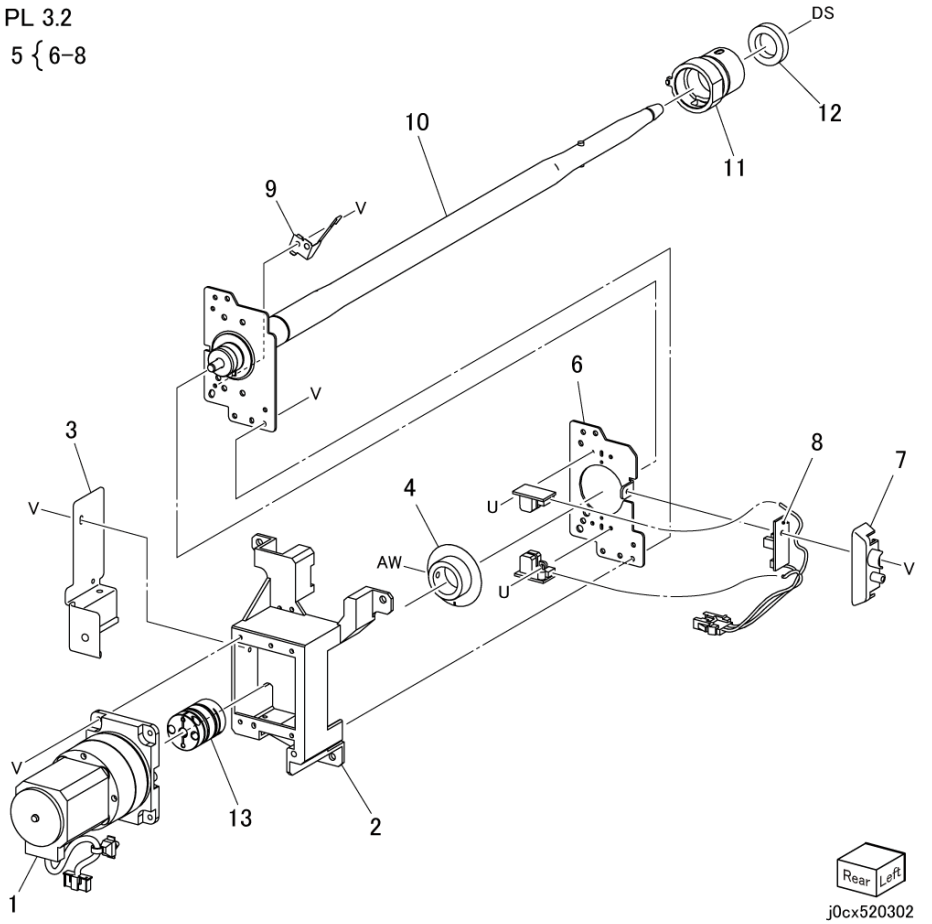
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD007K2398X/	DL	DRIVE ASSY-DRUM A
	0TD007K2398X/	DL	DRIVE ASSY-DRUM A
	0TD007K2398X/	DL	DRIVE ASSY-DRUM A
	0TD007K2398X/	DL	DRIVE ASSY-DRUM A
	0TD007K2398X/	DL	DRIVE ASSY-DRUM A
	0TD007K2398X/	DL	DRIVE ASSY-DRUM A
2	-----	-----	
3	-----	-----	
4	-----	-----	

PL 3.1



【PL3.2】
Drum Drive Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

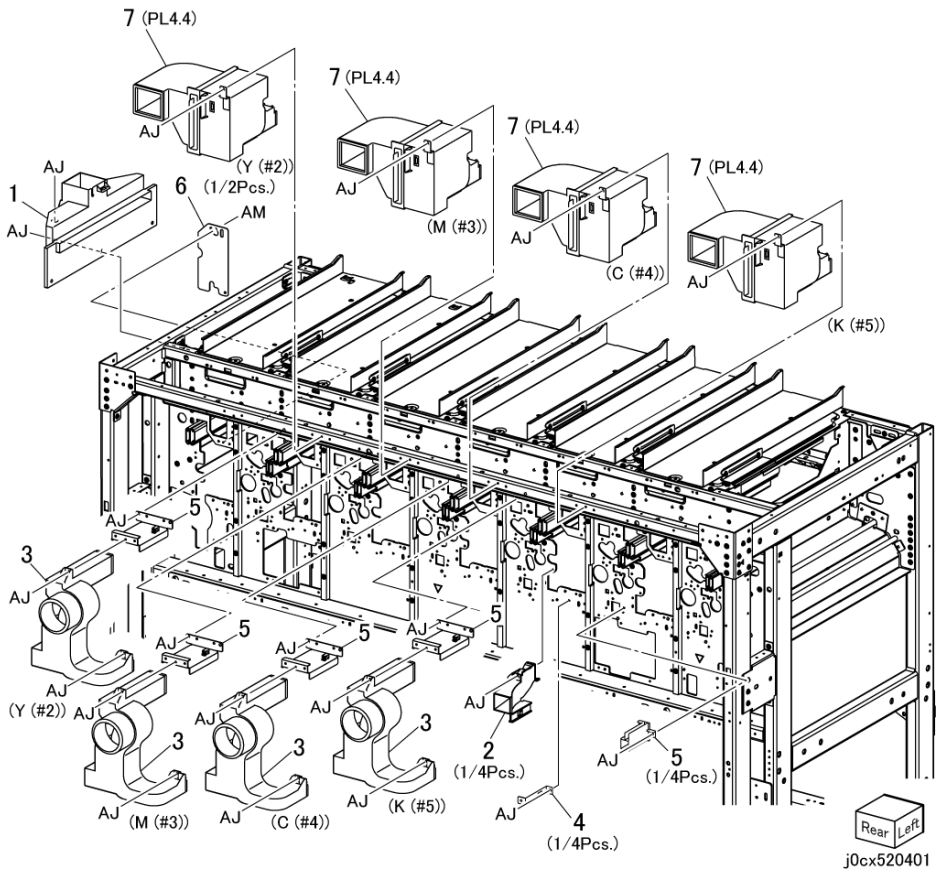
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	



【PL4.1】
IOT-L Duct Component (Y (#2)/ M (#3)/ C (#4)/ K (#5))

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD054K3931X／	BF	Duct Assembly (Y (#2)/ M (#3)/ C (#4)/ K (#5))
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD054K3933X／	BV	CC Fan Assembly 2/3/4/5

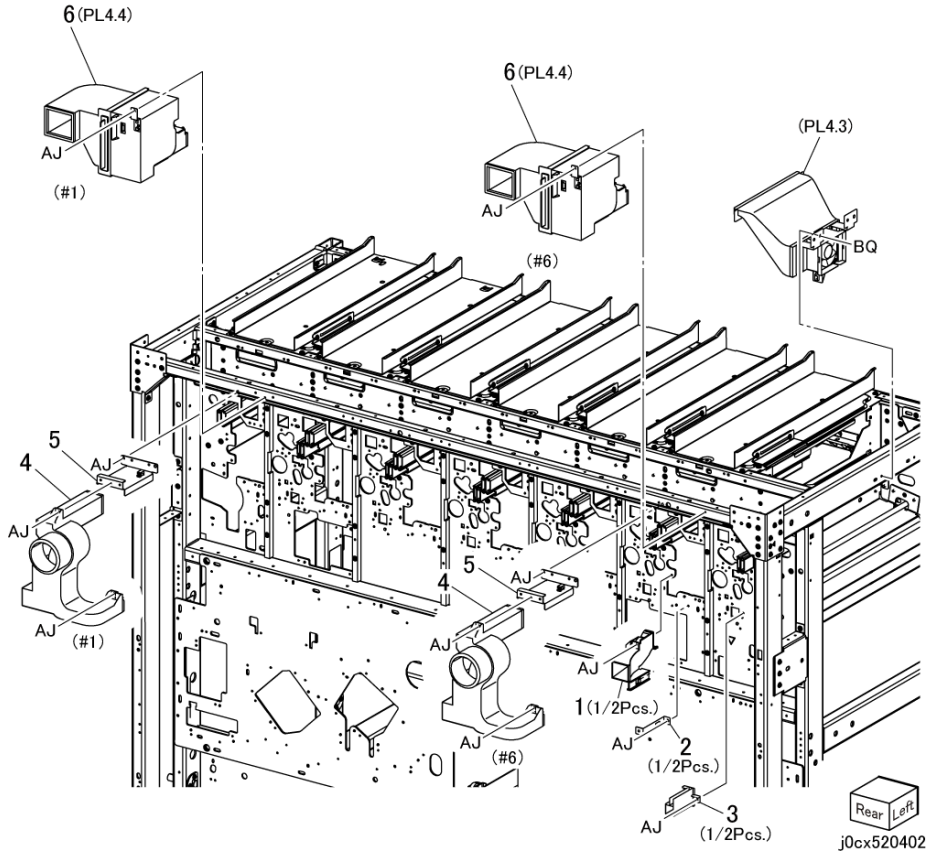
PL 4.1



【PL4.2】
Clear Toner Duct Component

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD054K3931X／	BF	Duct Assembly (Y (#2)/ M (#3)/ C (#4)/ K (#5))
5	－－－－－	-----	
6	0TD054K3933X／	BV	CC Fan Assembly 2/3/4/5

PL 4.2

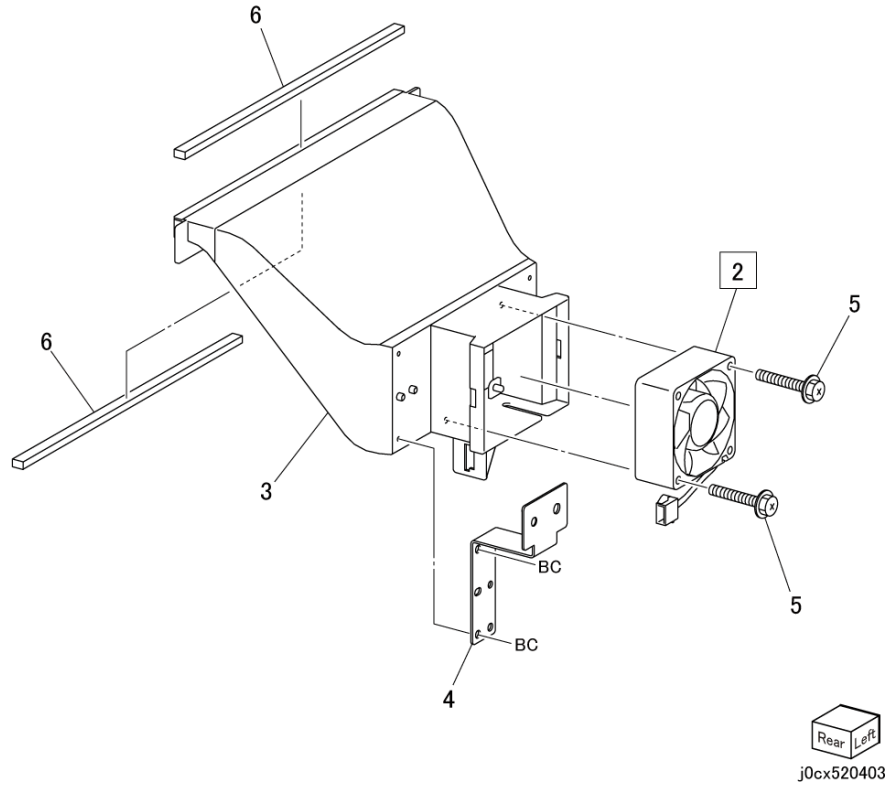


【PL4.3】
ROS Fan Assembly 1

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K3936X／	BS	ROS Fan Assembly 1 (Item 2-6)
2	0TD127K3956X／	BC	(SCC) ROS Fan 1
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	

PL 4.3

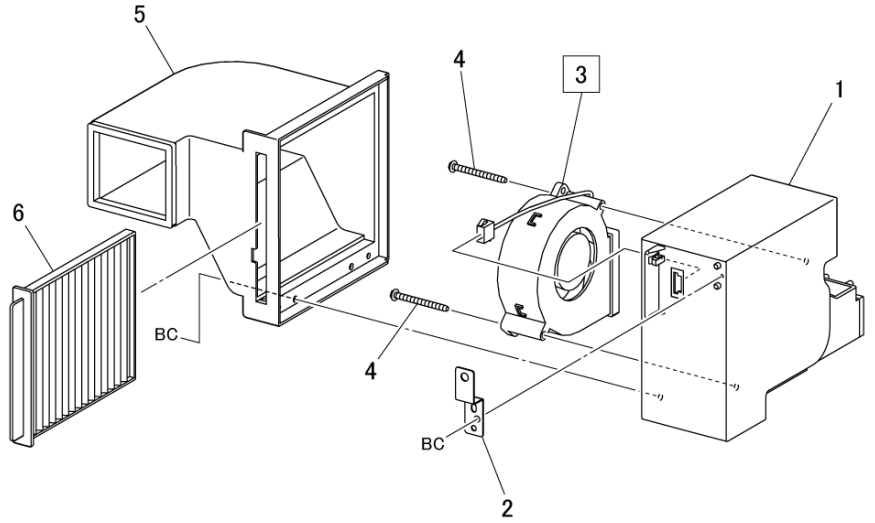
1 { 2-6



【PL4.4】
CC Fan Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD127K5922X/	BP	CC Fan 1/2/3/4/5/6
4	-----	-----	
5	-----	-----	
6	0TD053K9299X/	AZ	FILTER ASSY-CC DUST

PL 4.4



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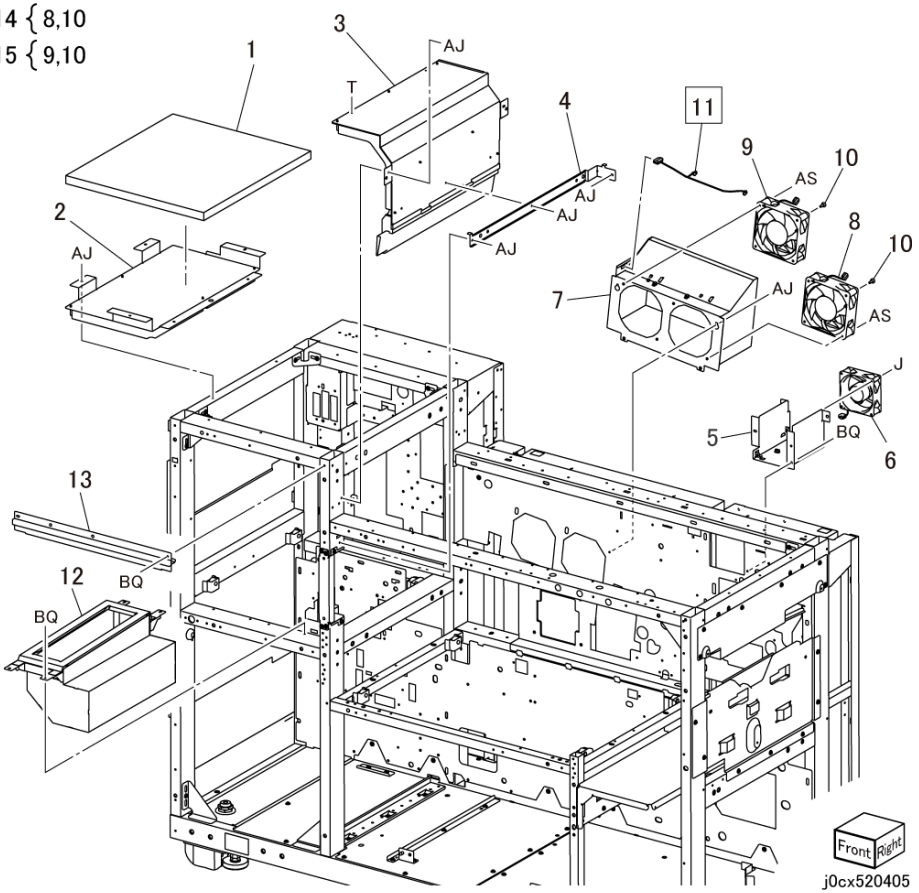
【PL4.5】
IOT-R (1 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD127K4585X／	BG	(SCC) IOT-R Rear Cooling Fan
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD962K7279X／	AZ	(SCC) Wire Harness
12	－－－－－	-----	
13	－－－－－	-----	
14	0TD127K6035X／	BS	Heat Sink Fan 2 Assembly (Item 8, 10)
15	0TD127K6035X／	BS	Heat Sink Fan 2 Assembly (Item 8, 10)

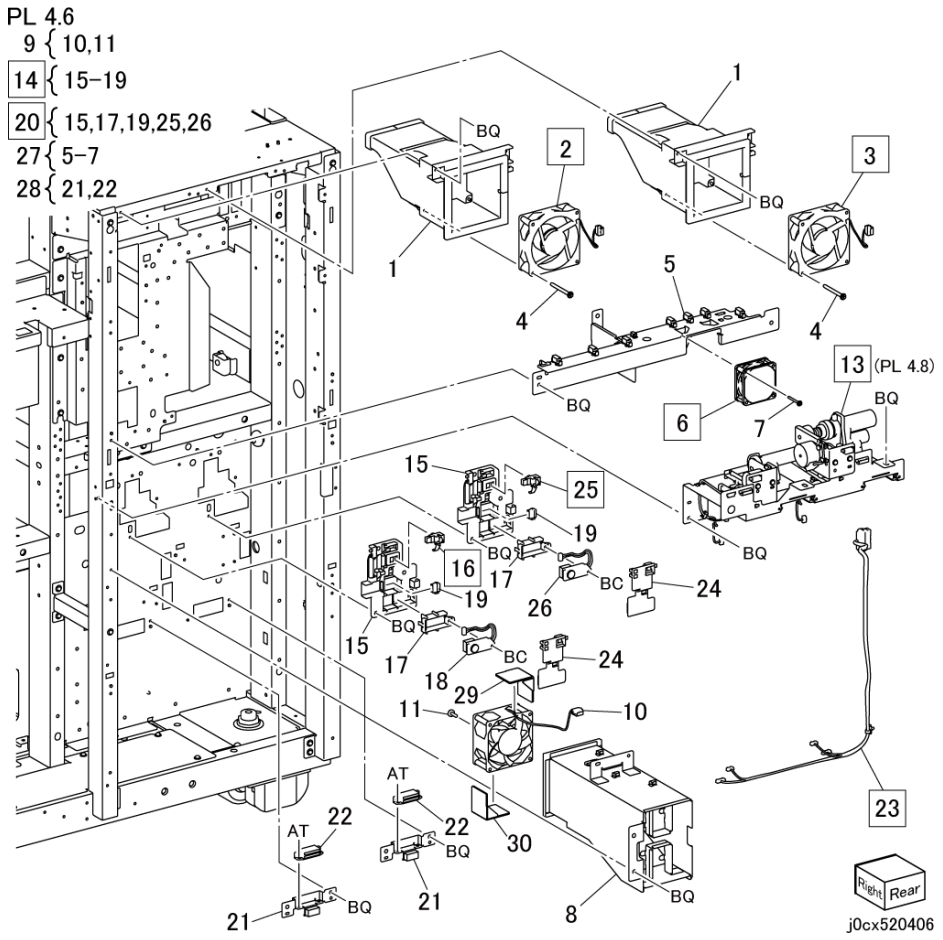
PL 4.5

14 { 8,10

15 { 9,10



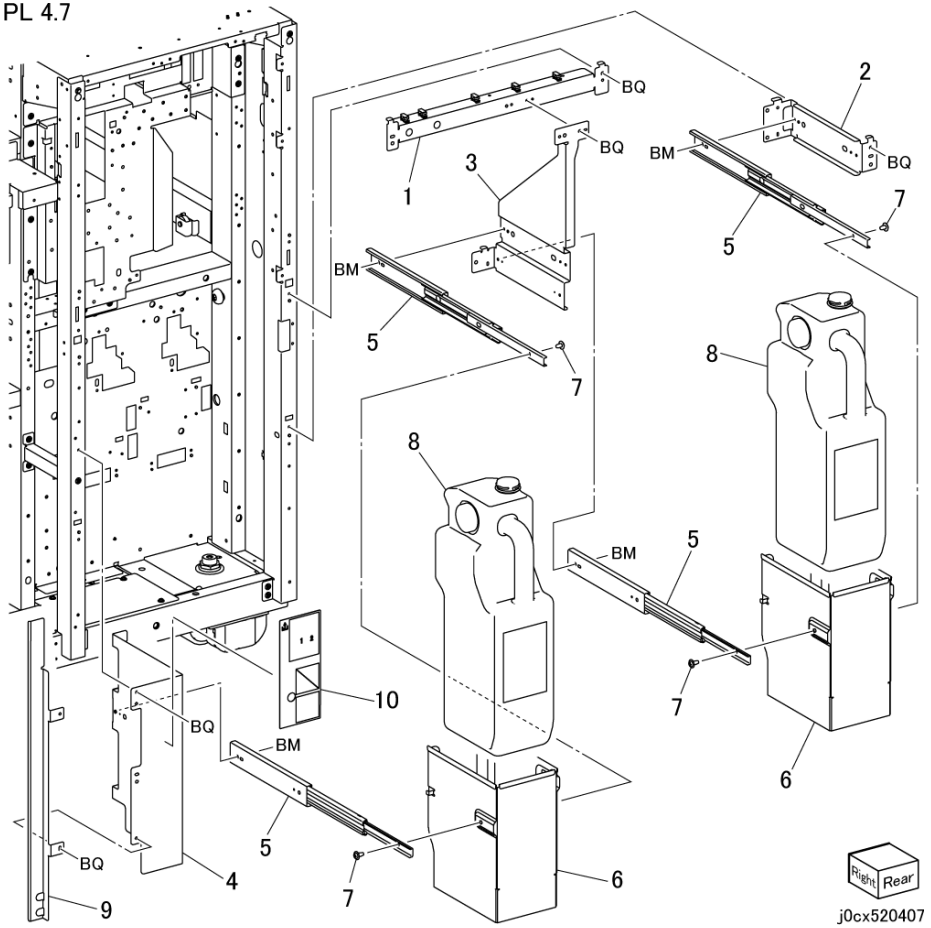
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD127K5969X／	BR	(SCC) Fusing Exhaust Fan 1
3	0TD127K5969X／	BR	(SCC) Fusing Exhaust Fan 1
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD127K7418X／	BA	(SCC) Fusing Waste Fan
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD127K6036X／	BP	Fusing Lower Fan Assembly (Item 10, 11)
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	0TD049K0291X／	CE	Bottle Bracket Assembly
14	0TD019K0997X／	BQ	Sensor Holder 1 Assembly (Item 15-19)
15	－－－－－	-----	
16	0TD130K7278X／	AR	WASTE TONER POSITION SENSOR
17	0TD019K0998X／	BH	Sensor Holder
18	0TD130K6045X／	BF	WASTE TONER SENSOR
19	－－－－－	-----	
20	0TD019K0997X／	BQ	Sensor Holder 1 Assembly (Item 15-19)
21	－－－－－	-----	
22	－－－－－	-----	
23	0TD962K7276X／	BB	(SCC) Wire Harness
24	－－－－－	-----	
25	0TD130K7278X／	AR	WASTE TONER POSITION SENSOR
26	0TD130K6045X／	BF	WASTE TONER SENSOR
27	－－－－－	-----	
28	0TD003K8681X／	AX	Magnet Catch Assembly (Item 21, 22)
29	－－－－－	-----	
30	－－－－－	-----	



【PL4.7】
IOT-R (3 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	0TD801E0929X／	BC	Bottle Rail
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
	– – – – –	-----	
	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	

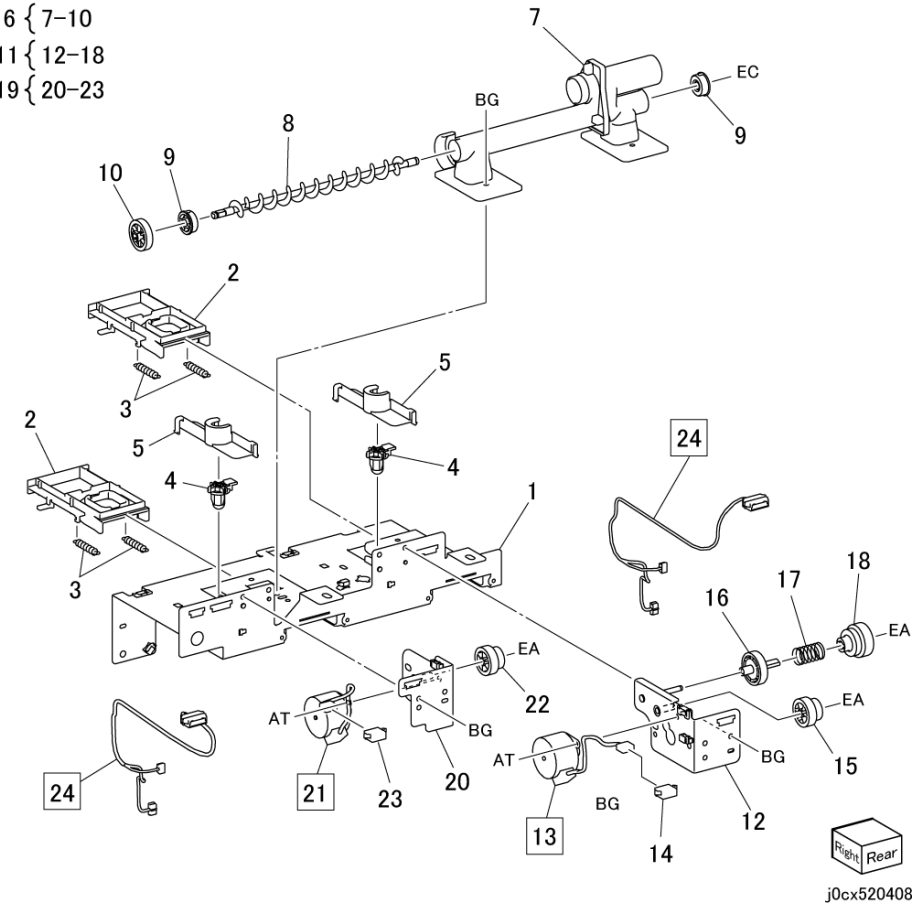
PL 4.7



【PL4.8】
Bottle Bracket Assembly

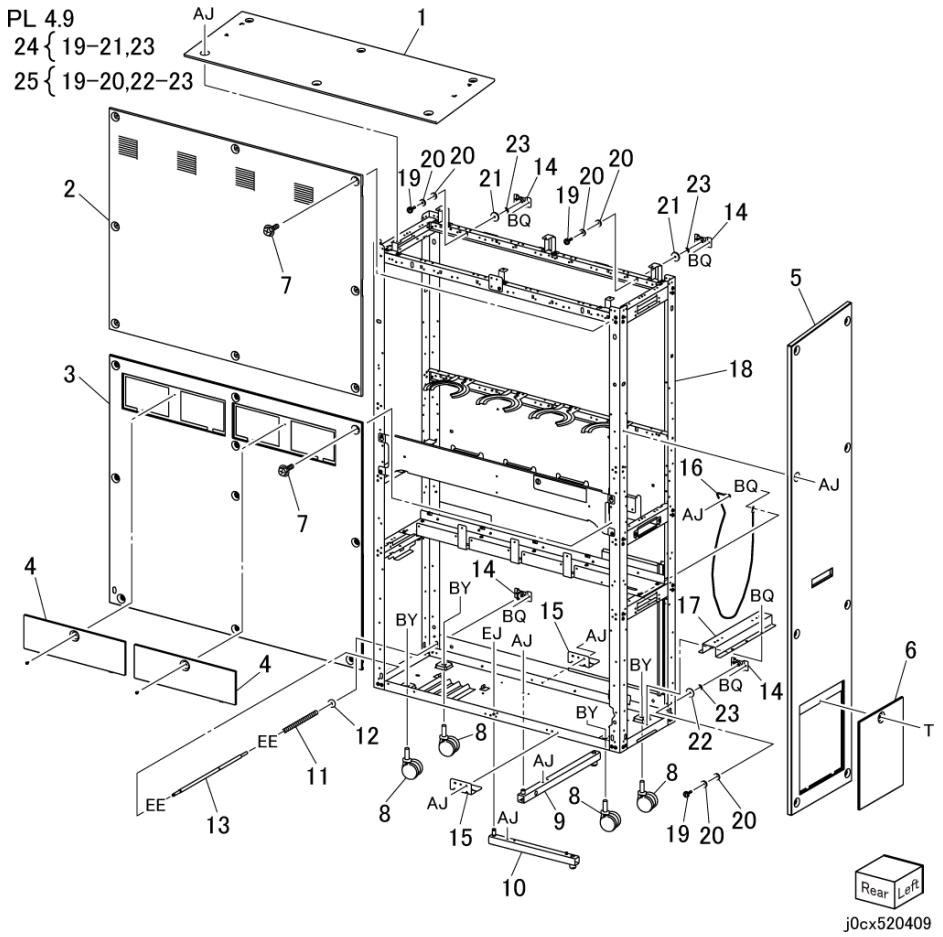
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD011K0315X／	BR	Bottle Joint Assembly (Item 7-10)
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD127K5845X／	BH	Auger Motor 2 Assembly (Item 12-18)
12	－－－－－	-----	
13	0TD127K3767X／	BC	(SCC) Auger Motor 2
14	0TD913W13171／	AD	Connector
15	0TD807E2525X／	AL	Gear (28T)
16	0TD807E2555X／	AP	Gear (32T)
17	－－－－－	-----	
18	－－－－－	-----	
19	0TD127K5874X／	BE	Bottle Motor Assembly (Item 20-23)
20	－－－－－	-----	
21	0TD127K3767X／	BC	(SCC) Auger Motor 2
22	0TD807E2525X／	AL	Gear (28T)
23	0TD913W13171／	AD	Connector
24	0TD962K7277X／	AY	(SCC) Wire Harness

PL 4.8
6 { 7-10
11 { 12-18
19 { 20-23



【PL4.9】
ECO Box Unit (1 of 3)

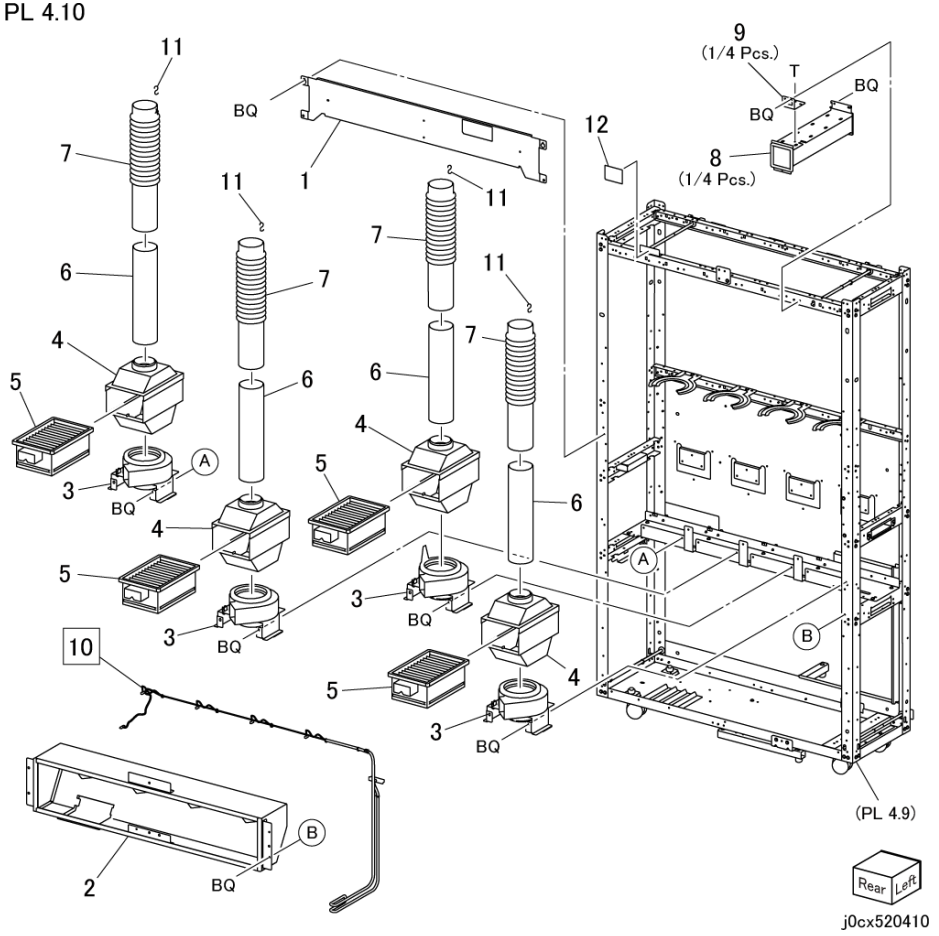
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	0TD017K9474X／	BM	Side Foot
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	0TD118E2228X／	BC	Strain Relief
17	– – – – –	-----	
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	
22	– – – – –	-----	
23	– – – – –	-----	
24	0TD607K0892X／	BC	Kit Thumb Screw Upp (Item 19-21, 23)
25	0TD607K0893X／	BC	Kit Thumb Screw Low (Item 19, 20, 22-23)



【PL4.10】
ECO Box Unit (2 of 3)

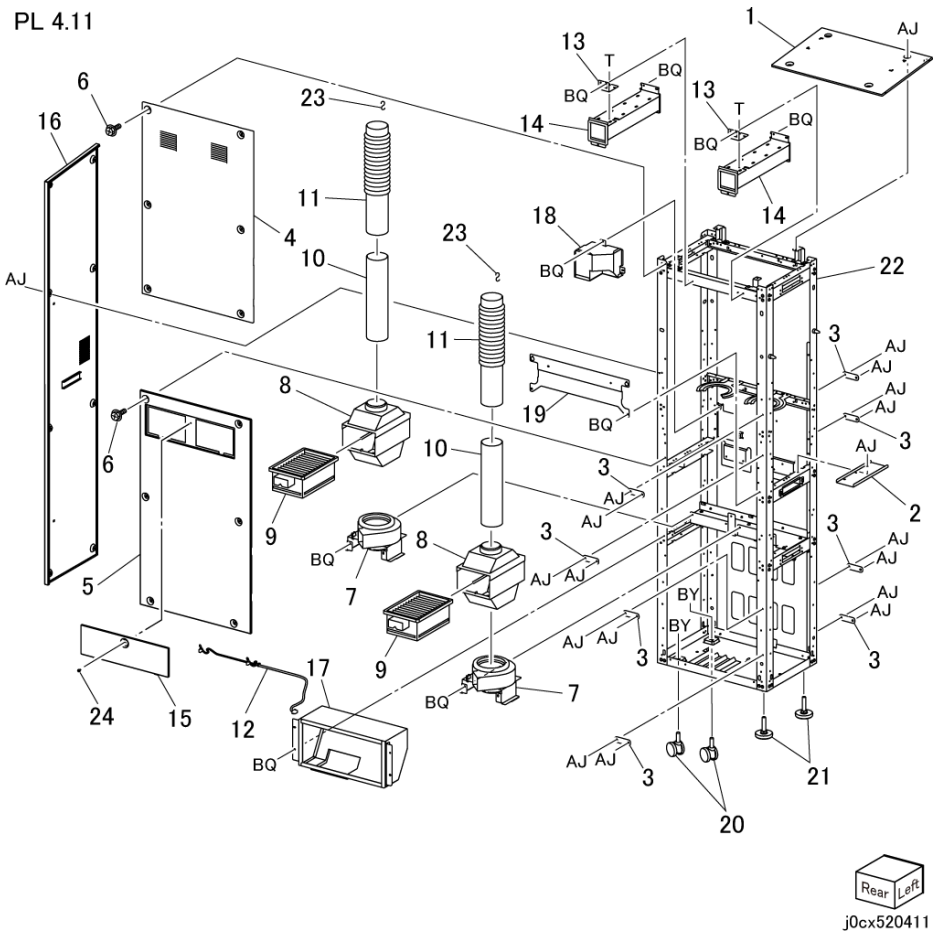
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD127K5929X／	BZ	Blower Fan 3/4/5/6
4	0TD948K3115X／	BN	Case Assembly
5	0TD053K0667X／	BS	FILTER ASSY-MAIN
6	－－－－－	-----	
7	0TD052E3118X／	BK	Hose
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD962K7280X／	BP	(SCC) Wire Harness
11	－－－－－	-----	
12	－－－－－	-----	

PL 4.10



【PL4.11】
ECO2 Box Unit (3 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD127K5929X／	BZ	Blower Fan 3/4/5/6
8	0TD948K3115X／	BN	Case Assembly
9	0TD053K0667X／	BS	FILTER ASSY-MAIN
10	－－－－－	-----	
11	0TD052E3118X／	BK	Hose
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	0TD017E1208X／	AW	Adjuster Foot
22	－－－－－	-----	
23	－－－－－	-----	
24	－－－－－	-----	



【PL5.1】
Toner Dispenser Component (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
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5	-----	-----	
6	0TD948K5196X/	BV	COVERASSY-BLIND NB
7	-----	-----	
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Item	PARTS CODE	PRICE RANK	DESCRIPTION
11	-----	-----	
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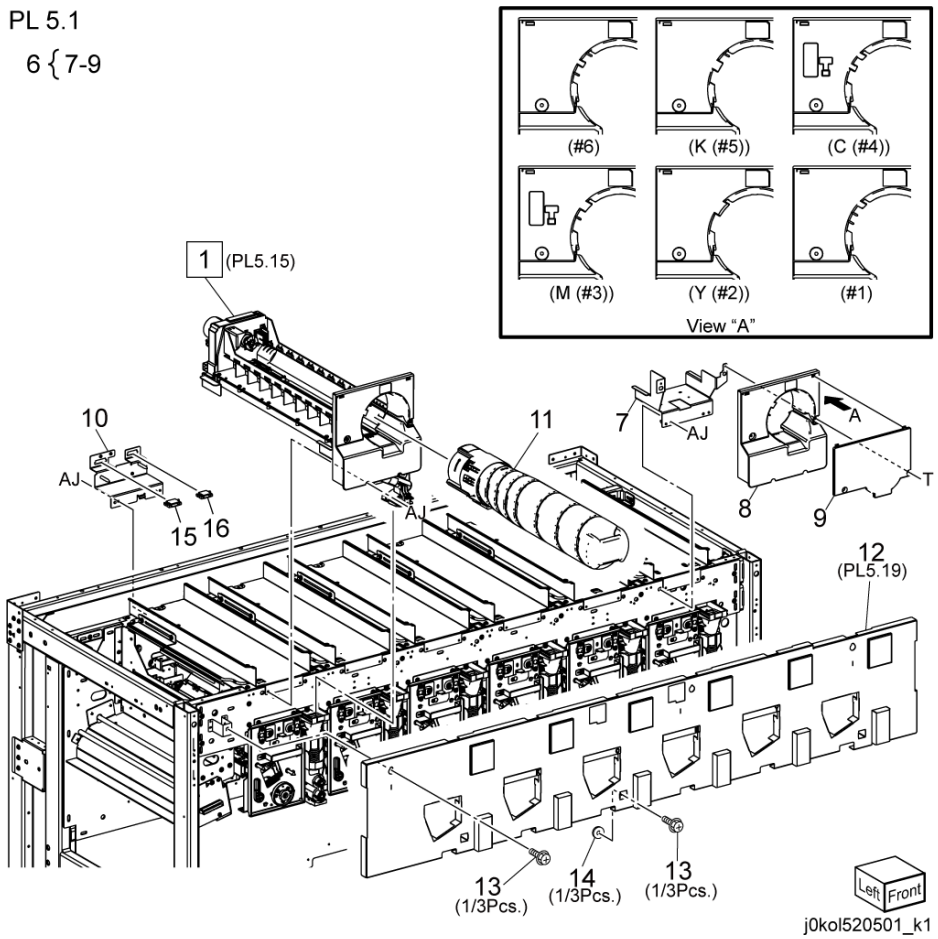
	-----	-----	
12	-----	-----	
13	-----	-----	
14	0TD028E9694X/	AD	CA Washer
15	-----	-----	
16	-----	-----	

【PL5.1】
Toner Dispenser Component (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

PL 5.1

6 { 7-9



【PL5.2】
MM Unit and Drum Cartridge (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
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5	-----	-----	
6	-----	-----	
7	-----	-----	
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8	-----	-----	
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	-----	-----	
9	0TD125K9443X/	CD	COROTRON ASSY-CC,C2 NB
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
	-----	-----	
14	0TD128E9150X/	BL	KISYU BLACK 100
15	0TD970E8723X/	AX	LABEL GLD NB
	0TD970E8724X/	AX	LABEL SLV NB
	0TD970E8725X/	AT	LABEL CLR NB
	0TD970E8727X/	AT	LABEL WHT NB
	0TD971E6994X/	BG	Label(WHT N NB) PL 5.2-Item15
	-----	-----	
	0TD970E8726X/	AX	LABEL-CR NB
	0TD970E8731X/	AX	LABEL-KP NB
	-----	-----	
16	0TD830E5326X/	AY	ROS Window Tool
17	-----	-----	
	-----	-----	
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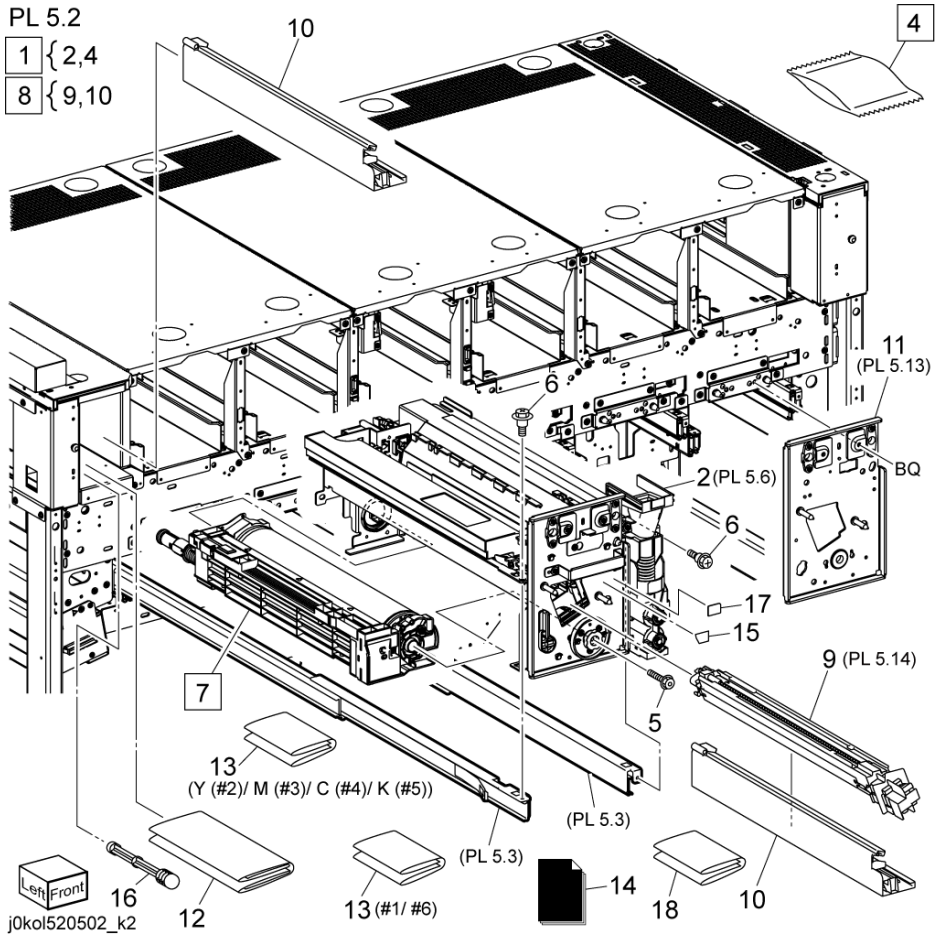
	-----	-----	
	-----	-----	
18	0TD695K3405X/	BH	Protect Sheet

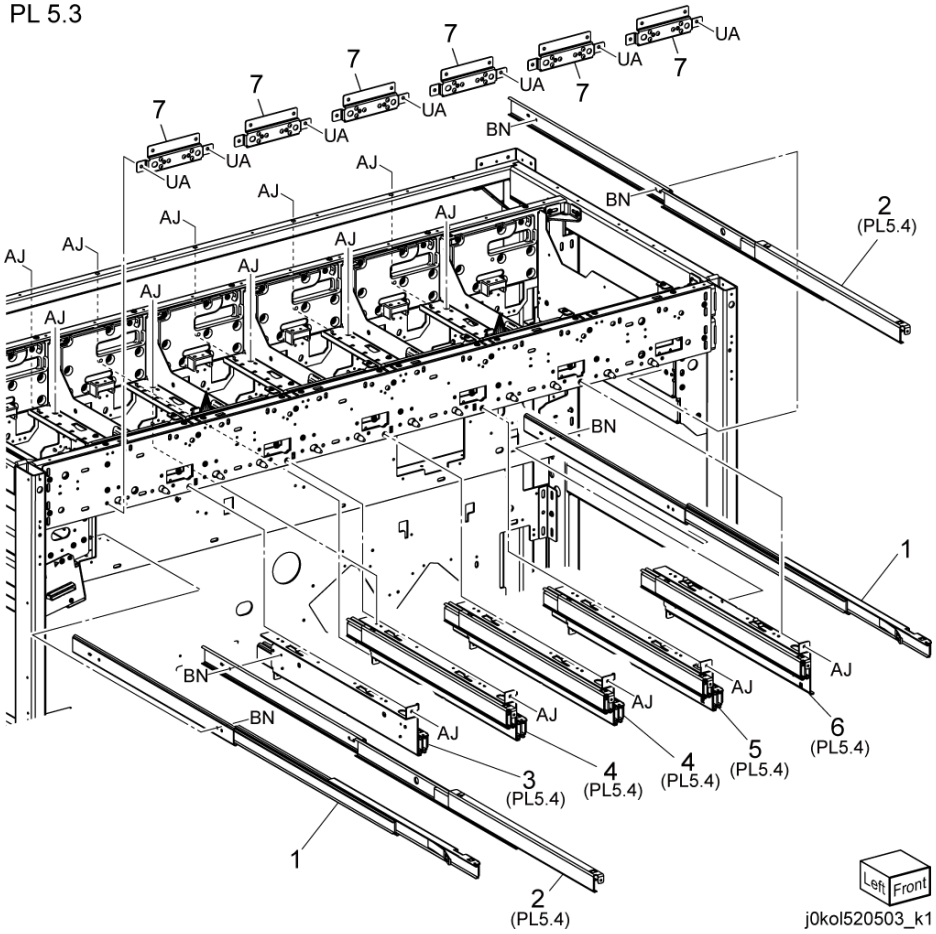
【PL5.2】
MM Unit and Drum Cartridge (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)



【PL5.3】
MM Rail Component (No.1, No.2, No.3, No.5 MM Rail Assembly)

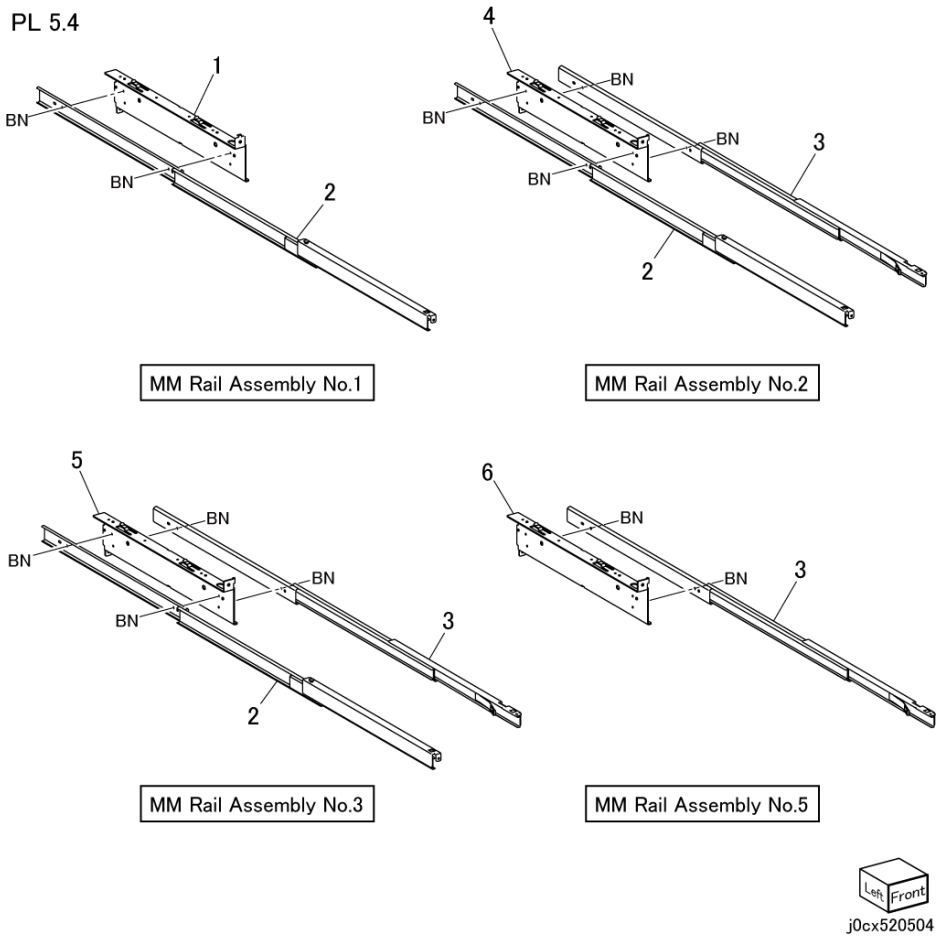
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD801K3562X／	BM	MM Left Rail Assembly
2	0TD801K6896X／	BS	MM Right Rail Assembly
3	0TD801K6900X／	BW	MM Rail Assembly No.5
4	0TD801K6899X／	CA	MM Rail Assembly No.3
5	0TD801K6898X／	CA	MM Rail Assembly No.2
6	0TD801K6897X／	BX	MM Rail Assembly No.1
7	0TD068K6237X／	BA	Bracket

PL 5.3



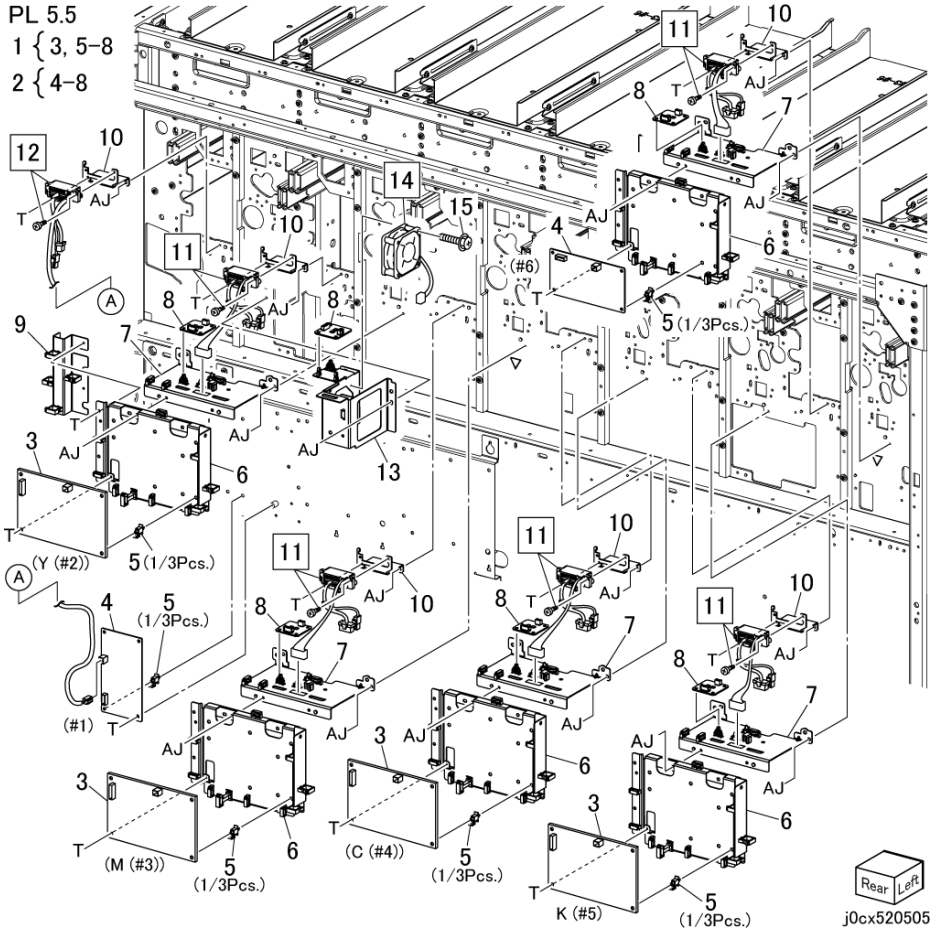
【PL5.4】
MM Rail Assembly (No.1, No.2, No.3, No.5 MM Rail Assembly)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD801K6896X/	BS	MM Right Rail Assembly
3	0TD801K3562X/	BM	MM Left Rail Assembly
4	-----	-----	
5	-----	-----	
6	-----	-----	



【PL5.5】
Deve Bias HVPS Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

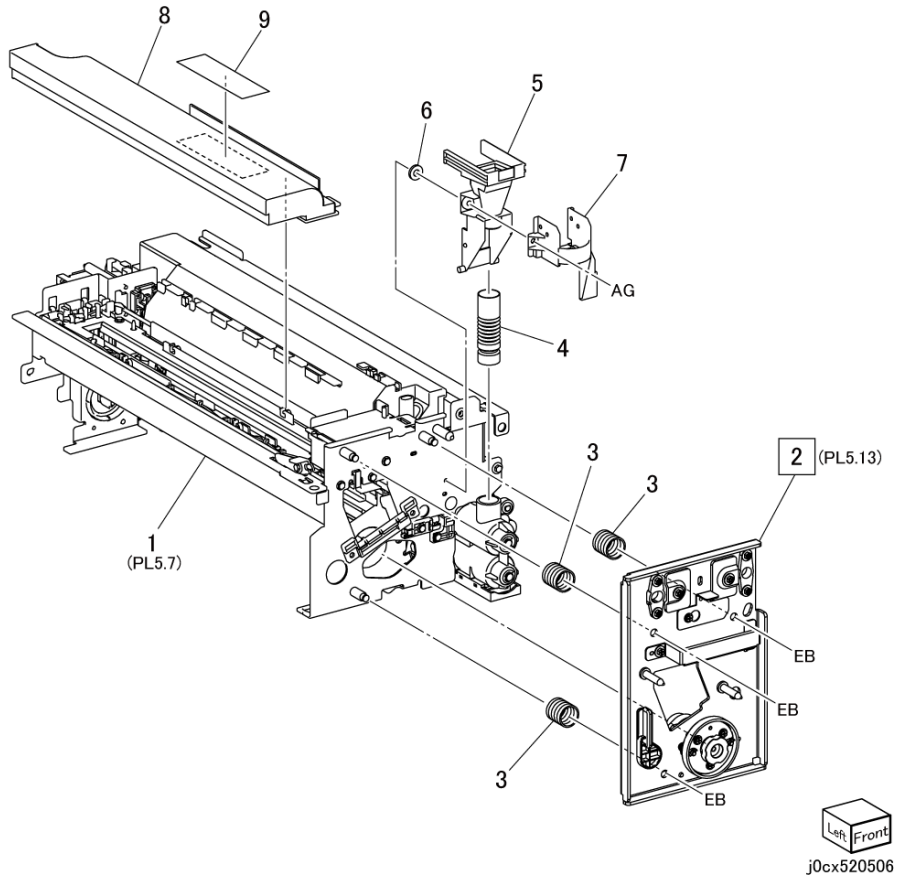
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD105E22600X／	CE	Deve Bias HVPS (Y (#2)/ M (#3)/ C (#4)/ K (#5))
4	0TD105E18798X／	BT	Deve Bias HVPS (#1/ #6)
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD960K8471X／	BF	Drum Sub Crum PWB (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (P/O Item 1,2)
9	－－－－－	-----	
10	0TD868E3665X／	BY	Connector Bracket
11	0TD952K3672X／	BW	(SCC) Drawer Harness (Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)
12	0TD952K3171X／	BW	(SCC) Drawer Harness (#1)
13	－－－－－	-----	
14	0TD127K7418X／	BA	(SCC) Fusing Waste Fan
15	－－－－－	-----	



【PL5.6】
MM Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

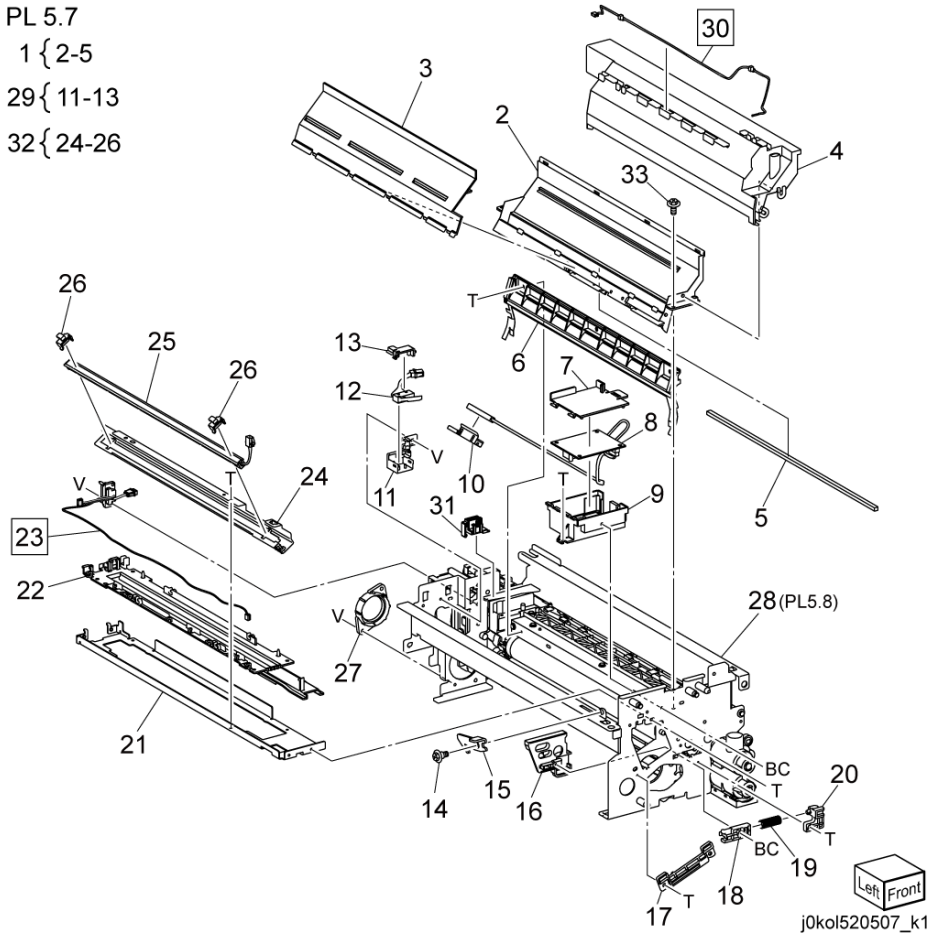
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
	－－－－－	-----	
	－－－－－	-----	
	－－－－－	-----	
	－－－－－	-----	
2	0TD815K0140X／	BU	PLATE ASSY FRONT
3	0TD809E9178X／	AY	Spring
4	0TD052E9421X／	AL	Joint Pipe
5	0TD032K0582X／	BB	Toner Guide
6	－－－－－	-----	
7	0TD868E2577X／	AQ	Guide Support
8	0TD054K6673X／	BS	DUCT ASSY-CC,IN NB
9	－－－－－	-----	

PL 5.6



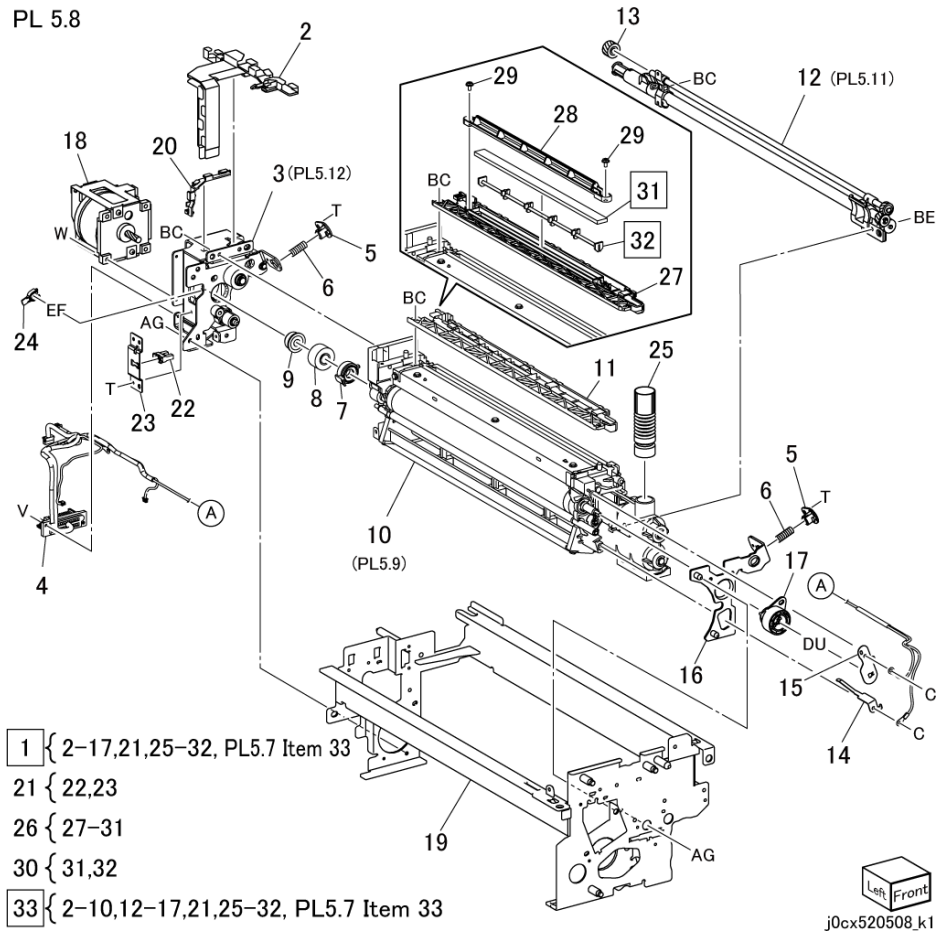
【PL5.7】
Developer Housing Componet (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K4162X/	BF	CC Out Duct Assembly (Item 2-5)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD948K0938X/	BW	Upper Cover Assembly
7	0TD848E3394X/	AZ	ESV Cover
8	0TD130K5791X/	BY	ESV Sensor (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)
9	0TD822E3956X/	BA	ESV Case
10	0TD113E2975X/	AK	ESV Holder
11	0TD019E7219X/	AT	Switch Holder
12	0TD110K1528X/	BF	CC Interlock Switch (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)
13	0TD848E2918X/	AU	Switch Cover
14	0TD026K8194X/	AL	Shoulder Screw
15	0TD815E5728X/	AV	Latch Plate
16	0TD011E2338X/	AL	CC Lever
17	0TD803E0211X/	AK	CC Stopper
18	0TD848E4109X/	AG	CC Lever Cover
19	0TD809E8874X/	AY	Spring
20	0TD803E0369X/	AH	Stopper Lever
21	-----	-----	
22	0TD032E3167X/	AT	CC Top Guide
23	0TD952K3499X/	BD	Wire Harness
24	-----	-----	
25	0TD122K9373X/	BE	ERASE LAMP
26	0TD019E7581X/	AL	Clip
27	0TD013E8904X/	AX	Bearing
28	-----	-----	
	-----	-----	
29	-----	-----	
30	0TD952K3619X/	AY	(SCC) Wire Harness
31	0TD819E0377X/	AY	Holder Connector
32	0TD068K6199X/	BH	Erase Lamp Bracket Assembly (Item 24-26)
33	-----	-----	



【PL5.8】
Developer Housing Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD607K4401X/	DP	KIT DEVE SP SC NB
	0TD607K4402X/	DP	KIT DEVE SP W NB
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	0TD010E9490X/	AF	Plunger
6	0TD809E8689X/	AZ	Spring
7	0TD014K8350X/	BC	Block In Assembly-DRS
8	-----	-----	
9	-----	-----	
10	-----	-----	
	-----	-----	
11	0TD948K5278X/	BN	COVER ASSY-TOP,C2 H NB
12	-----	-----	
	-----	-----	
13	0TD007K1565X/	AQ	Gear (13)
14	0TD815E5139X/	AZ	Resistor Plate
15	0TD815E5138X/	AY	MSA Plate
16	0TD815K2190X/	BC	Developer Out Plate
17	0TD068K6435X/	BB	Front Support Assembly (DRS)
18	0TD127K7606X/	CE	(SCC) Deve Motor
19	0TD801K6882X/	BZ	Developer Frame
20	-----	-----	
21	0TD930K0255X/	BH	Mag Roll Encoder Sensor Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (Item 22, 23)
22	-----	-----	
23	-----	-----	
24	-----	-----	
25	0TD052E9421X/	AL	Joint Pipe
26	0TD948K5278X/	BN	COVER ASSY-TOP,C2 H NB
27	-----	-----	
28	0TD822E8303X/	BA	COVER-FILTER NB
29	-----	-----	
30	0TD607K2755X/	KIT	KIT DEVE FILTER NB
31	-----	-----	
32	-----	-----	
33	0TD607K4403X/	KIT	KIT DEVE SP 4C NB



【PL5.9】
Lower Housing Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
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13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	– – – – –	-----	
17	– – – – –	-----	
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	
22	– – – – –	-----	
23	– – – – –	-----	
24	– – – – –	-----	
25	– – – – –	-----	
26	– – – – –	-----	
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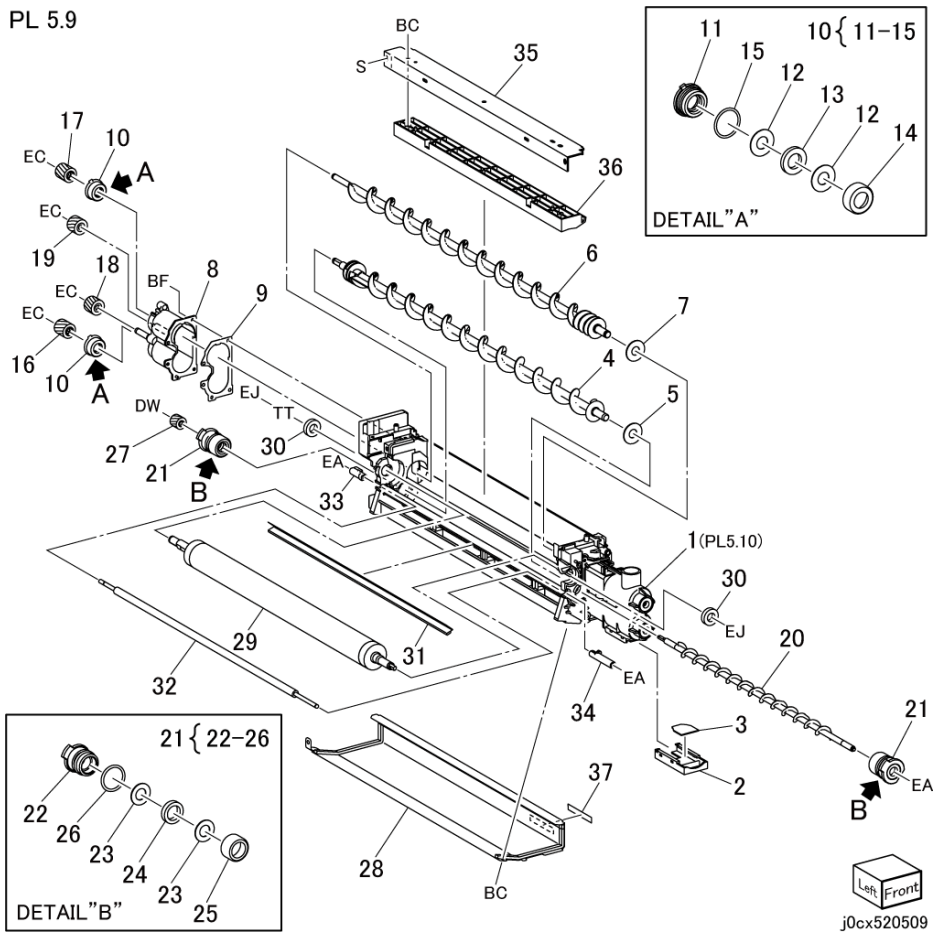
28	– – – – –	-----	
29	– – – – –	-----	
	– – – – –	-----	
30	– – – – –	-----	
31	– – – – –	-----	
32	– – – – –	-----	
33	– – – – –	-----	
34	– – – – –	-----	
35	– – – – –	-----	
36	– – – – –	-----	
37	– – – – –	-----	

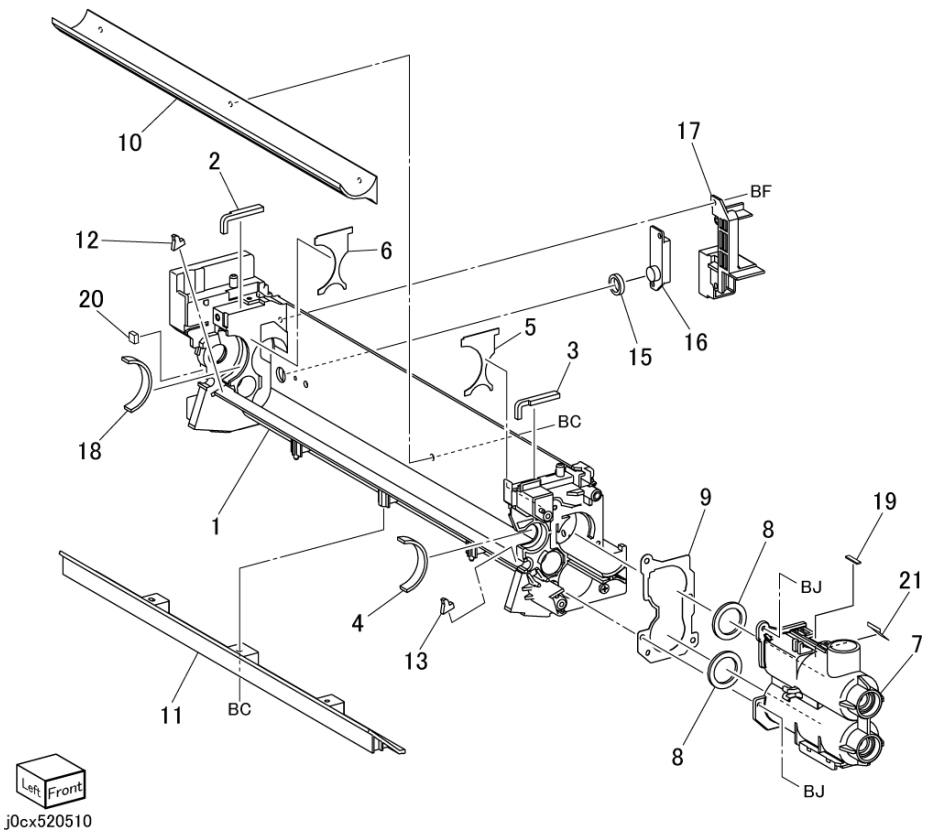


【PL5.10】
Lower Housing Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (2 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	0TD130K7325X／	BG	ATC Sensor Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (Item 15, 16)
15	– – – – –	-----	
16	– – – – –	-----	
17	– – – – –	-----	
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	

PL 5.10

14 { 15,16



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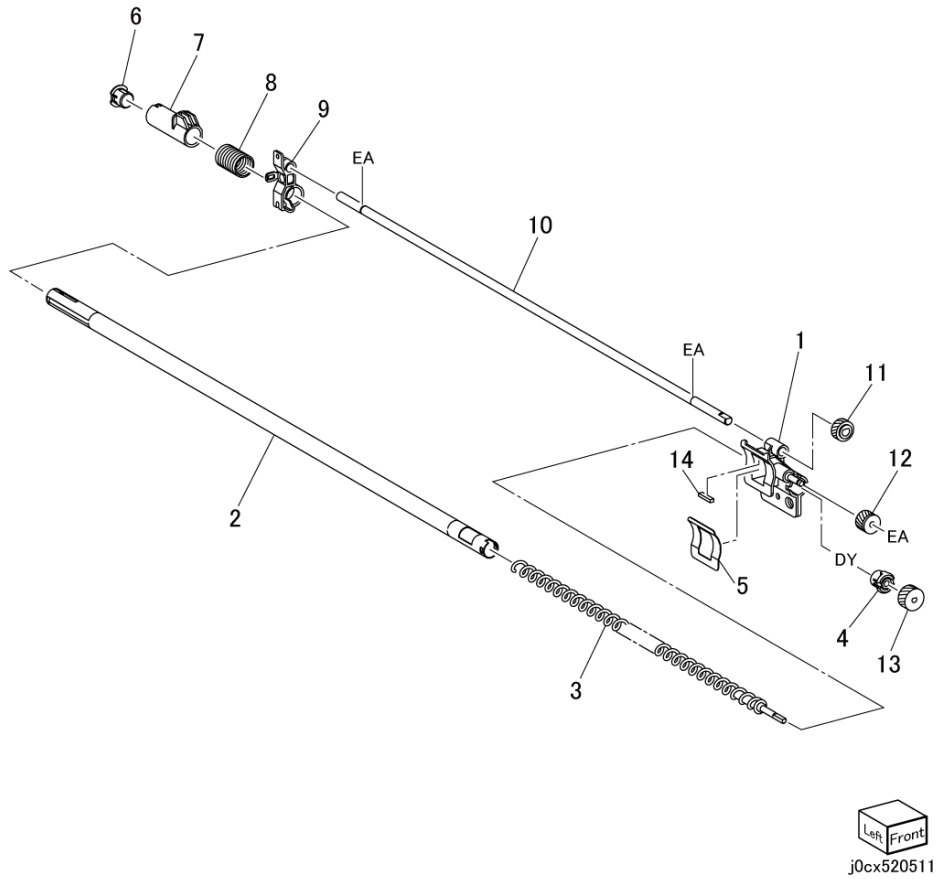
【PL5.11】
Trickle Auger Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
	– – – – –	-----	

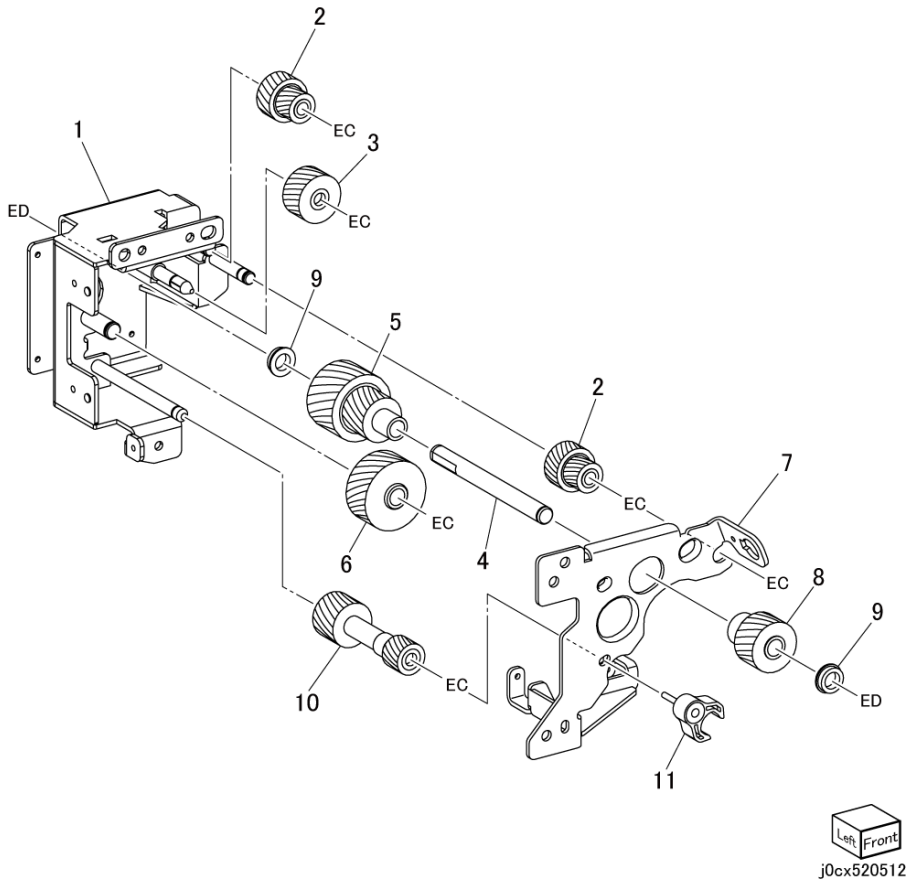
PL 5.11



【PL5.12】
Developer Motor Bracket Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	

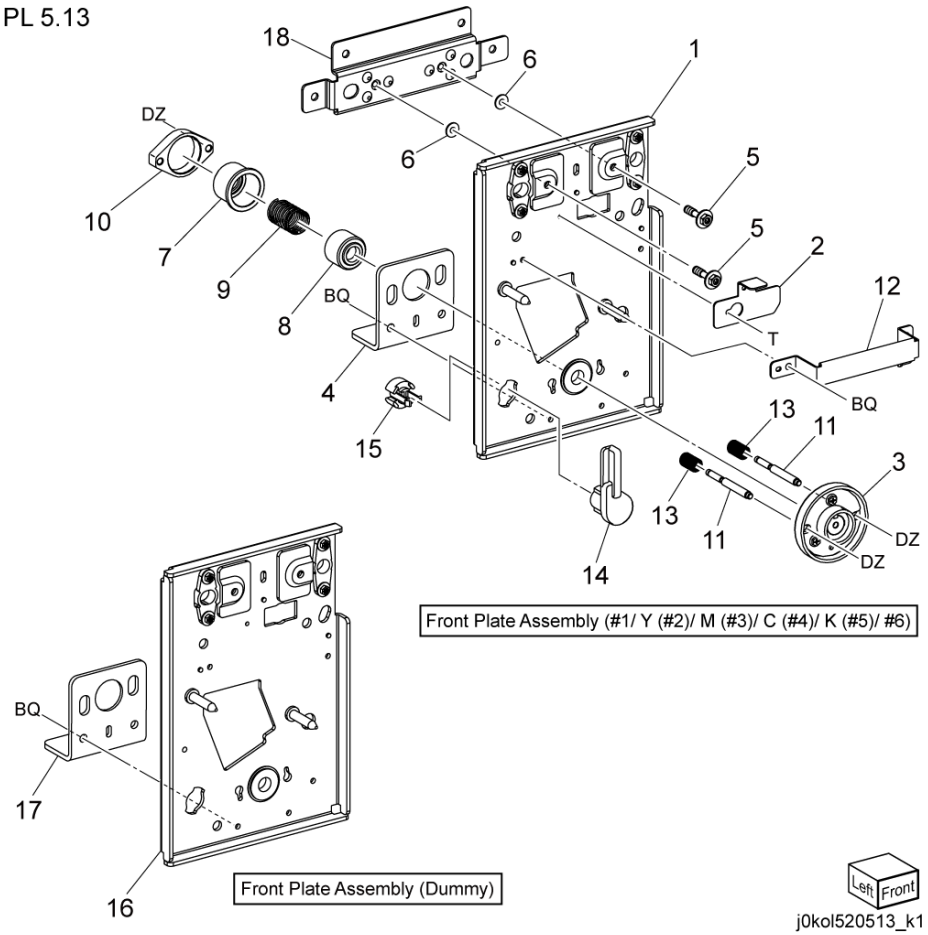
PL 5.12



【PL5.13】
Front Plate Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD028E9694X／	AD	CA Washer
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	0TD803E0114X／	AL	Knob
15	0TD021E1281X／	AK	Cap
16	－－－－－	-----	
17	－－－－－	-----	
18	0TD068K6237X／	BA	Bracket

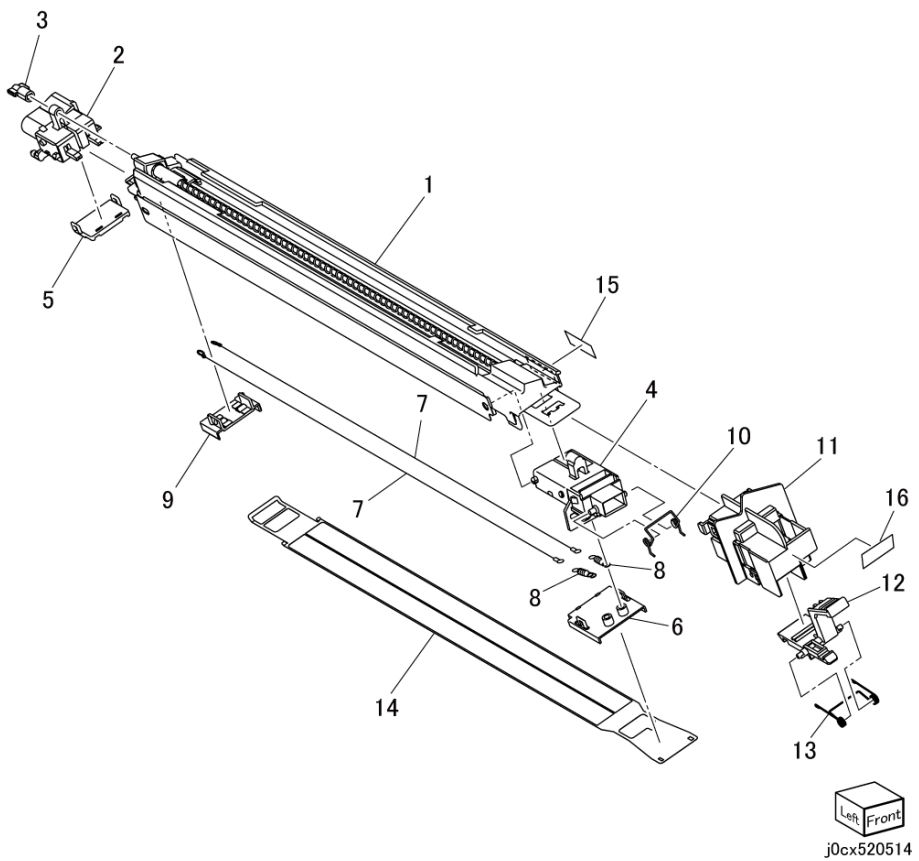
PL 5.13



【PL5.14】
CC Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	– – – – –	-----	

PL 5.14



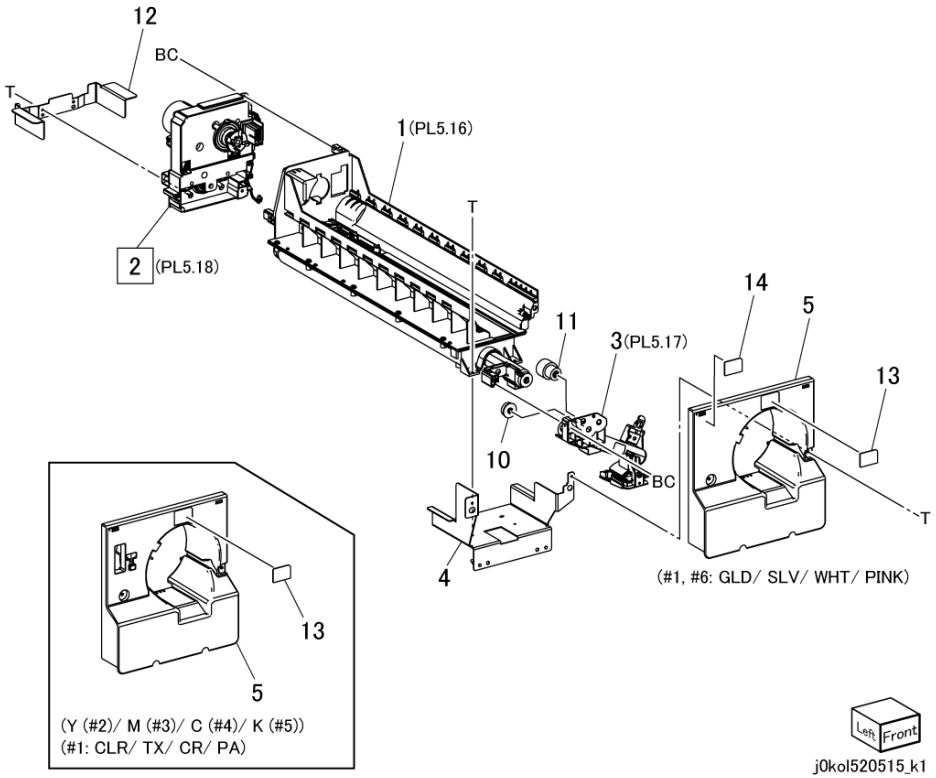
【PL5.15】
Toner Dispenser Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD052K9692X/	BK	Pipe Auger Assembly
4	-----	-----	
5	0TD822E8305X/	BL	COVER-INNER,DISP Y NB
	0TD822E8307X/	BL	COVER-INNER,DISP M NB
	0TD822E8308X/	BL	COVER-INNER,DISP C NB
	0TD822E8309X/	BL	COVER-INNER,DISP K NB
	0TD822E8310X/	BL	COVER-INNER,DISP CLR NB
	0TD822E8311X/	BL	COVER-INNER,DISP GLD NB
	0TD822E8312X/	BL	COVER-INNER,DISP SLV NB
	0TD822E8313X/	BL	COVER-INNER,DISP WHT NB
	0TD948K5011X/	BN	Dispenser Inner Cover (WHT) (with Item 13)
	0TD948K6405X/	BL	Dispenser Inner Cover (WHT N)(with Item 13)(WW)
	0TD822E8314X/	BL	COVER-INNER,DISP TEX NB
	0TD948K5012X/	BN	Dispenser Inner Cover (TX) (with Item 13)
6	0TD094K9443X/	CS	Dispense Assembly
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	0TD970E9050X/	BA	LABEL-TONER Y NB
	0TD970E9049X/	AY	LABEL-TONER M NB
	0TD970E9048X/	AY	LABEL-TONER C NB
	0TD970E9051X/	AY	LABEL-TONER K NB
	0TD970E9052X/	AY	LABEL-TONER CLR NB
	0TD970E9053X/	BA	LABEL-TONER GLD NB
	0TD970E9054X/	BA	LABEL-TONER SLV NB
	0TD970E9056X/	AY	LABEL-TONER,WHT NB
	0TD971E6993X/	BP	Toner Label(WHT N NB) PL 5.15-Item13
	-----	-----	
	0TD970E9055X/	AY	LABEL-TONER CR NB
	0TD970E9070X/	BA	LABEL-TONER KP NB
	-----	-----	
14	-----	-----	
	-----	-----	
	-----	-----	
	-----	-----	

Item	PARTS CODE	PRICE RANK	DESCRIPTION
14	-----	-----	
	-----	-----	
	-----	-----	
	-----	-----	

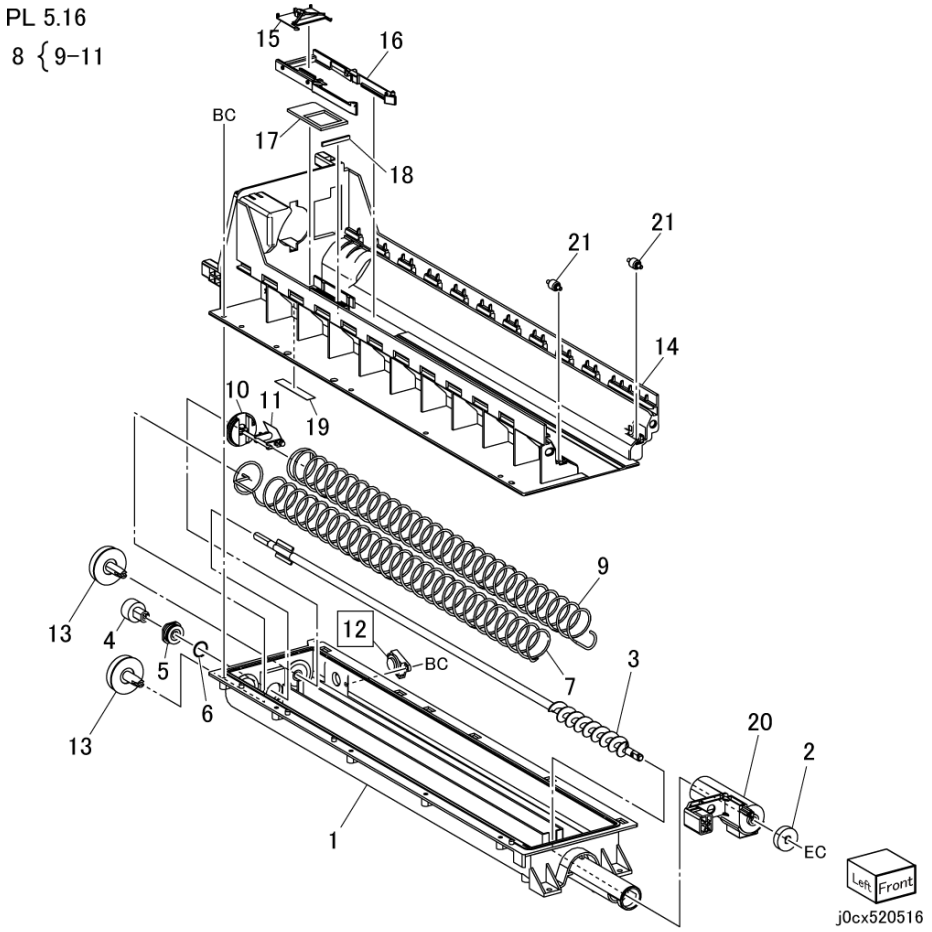
【PL5.15】
Toner Dispenser Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

PL 5.15
6 { 1-4,10-12



【PL5.16】
Reserve Housing Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

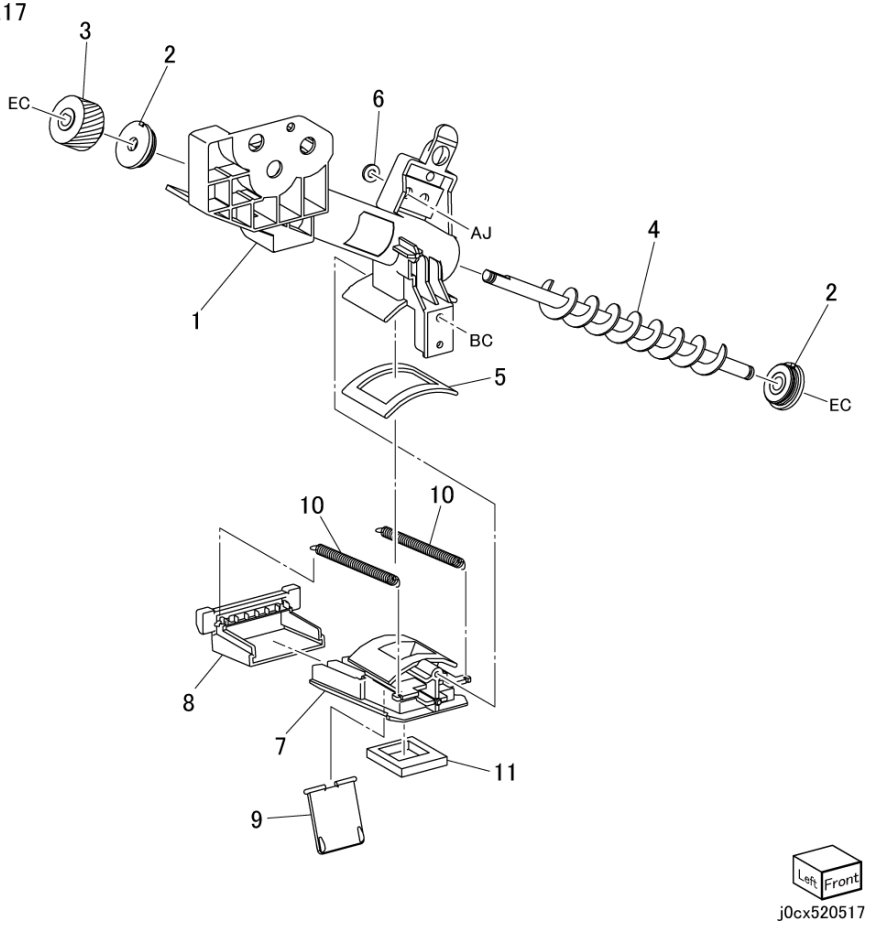
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD007E5373X／	AF	Gear (24)
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD055E6542X／	BD	Shutter
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	



【PL5.17】
Pipe Auger Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	

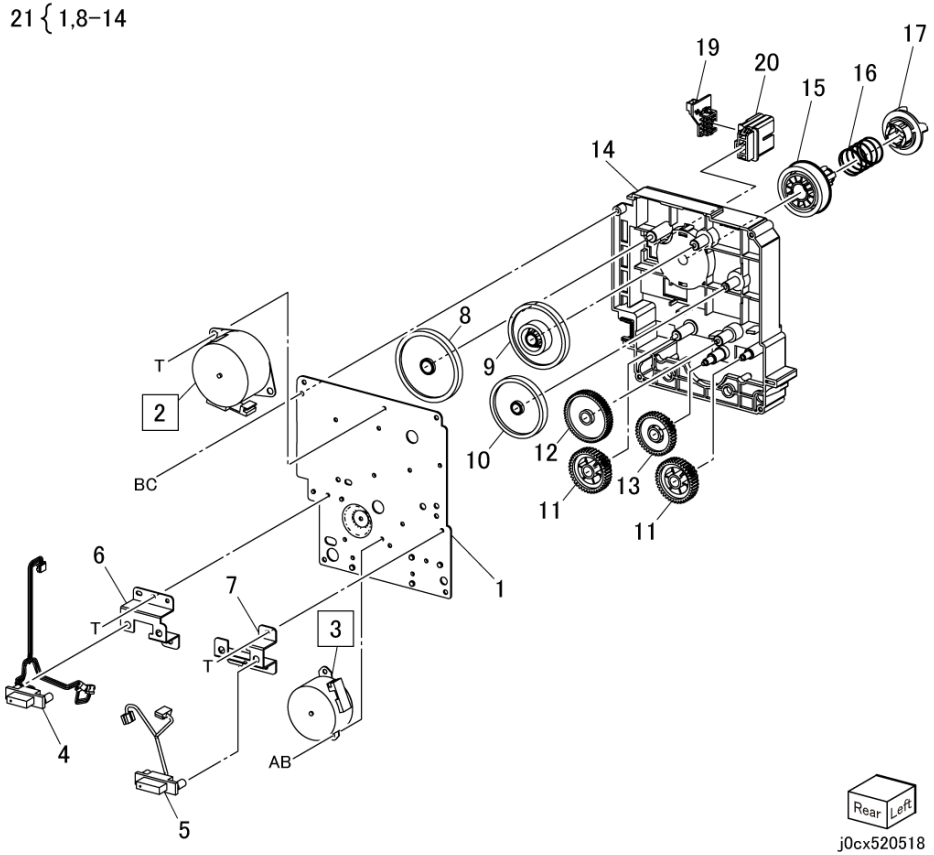
PL 5.17



【PL5.18】
Rear Plate Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD127K7608X／	BV	(SCC) Toner Cartridge Motor (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)
3	0TD127K6593X／	BB	(SCC) Toner Dispense Motor (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	－－－－－	-----	
18	0TD019K1719X／	BB	CRUM Holder Assembly (Item 19,20)
19	－－－－－	-----	
20	－－－－－	-----	
21	0TD815K1800X／	BG	Rear Dispense Plate Assembly (Item 1,8-14)

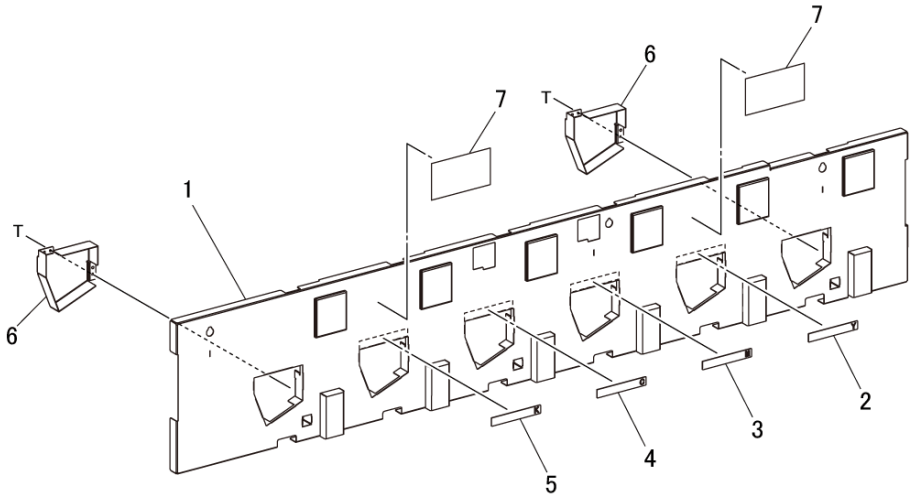
PL 5.18
18 { 19,20
21 { 1,8-14



【PL5.19】
Developer Inner Cover Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD970E9084X/	AZ	LABEL Y NB
3	0TD970E9083X/	AZ	LABEL M NB
4	0TD970E9082X/	AZ	LABEL C NB
5	0TD970E9085X/	AZ	LABEL K NB
6	-----	-----	
7	-----	-----	

PL 5.19



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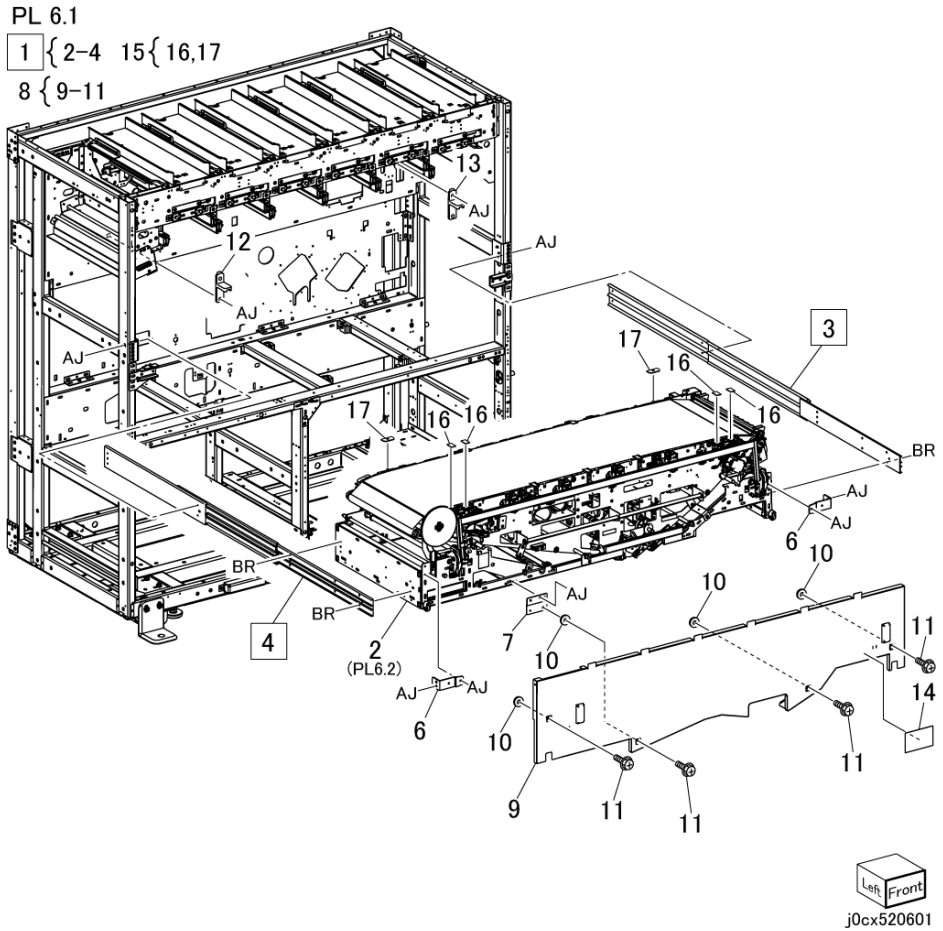
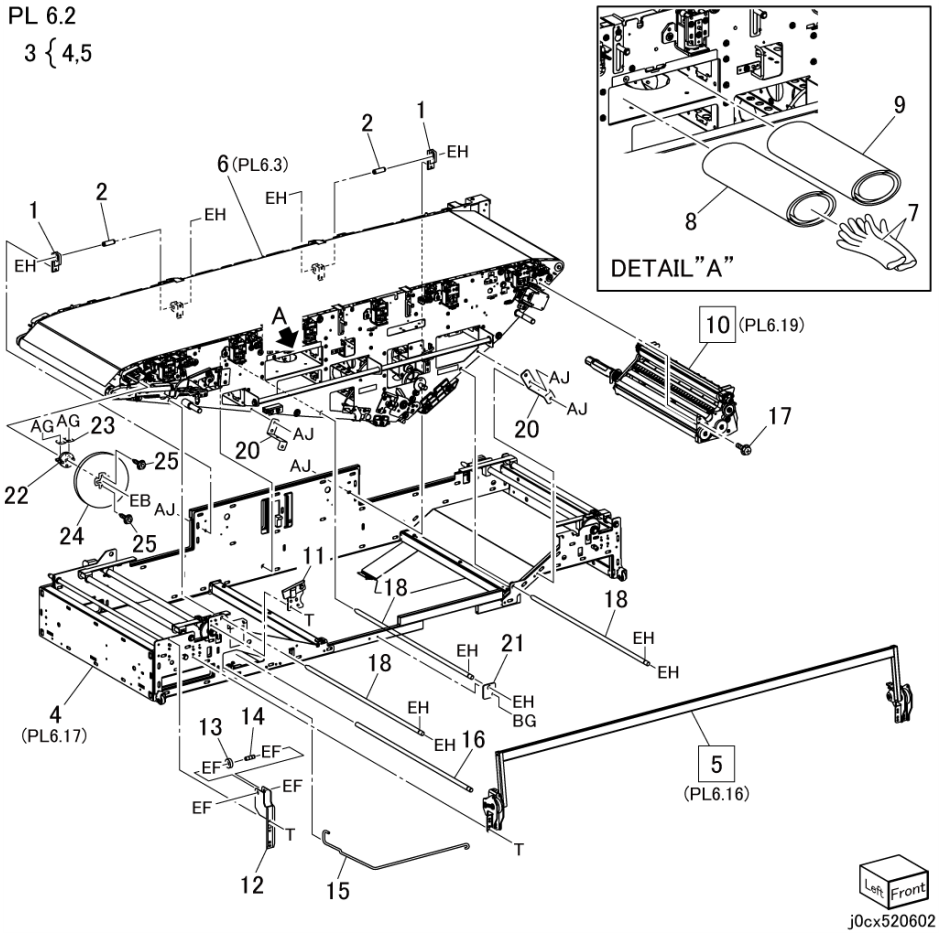
【PL6.1】
IBT Belt Component

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
	－－－－－	-----	
2	－－－－－	-----	
3	0TD801K3510X／	BX	IBT Right Drawer Rail Assembly
4	0TD801K3510X／	BX	IBT Right Drawer Rail Assembly
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD948K5078X／	CW	COVER ASSY-INNER,ALL,CM2 NB
9	－－－－－	-----	
10	0TD028E9694X／	AD	CA Washer
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD607K1217X／	KIT	IBT Shim Kit (Item 16,17)
16	－－－－－	-----	
17	－－－－－	-----	



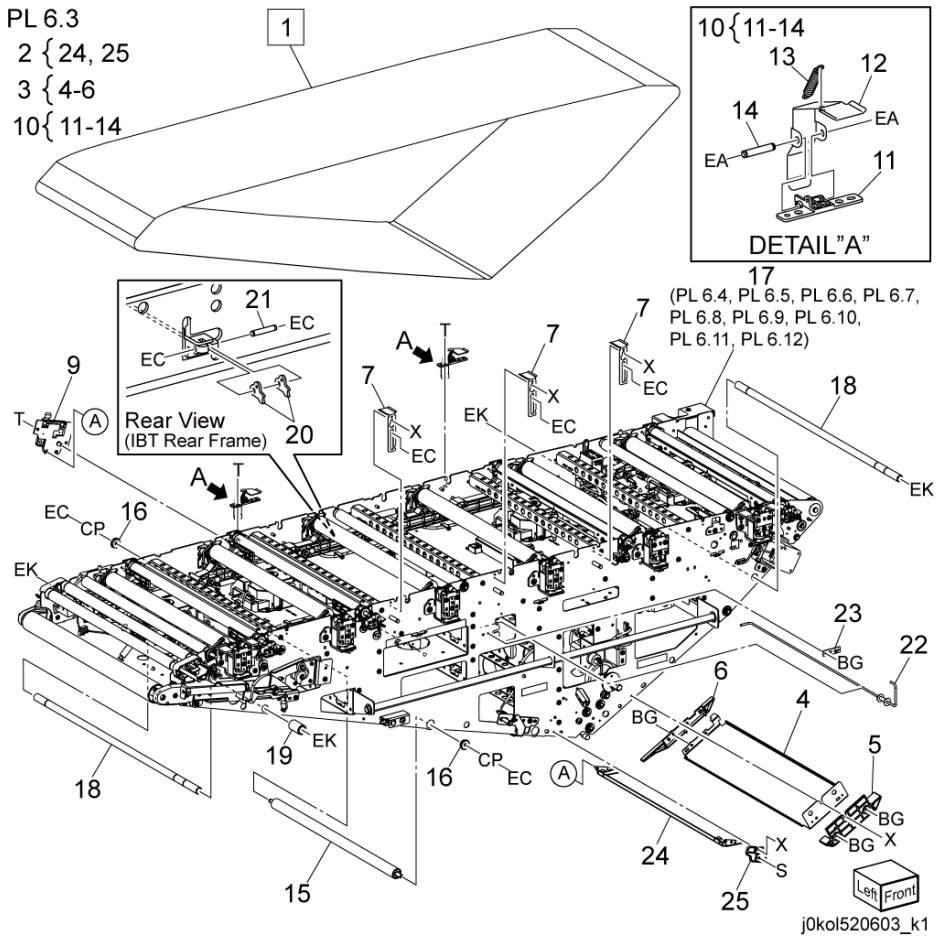
【PL6.2】
IBT Belt Assembly and IBT Frame

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD003K8734X／	CD	IBT Handle Assembly
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD052E3128X／	BM	Jig Tube
9	0TD052E3129X／	BP	Protect Tube
10	0TD042K0441X／	CL	CLEANER ASSY-HIGH,C2
11	－－－－－	-----	
12	－－－－－	-----	
13	0TD013E2550X／	AP	Bearing
14	0TD806E2749X／	AL	Shaft
15	0TD806E2911X／	BM	Belt Holder Shaft
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	
23	－－－－－	-----	
24	－－－－－	-----	
25	－－－－－	-----	



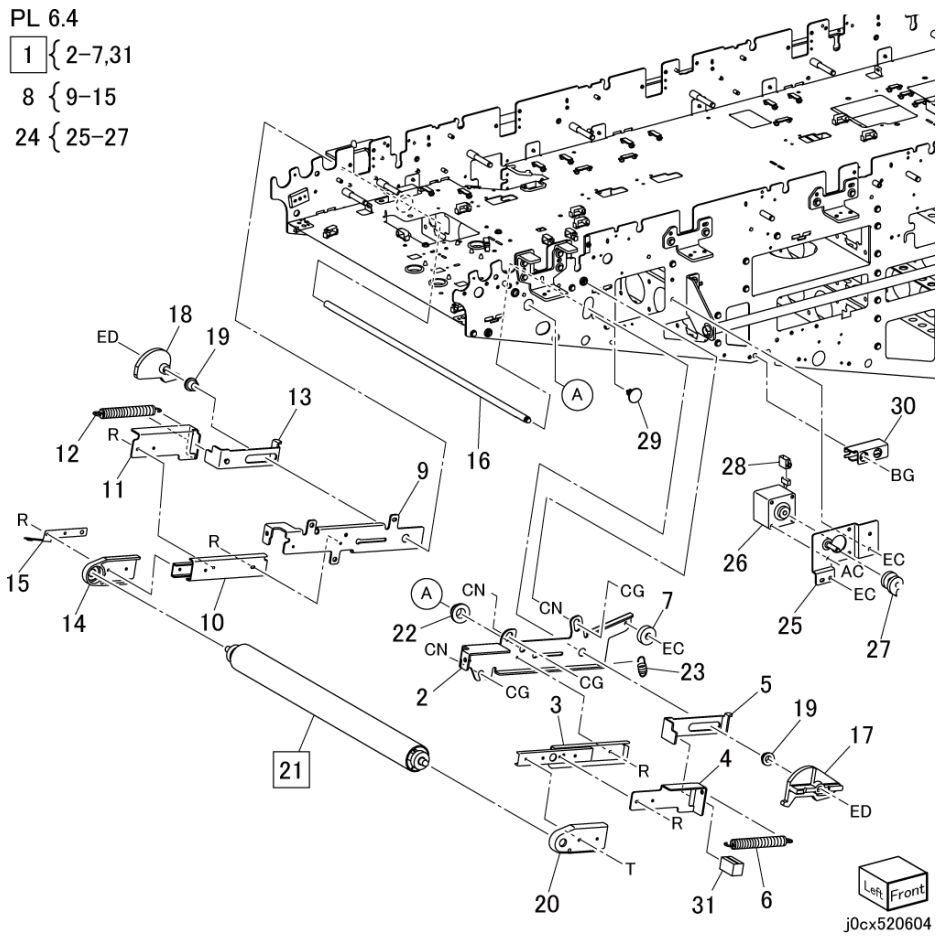
【PL6.3】
IBT Belt Assembly (1 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD064K0323X/	DH	BELT ASSY-IBT
	0TD064K0323X/	DH	BELT ASSY-IBT
2	-----	-----	
3	0TD055K3195X/	AZ	Belt Guard Assembly (Item 4-6)
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD055E5751X/	AN	Upper Belt Guard
8	-----	-----	
9	0TD019K1699X/	BN	Chute Holder Assembly
10	0TD055K3202X/	AZ	Rear Belt Guard Assembly (Item 11-14)
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	0TD859K0803X/	BH	Idle Roll
16	0TD013E4766X/	AY	Bearing
17	-----	-----	
18	-----	-----	
19	0TD014E6539X/	BB	Spacer Shaft
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	-----	-----	
24	0TD054K5708X/	BN	Upper Chute Assembly
25	-----	-----	



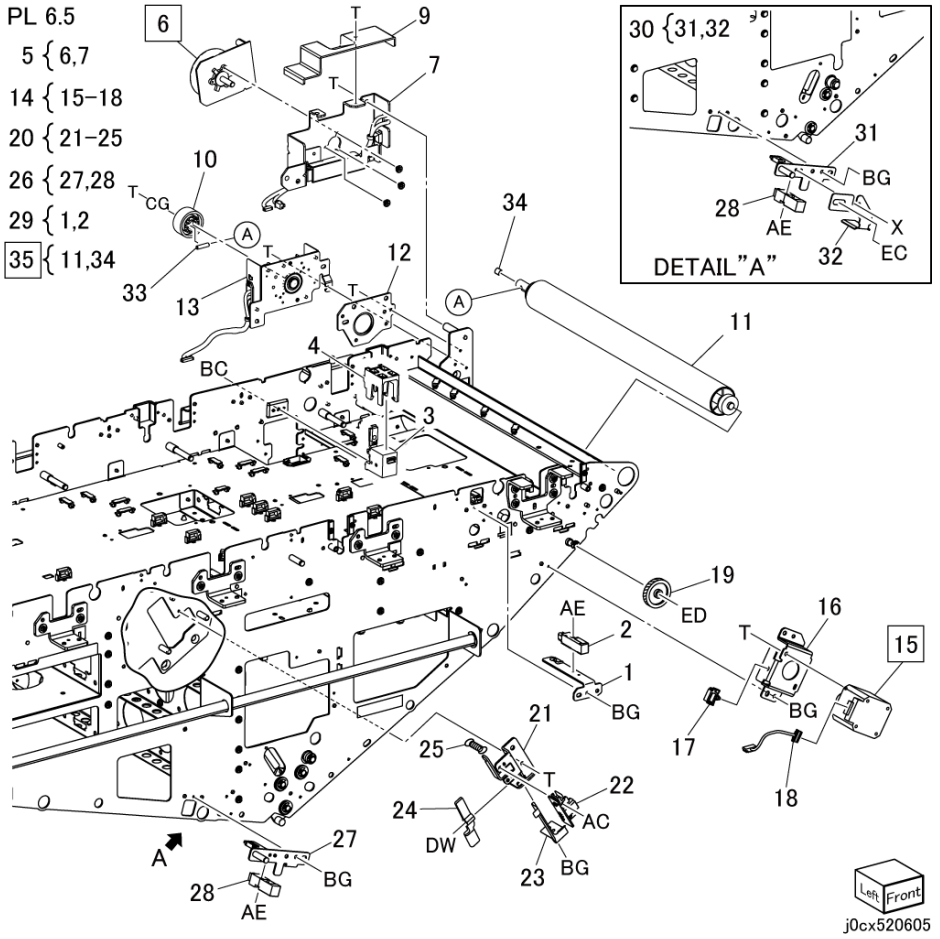
【PL6.4】
IBT Belt Assembly (2 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD068K6276X/	BL	Front Tension Support Assembly (Item 2-7,31)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	0TD049K4626X/	BT	Rear Tension Support Assembly (Item 9-15)
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	0TD008E0727X/	AH	Front Tension Cam
18	0TD008E9328X/	AS	Rear Tension Cam
19	0TD016E9042X/	AF	Bush
20	0TD848E5072X/	AN	Front Tension Housing
21	0TD059K6090X/	BV	Tension Roll
22	0TD413W79359/	AF	Bearing
23	0TD809E8767X/	AU	Spring
24	0TD127K5918X/	BN	IBT Steering Motor Assembly (Item 25-27)
25	-----	-----	
26	-----	-----	
27	0TD008E9384X/	AH	Cam
28	-----	-----	
29	0TD019E4202X/	AH	Anchor Clip
30	0TD868E5052X/	BD	Bracket
31	0TD004E1904X/	AS	Absorber



【PL6.5】
IBT Belt Assembly (3 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD130E8427X/	AY	Belt Home Position Sensor 1
3	0TD930K0377X/	BQ	Belt Edge Sensor 3
4	－－－－－	-----	
5	0TD007K2247X/	BX	IBT Drive Motor Assembly (Item 6, 7)
6	0TD127K7565X/	BZ	(SCC) IBT Drive Motor
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD807E5651X/	BA	IBT Drive Gear (56T)
11	－－－－－	-----	
12	－－－－－	-----	
13	0TD146K9118X/	CG	Belt Encoder Sensor Assembly
14	0TD127K7575X/	BV	IBT Cleaner Motor Assembly (Item 15-18)
15	0TD127K7576X/	BU	(SCC) IBT Cleaner Motor
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	0TD807E3111X/	AP	GEAR-HELICAL,35
20	0TD930K0281X/	BZ	Belt Edge Sensor 2 Assembly (Item 21-25)
21	－－－－－	-----	
22	0TD930K0280X/	BS	Belt Edge Sensor 2
23	0TD809E3560X/	BB	Spring Plate
24	0TD003K8579X/	BB	Hinge
25	0TD809E0957X/	AG	Spring
26	－－－－－	-----	
27	－－－－－	-----	
28	0TD130E8427X/	AY	Belt Home Position Sensor 1
29	－－－－－	-----	
30	0TD604K7253X/	BT	Guard Kit (Item 31, 32)
31	－－－－－	-----	
32	0TD055E6300X/	BC	Lower Belt Guard
33	0TD029E5461X/	AV	PIN DOWEL
34	－－－－－	-----	
35	－－－－－	-----	

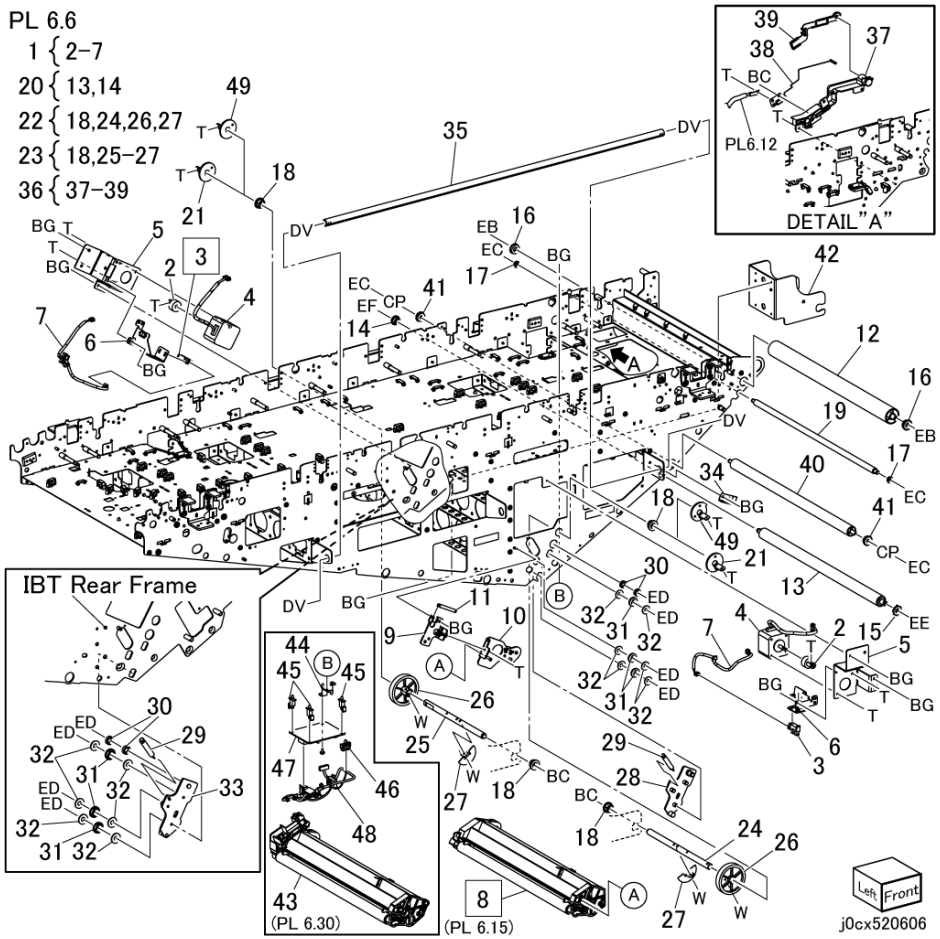


IBT Belt Assembly (4 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD127K5903X/	BP	Front/Rear 2nd Nip Adjustable Motor Assembly (Item 2-7)
2	-----	-----	
3	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	0TD859K0571X/	CG	ROLLER ASSY-BACKUP,C2
9	0TD049K3540X/	BF	Backup Roll Bracket Assembly
10	0TD815K1769X/	BH	Backup Roll Plate Assembly
11	0TD899E1567X/	AZ	Backup Roll Spring
12	0TD059K6251X/	BK	Idle Roll
13	0TD042K9370X/	BQ	Inner Cleaner Brush
14	0TD013P6050X/	BC	Bearing
15	0TD013E9461X/	AH	Bearing
16	-----	-----	
17	0TD413W60270/	AS	Bearing
18	0TD413W79359/	AF	Bearing
19	0TD059E0502X/	BD	IBT Cleaner Brush Roll
20	0TD042K9371X/	BK	BRUSH ASSY-INNER
21	0TD008K9249X/	BB	Cam Assembly
22	0TD006K3505X/	BH	2nd Shaft Front Assembly (Item 18, 24, 26, 27)
23	0TD006K3506X/	BH	2nd Shaft Rear Assembly (Item 18, 25-27)
24	0TD806E4844X/	AY	2nd Shaft Front
25	0TD806E4845X/	AY	2nd Shaft Rear
26	-----	-----	
27	-----	-----	
28	-----	-----	
29	0TD899E1730X/	AL	Spring
30	0TD413W88550/	AL	Bearing
31	0TD014E7723X/	AK	Spacer
32	0TD028E1904X/	AZ	Nylon Washer
33	0TD815K1755X/	BH	Rear Plate
34	0TD809E8584X/	AR	Spring Stopper
35	-----	-----	
36	0TD115K9165X/	BR	Terminal Brush Assembly (Item 37-39)
37	-----	-----	
38	-----	-----	
39	-----	-----	
40	0TD859K0803X/	BH	Idle Roll

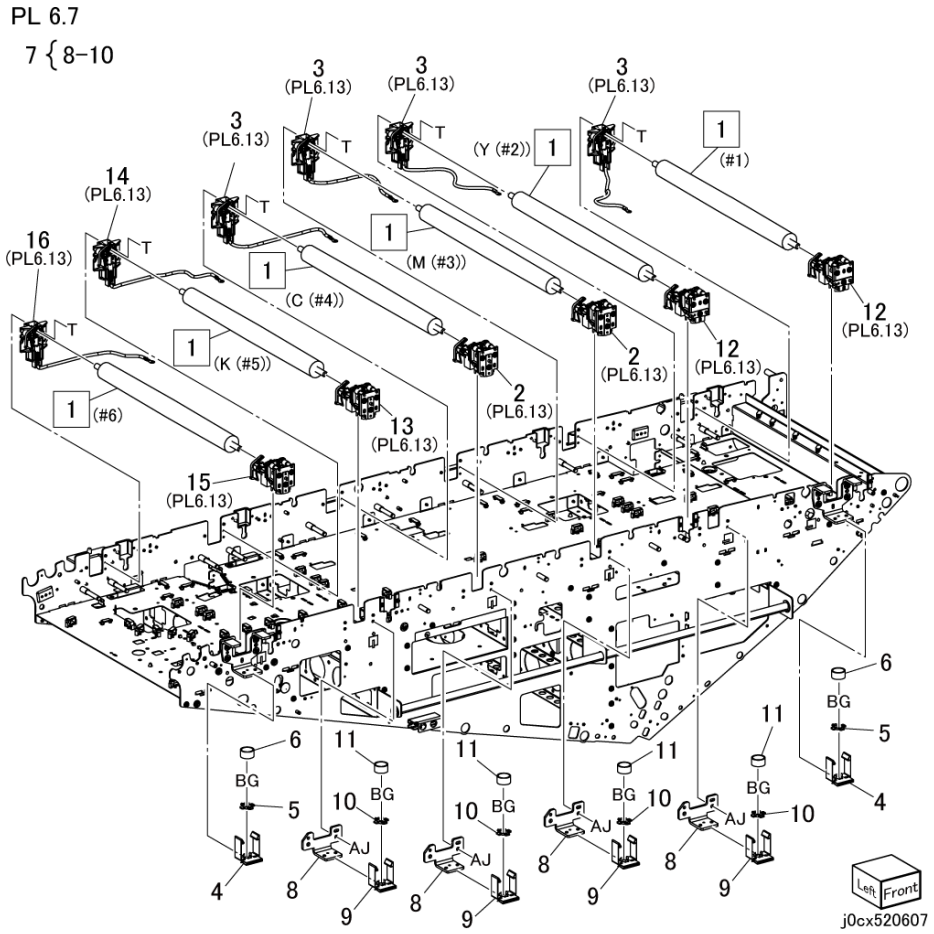
Item	PARTS CODE	PRICE RANK	DESCRIPTION
41	0TD013E4766X/	AY	Bearing
42	0TD869E2501X/	BF	Bracket
43	0TD859K1341X/	CQ	BACK UP ROLL ASSEMBLY
44	-----	-----	
45	-----	-----	
46	-----	-----	
47	0TD960K5718X/	CA	Power Save PWB
48	0TD952K4216X/	BC	Wire Harness
49	0TD008K9253X/	BB	Nip Cam Assembly For Media Expansion Kit

【PL6.6】
IBT Belt Assembly (4 of 10)



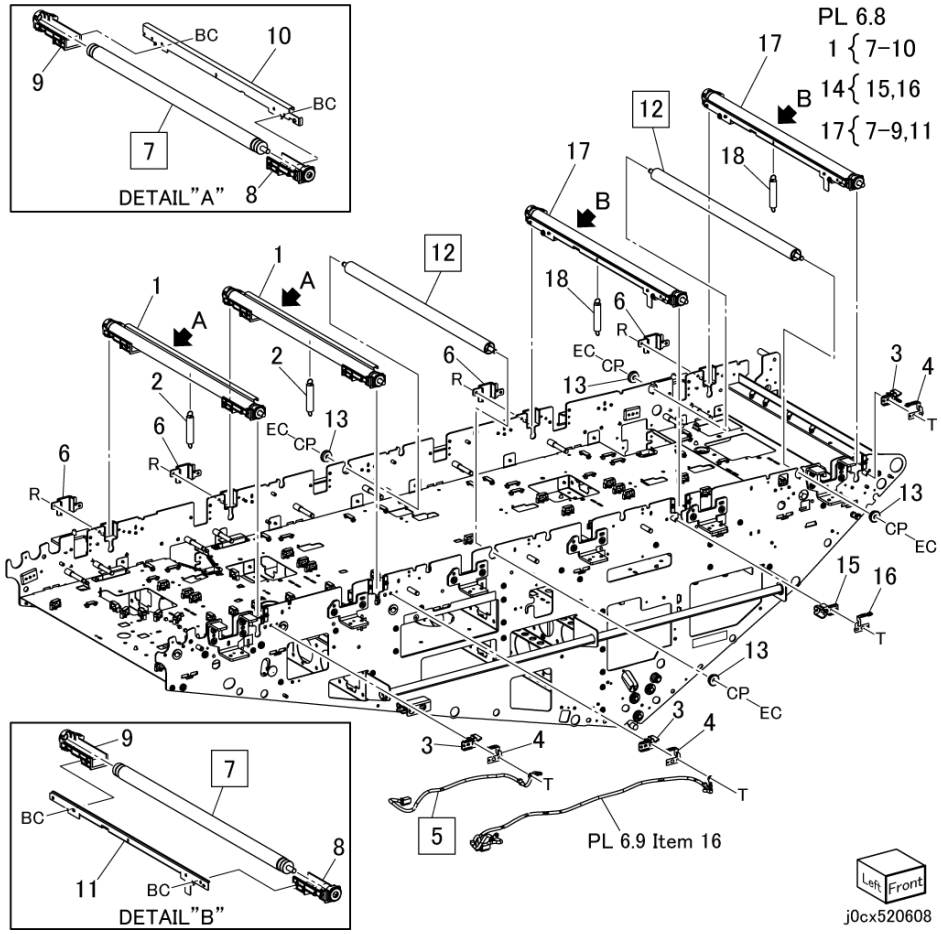
【PL6.7】
IBT Belt Assembly (5 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD059K6087X／	BK	ROLLER ASSY 1ST
2	0TD019K1810X／	BQ	HOLDER ASST BTR F(Front Parts#3,#4)
3	0TD019K1022X／	BG	HOLDER ASSY BTR R(Rear Parts)
4	0TD003E5705X／	AQ	Holder Stopper
5	0TD014E6536X／	AK	Spacer
6	0TD809E8656X／	AK	Spring
7	0TD068K6267X／	BC	Front Bracket Assembly (Item 8-10)
8	－－－－－	-----	
9	0TD003E5705X／	AQ	Holder Stopper
10	0TD014E6536X／	AK	Spacer
11	0TD809E8656X／	AK	Spring
12	0TD019K1809X／	BQ	HOLDER ASST BTR F(Front Parts)
13	0TD019K1793X／	BN	HOLDER ASST BTR F(Front Parts)
14	0TD019K1795X／	BH	HOLDER ASST BTR F(Front Parts)
15	0TD019K1794X／	BN	HOLDER ASST BTR F(Front Parts)
16	0TD019K1796X／	BH	HOLDER ASSY BTR R(Rear Parts)



【PL6.8】
IBT Belt Assembly (6 of 10)

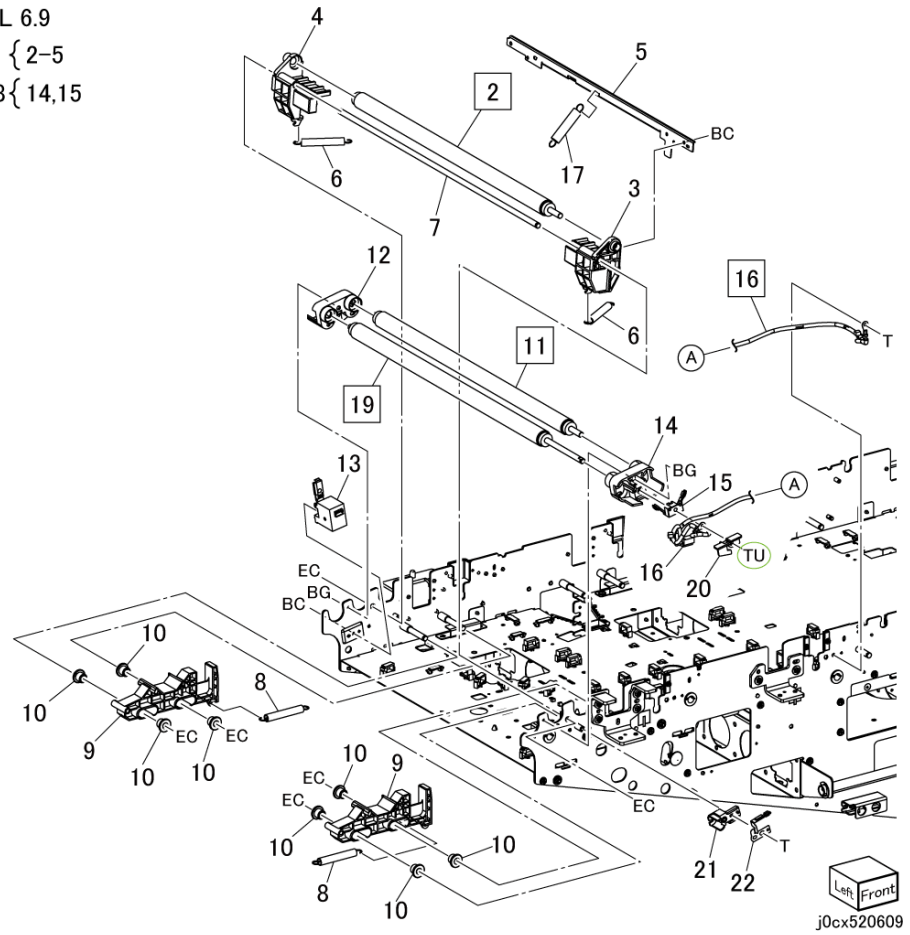
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD059K6086X／	BV	Eliminator Roll Assembly (Item 7-10)
2	0TD809E8734X／	AY	Spring
3	0TD019K1068X／	AZ	Terminal Holder
4	0TD130K7295X／	BF	Conductor Assembly
5	0TD952K3505X／	BA	(SCC) Wire Harness
6	0TD016E9760X／	AL	Edge Bushing
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD859K0803X／	BH	Idle Roll
13	0TD013E4766X／	AY	Bearing
14	0TD115K9154X／	BK	Terminal Assembly (Item 15, 16)
15	0TD019K1068X／	AZ	Terminal Holder
16	0TD130K7295X／	BF	Conductor Assembly
17	0TD059K6586X／	BV	Retract Roll Assembly (Item 7-9, 11)
18	0TD809E8734X／	AY	Spring



【PL6.9】
IBT Belt Assembly (7 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD031K9397X/	BT	Retract Arm Assembly (Item 2-5)
2	0TD607K1161X/	BM	Single Roll 2
3	0TD031E9798X/	BB	Front Arm
4	0TD031E9799X/	BB	Rear Arm
5	0TD815E5258X/	BA	Plate
6	0TD809E8580X/	AZ	Spring
7	-----	-----	
8	0TD809E8580X/	AZ	Spring
9	0TD014E6421X/	BA	Retract Slide Block (Short)
10	0TD016E9747X/	AD	Slide Bushing
11	0TD607K1161X/	BM	Single Roll 2
12	0TD019K1067X/	AQ	In MOB Holder
13	0TD130K7297X/	BL	Belt Edge Sensor 1
14	-----	-----	
15	0TD130K7293X/	BF	MOB Conductor Assembly
16	0TD952K3503X/	BA	(SCC) Wire Harness (MOB-HV)
17	0TD809E8734X/	AY	Spring
18	0TD019K1019X/	BF	Out MOB Holder Assembly (Item 14, 15)
19	0TD059K7432X/	BY	FW Single Roll
20	-----	-----	
21	0TD019K1068X/	AZ	Terminal Holder
22	0TD130K7295X/	BF	Conductor Assembly

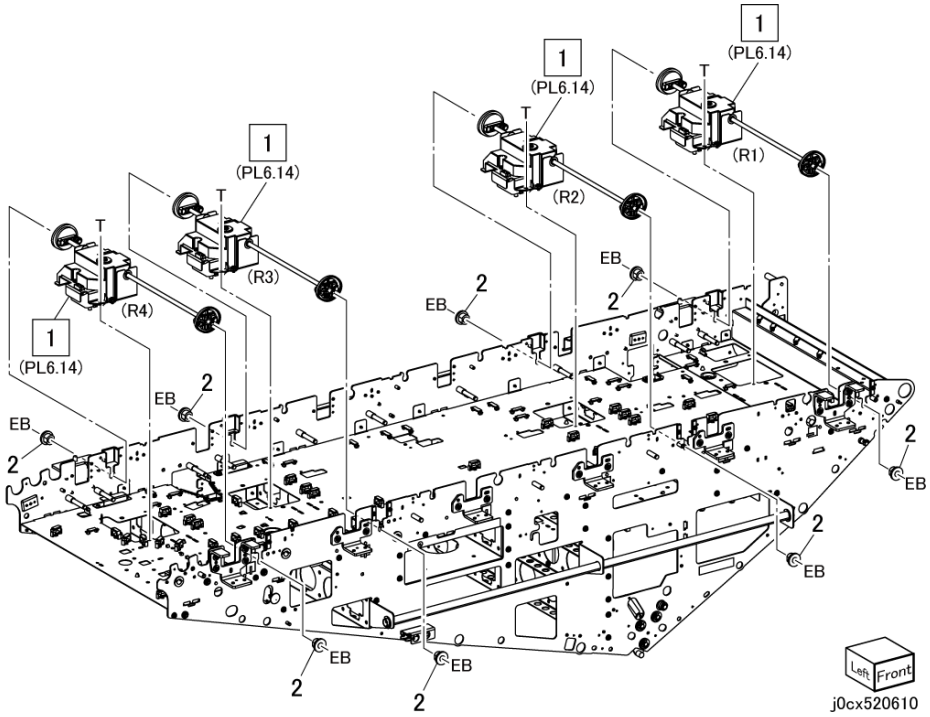
PL 6.9
1 { 2-5
18 { 14,15



【PL6.10】
IBT Belt Assembly (8 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD413W75959／	AG	Bearing

PL 6.10

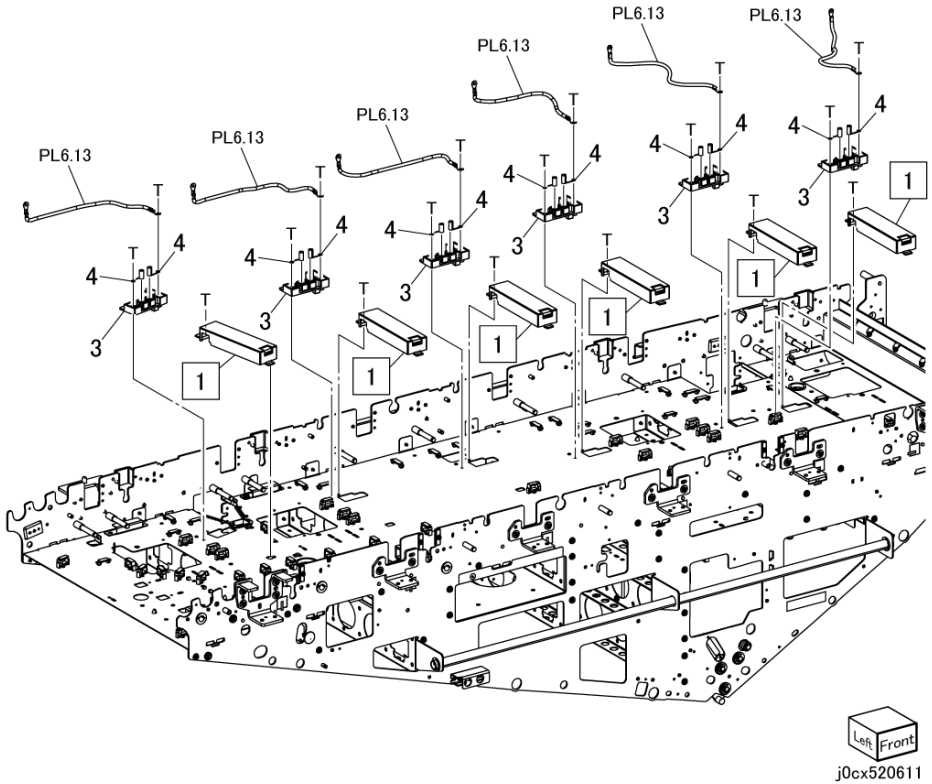


【PL6.11】
IBT Belt Assembly (9 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD105E1880X／	BY	(SCC) 1st BTR HVPS (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)
2	0TD115K9155X／	BC	1st Terminal Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (Item 3, 4)
3	－－－－－	-----	
4	－－－－－	-----	

PL 6.11

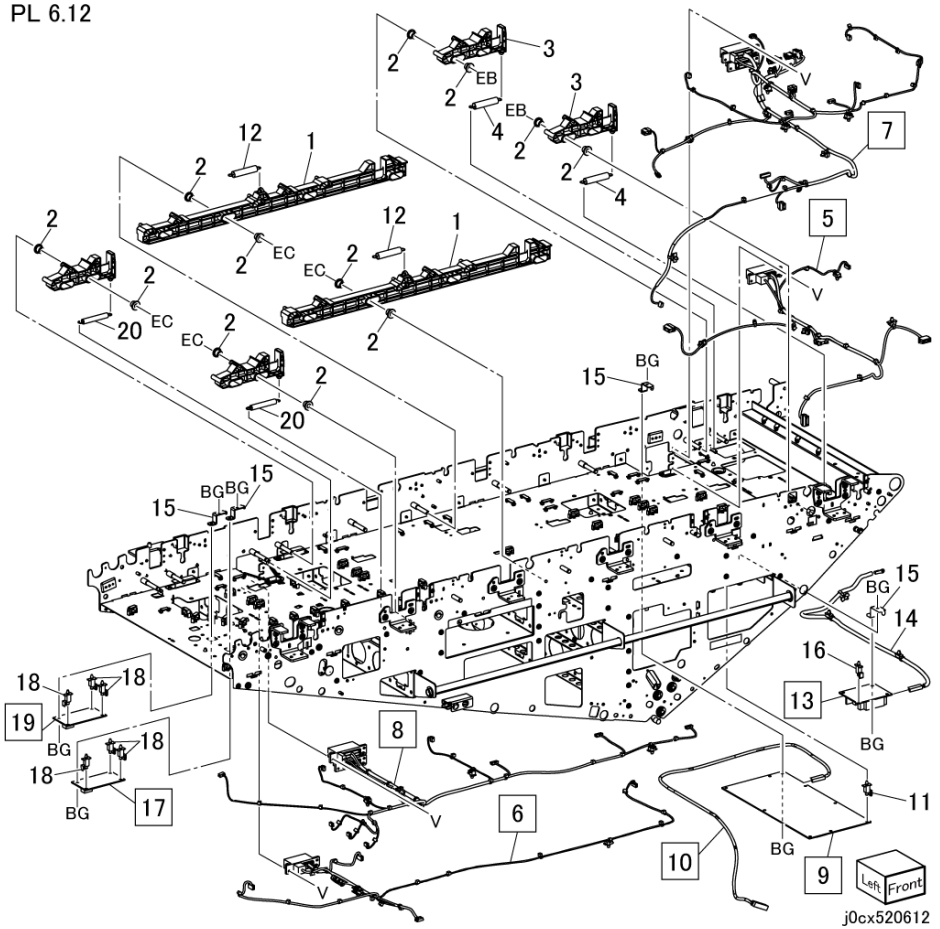
2 { 3,4



IBT Belt Assembly (10 of 10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD014E7685X/	BK	Retract Slide Block
2	0TD016E9747X/	AD	Slide Bushing
3	0TD014E6421X/	BA	Retract Slide Block (Short)
4	0TD809E8578X/	AZ	Spring
5	0TD952K0963X/	BF	(SCC) Wire Harness
6	0TD952K0962X/	BG	(SCC) Wire Harness
7	0TD952K0959X/	BR	(SCC) Wire Harness
8	0TD952K0958X/	BN	(SCC) Wire Harness
9	0TD105K2361X/	CF	(SCC) 2nd BTB HVPS
10	0TD962K7237X/	BA	(SCC) Wire Harness (BUR)
11	-----	-----	
12	0TD809E8578X/	AZ	Spring
13	0TD105E1176X/	BF	(SCC) IBT Cleaner Brush HVPS
14	-----	-----	
15	0TD830E0532X/	AY	Earth Bracket
16	-----	-----	
17	0TD105E1881X/	BY	(SCC) MOB Roll HVPS
18	-----	-----	
19	0TD105E1881X/	BY	(SCC) MOB Roll HVPS
20	0TD809E8580X/	AZ	Spring

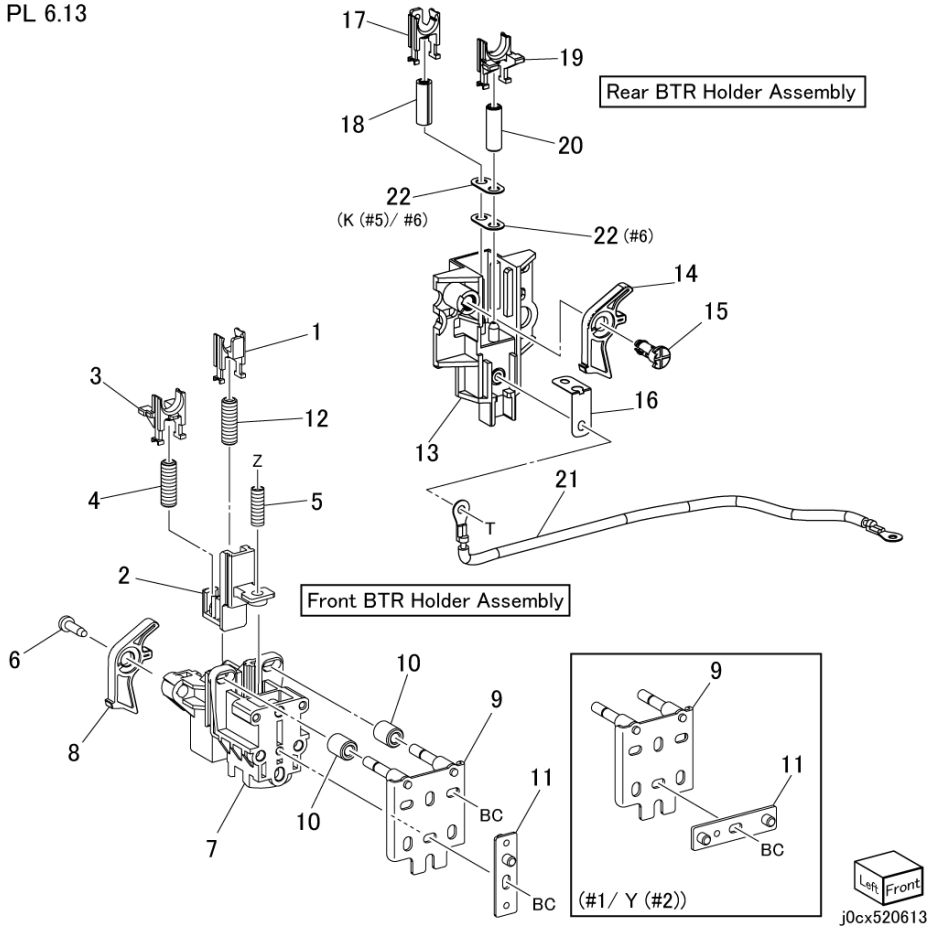
PL 6.12



【PL6.13】
Front/Rear BTR Holder Assembly

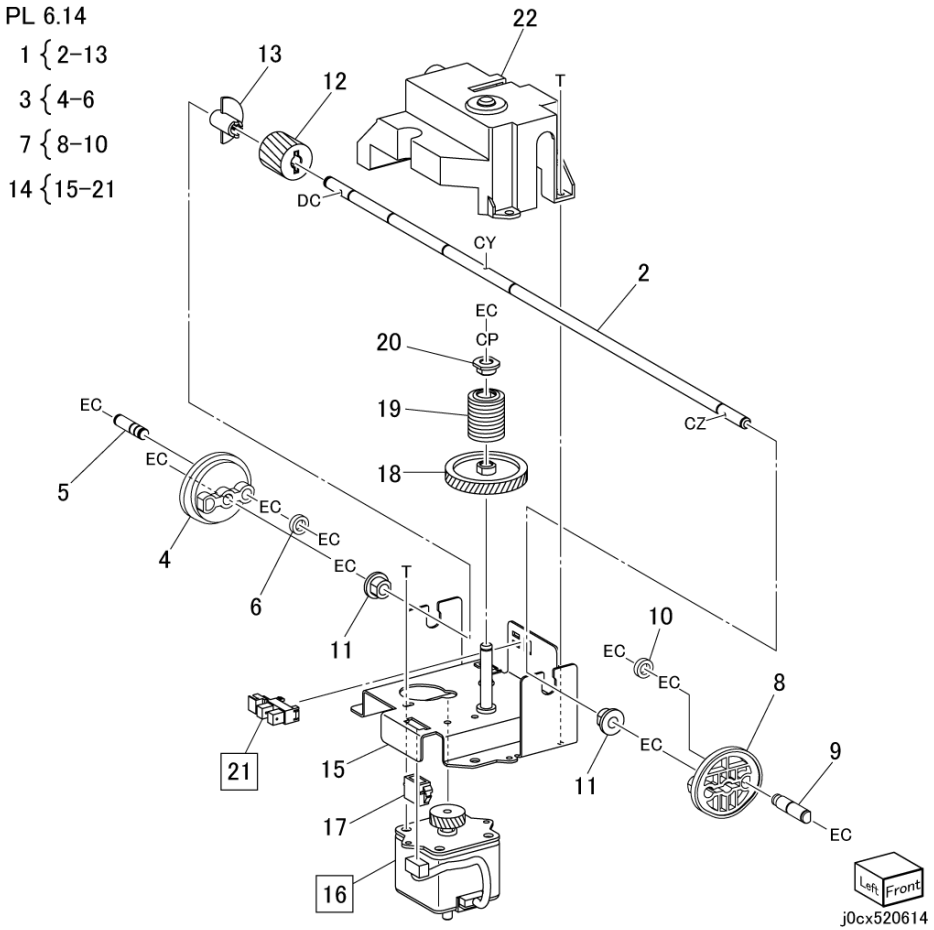
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	0TD825E0288X／	AX	Plate (K (#5)/ #6)

PL 6.13



【PL6.14】
Retract Cam Assembly (R1, R2, R3, R4)

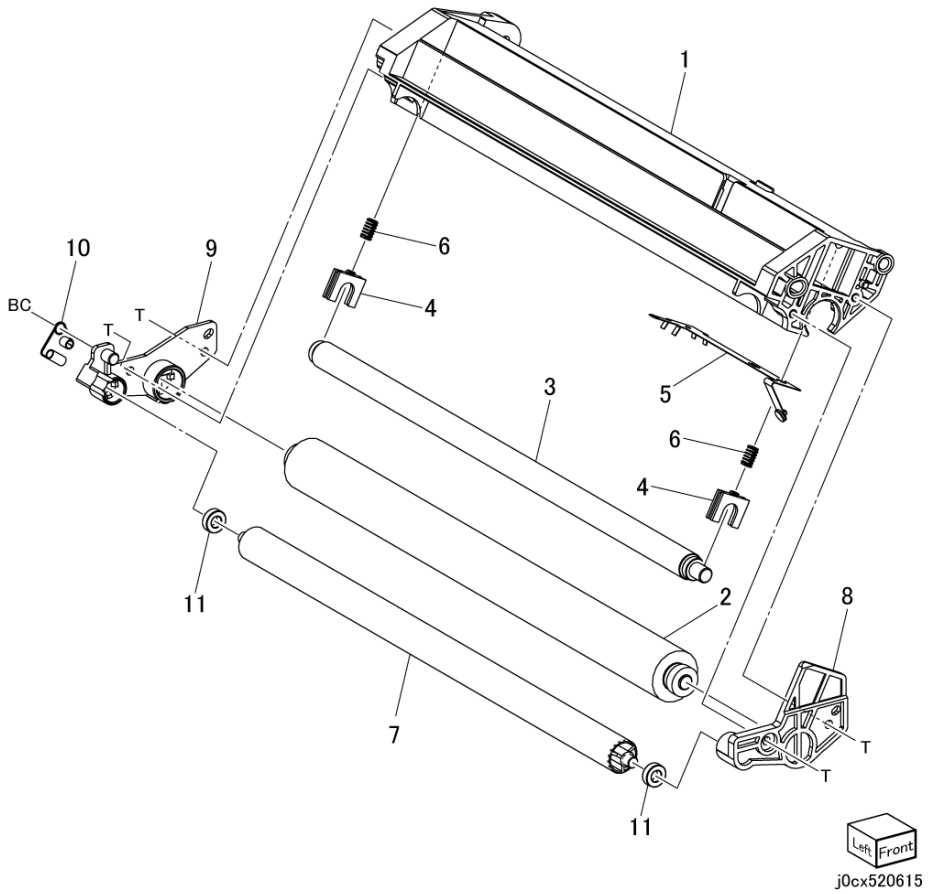
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD008K9209X/	BP	Retract Cam Assembly (R1, R2, R3, R4) (Item 2-13)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD413W90150/	AS	Bearing
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	0TD413W90150/	AS	Bearing
11	0TD413W75959/	AG	Bearing
12	0TD807E0167X/	AP	Gear (18)
13	-----	-----	
14	0TD127K5902X/	BV	Retract Motor Assembly (Item 15-21)
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	0TD807E0169X/	AP	Worm Gear
20	-----	-----	
21	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
22	-----	-----	



【PL6.15】
Backup Roll Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD948K0698X/	BP	BUR Housing
2	0TD059K6092X/	BX	ROLL ASSY-BUR,FIN
3	0TD059K6094X/	BR	Contact Roll
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD062E1838X/	BB	Pre Roll
8	0TD819E0274X/	AZ	Front BUR Holder
9	0TD819E0275X/	AZ	Rear BUR Holder
10	0TD062E1838X/	BB	Pre Roll
11	0TD413W90350/	BA	Bearing Ball
12	-----	-----	

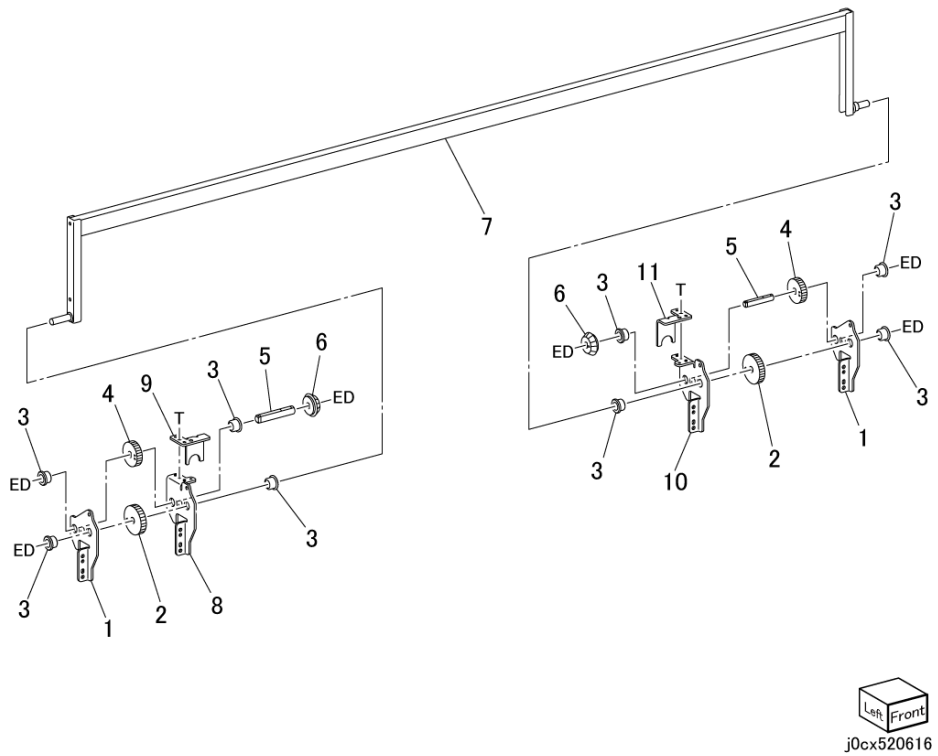
PL 6.15



【PL6.16】
IBT Handle Assembly

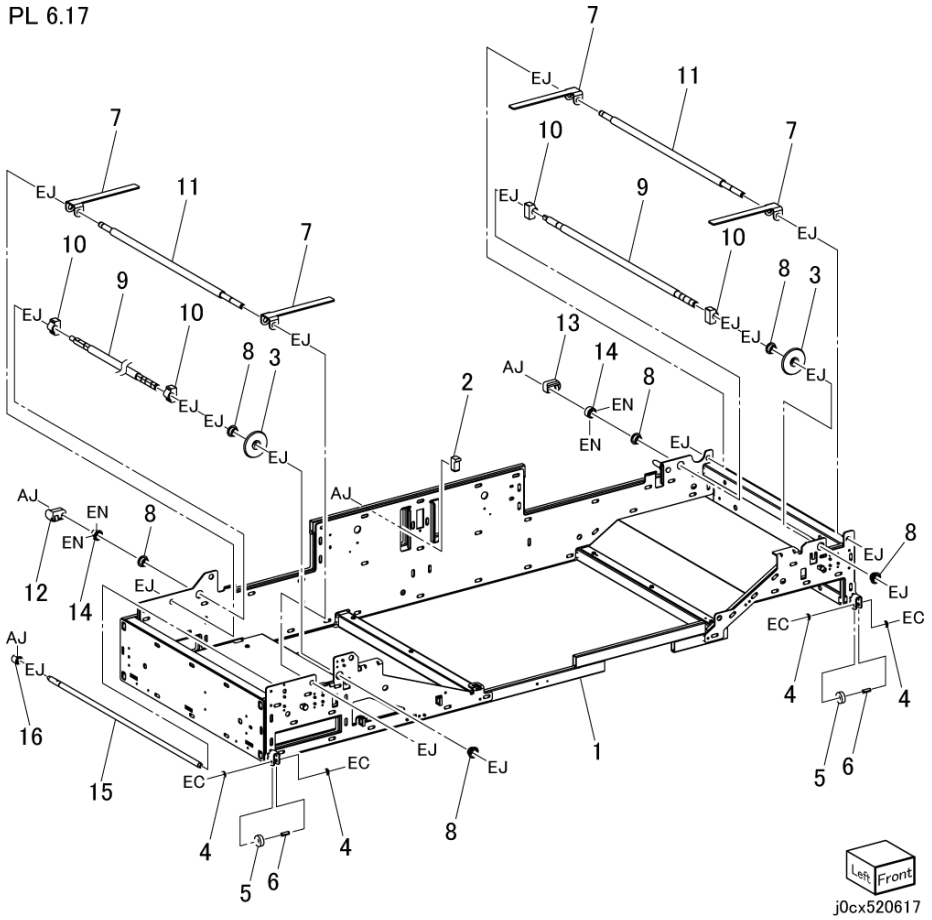
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD003K8734X／	CD	IBT Handle Assembly
2	0TD807E2560X／	AY	Gear (36)
3	0TD013E3463X／	AF	Bearing
4	0TD807E2559X／	AX	Gear (30)
5	0TD806E2733X／	AW	Shaft
6	0TD807E2561X／	BA	Gear (20)
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	

PL 6.16



【PL6.17】
IBT Frame Assembly

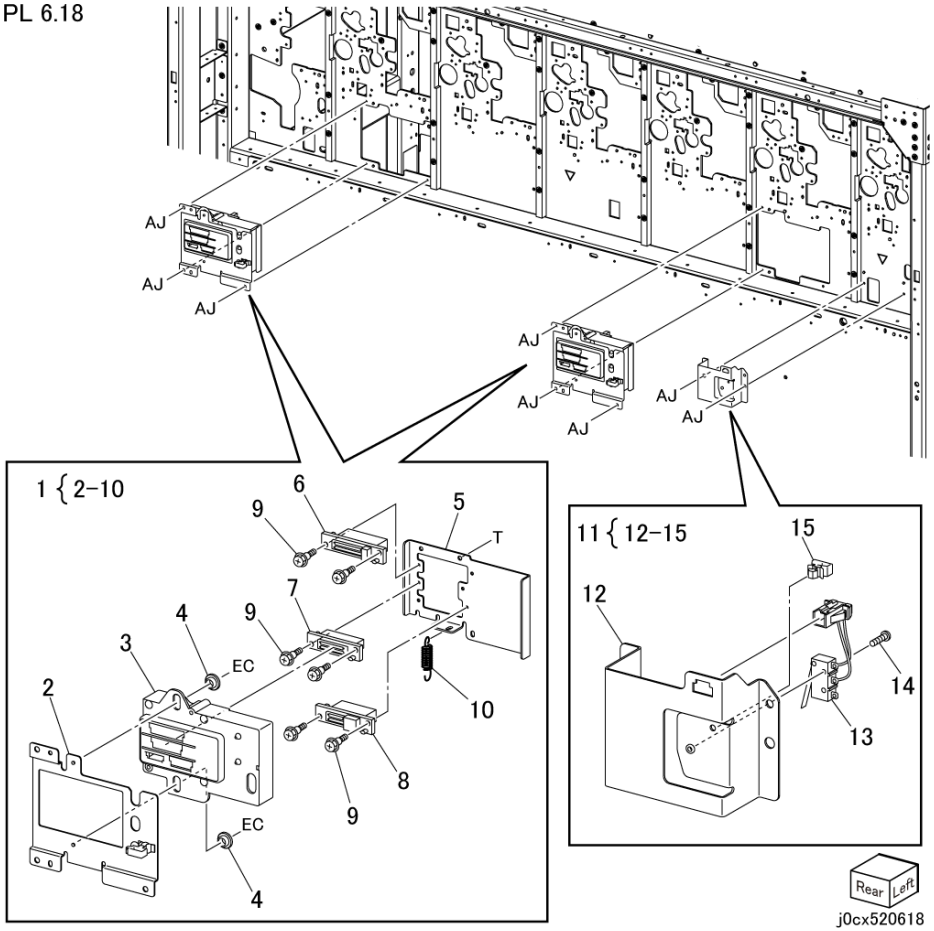
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD807E2562X／	BF	Gear (40)
4	0TD016E9143X／	AN	Bearing
5	0TD413W08150／	AL	Bearing
6	0TD806E2785X／	AR	Shaft
7	0TD809E8486X／	BE	Spring Plate
8	0TD013E3464X／	AQ	Bearing
9	－－－－－	-----	
10	0TD008E9712X／	AT	Retract Cam
11	0TD806E2751X／	BF	Shaft
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	



【PL6.18】
IBT Drawer Connector Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD114K8242X／	CC	IBT Drawer Connector Assembly (Item 2-10)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD848K2599X／	BE	IBT Interlock Switch Assembly (Item 12-15)
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	

PL 6.18

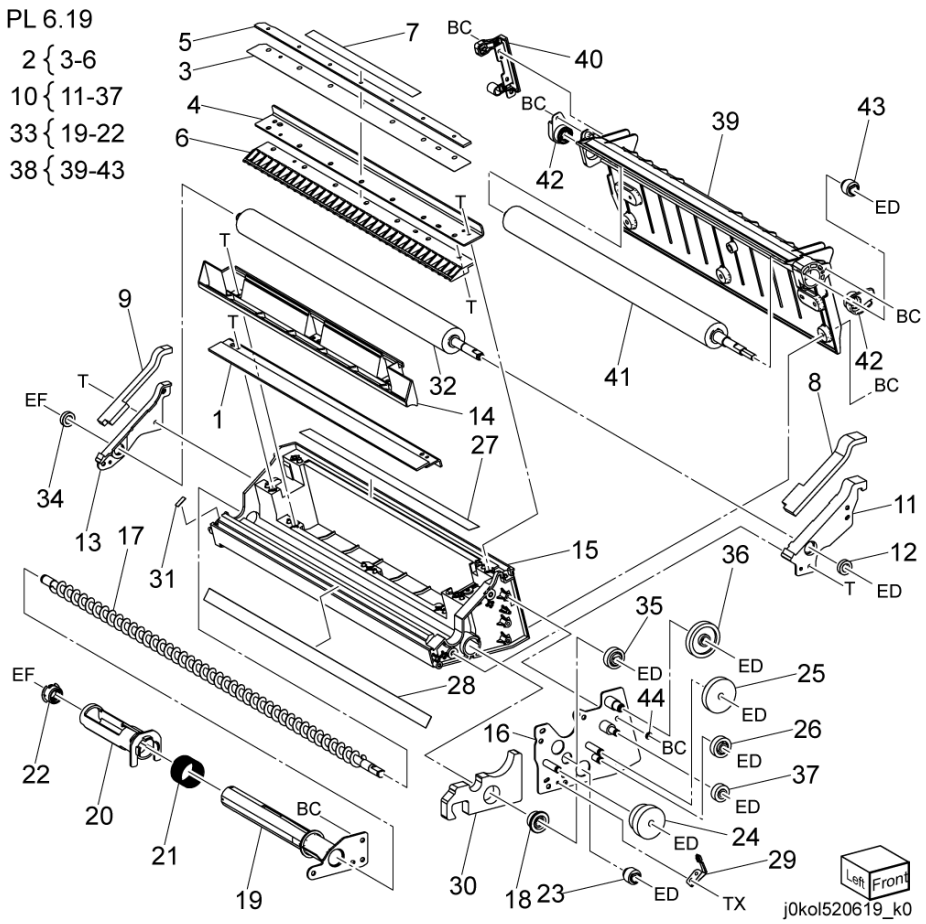


【PL6.19】
IBT Clenaer Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD033K9847X/	BG	IBT CLEANER BLADE
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD013E3515X/	AS	Bearing
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	0TD013K8251X/	AR	Bearing
19	-----	-----	
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	0TD807E2687X/	AL	Gear (15)
24	0TD807E2688X/	AY	Gear (36/30)
25	0TD807E2689X/	AN	Gear (39/15)
26	0TD407W08622/	AL	Gear
27	-----	-----	
28	-----	-----	
29	-----	-----	
30	-----	-----	
31	-----	-----	
32	-----	-----	
33	-----	-----	
34	0TD013E3515X/	AS	Bearing
35	0TD407W08772/	AR	Gear (22)
36	0TD407W08840/	AQ	Gear (40)
37	0TD407W08668/	AL	Gear (18)
38	-----	-----	
39	-----	-----	
40	-----	-----	

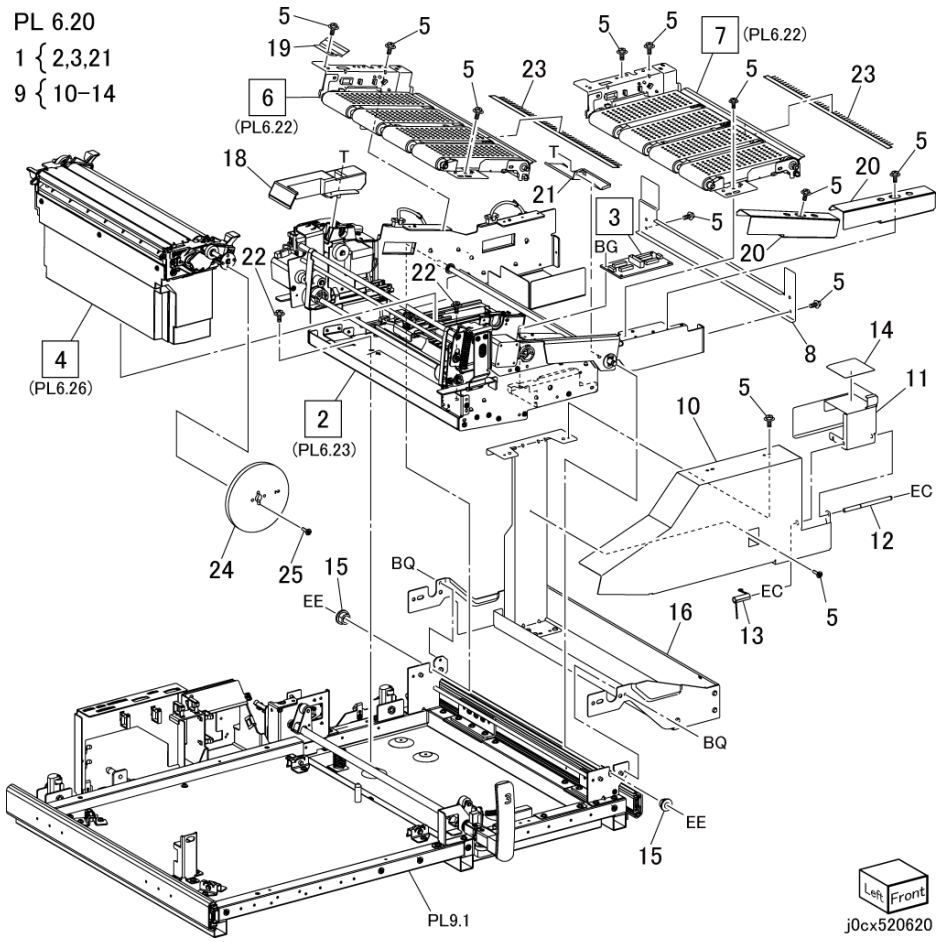
Item	PARTS CODE	PRICE RANK	DESCRIPTION
41	-----	-----	
42	-----	-----	
43	0TD807E2687X/	AL	Gear (15)
44	-----	-----	

【PL6.19】
IBT Clenaer Assembly



【PL6.20】
BTB Assembly and V-Transport Assembly 1,2

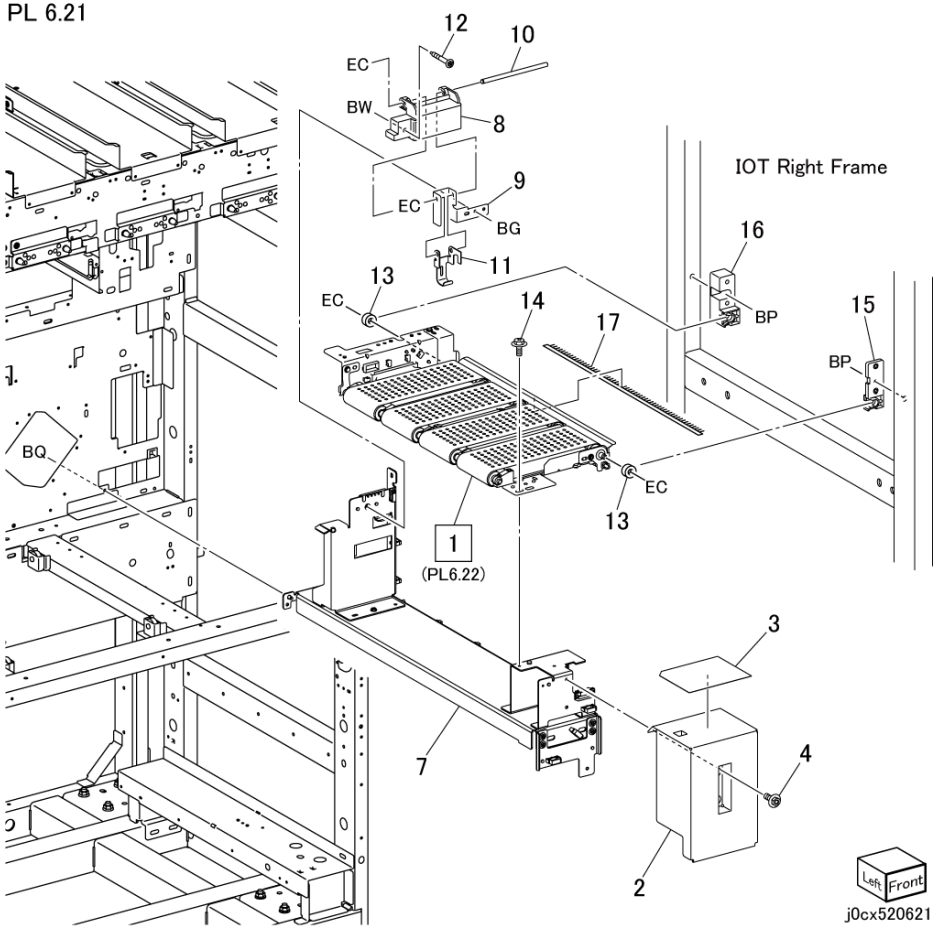
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD801K6809X／	DQ	BTB Frame Assembly (PL 6.23) (REP 6.20.4)
3	0TD105E1949X／	CC	(SCC) 2nd BTB DTR/ESB HVPS
4	0TD064K0280X／	DE	BELT ASSY-2ND,BTB,C2,LOW
5	－－－－－	-----	
6	0TD859K2610X／	CP	(SCC) V-Transport Assembly 1 (PL 6.22) (REP 6.20.2, REP 99.1.1)
7	0TD859K2610X／	CP	(SCC) V-Transport Assembly 1 (PL 6.22) (REP 6.20.2, REP 99.1.1)
8	0TD848E3914X／	BF	Lower Cover
9	0TD948K5079X／	CA	V-Transport Rear Cover Assembly (Item 10-14)
10	－－－－－	-----	
11	0TD848K2830X／	BK	Motion Cover
12	－－－－－	-----	
13	－－－－－	-----	
14	0TD970E8622X／	BD	LABEL-CE NB
15	0TD413W77559／	AG	Bearing
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	0TD822E3749X／	BR	V-Transport Front Cover
21	－－－－－	-----	
22	－－－－－	-----	
23	0TD105E1978X／	AX	Eliminator
24	0TD890E8170X／	BS	Fly Wheel Plate
25	－－－－－	-----	



【PL6.21】
V-Transport Assembly 3

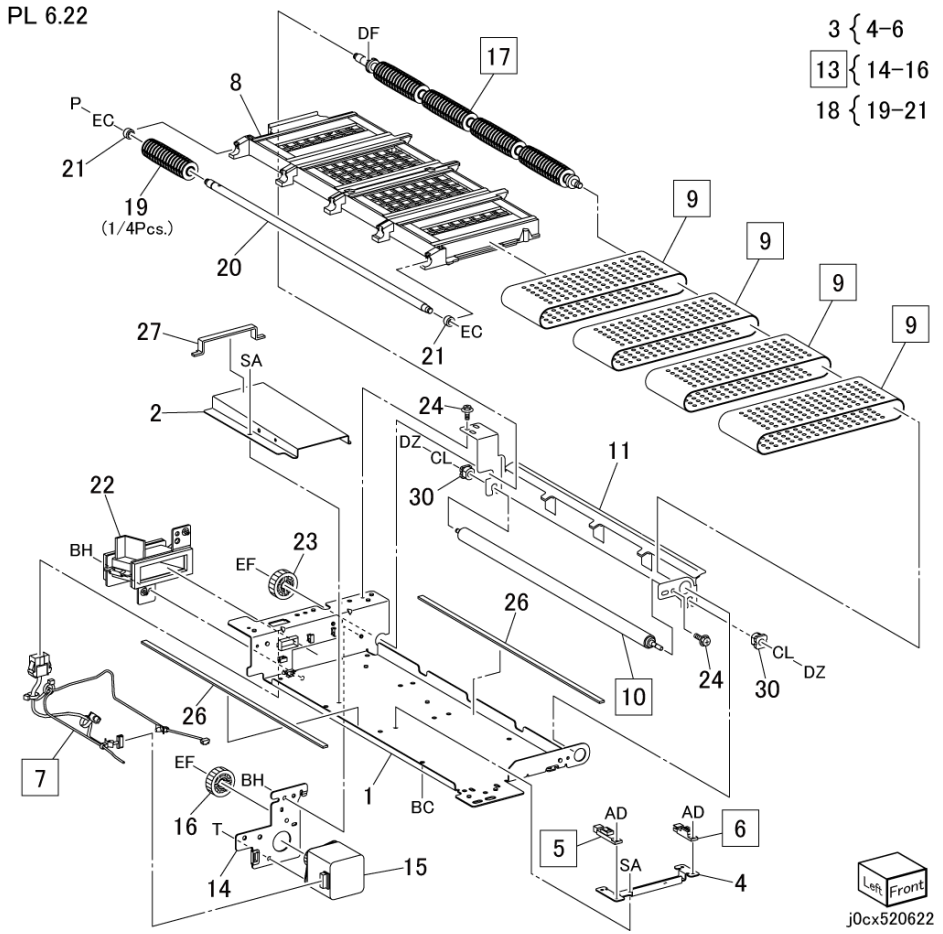
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K2610X／	CP	(SCC) V-Transport Assembly 1 (PL 6.22) (REP 6.20.2, REP 99.1.1)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	0TD413W90150／	AS	Bearing
14	－－－－－	-----	
15	0TD019E7365X／	AY	Front Bearing Holder
16	0TD019E7366X／	AZ	Rear Bearing Holder
17	0TD105E1978X／	AX	Eliminator

PL 6.21



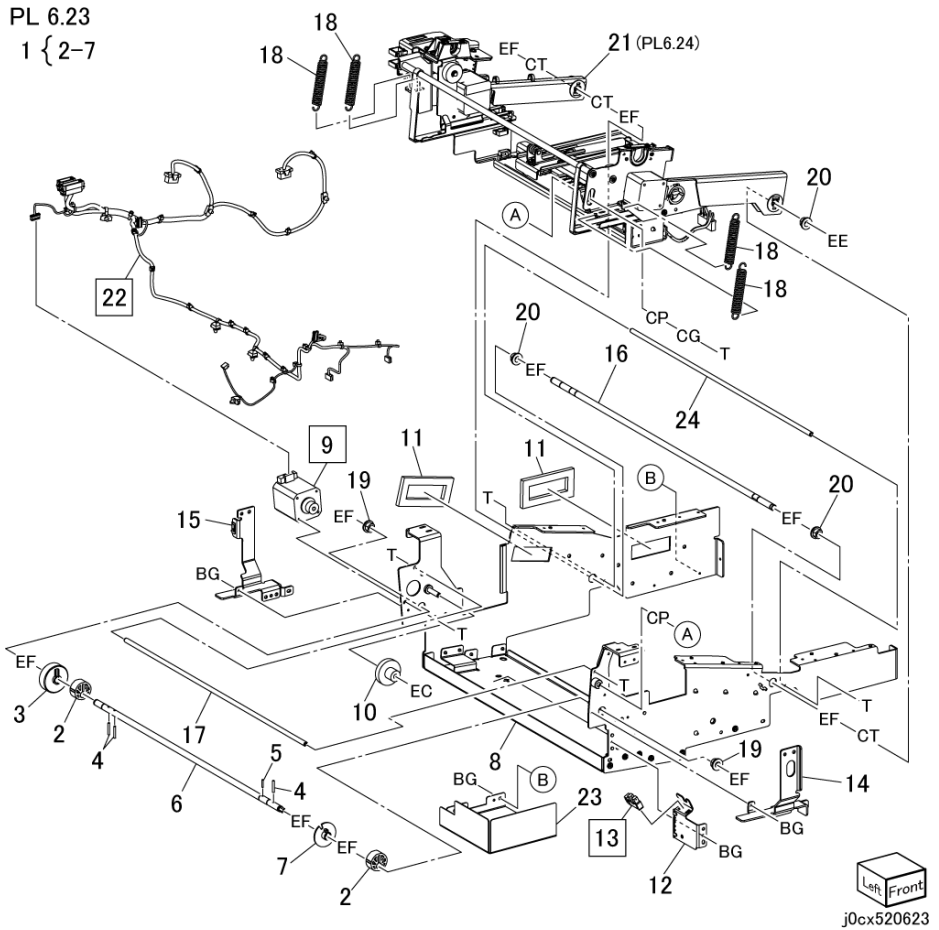
【PL6.22】
V-Transport 1/2/3/4/5/6 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD130K7275X／	BD	V-Tra Sensor Assembly (Item 4-6)
4	－－－－－	-----	
5	0TD130K8777X／	AX	V-Tra Sensor 1/3/5
6	0TD930W00211／	AS	HCF Tray 1/2 Pre Feed Sensor
7	0TD962K7275X／	AY	(SCC) Wire Harness
8	－－－－－	-----	
9	0TD023E2723X／	AZ	BELT-TRANSPORT
10	0TD042K9362X／	BK	BRUSH ASSY-BELT
11	－－－－－	-----	
12	－－－－－	-----	
13	0TD127K5877X／	BN	V-Tra Motor Assembly (1/2/3) (Item 14-16)
14	－－－－－	-----	
15	－－－－－	-----	
16	0TD807E2775X／	AN	Gear (27)
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	0TD422W20601／	AD	Concentric Core
22	－－－－－	-----	
23	0TD807E2775X／	AN	Gear (27)
24	－－－－－	-----	
25	－－－－－	-----	
26	－－－－－	-----	
27	－－－－－	-----	
28	－－－－－	-----	
29	－－－－－	-----	
30	0TD413W14460／	AQ	Bearing



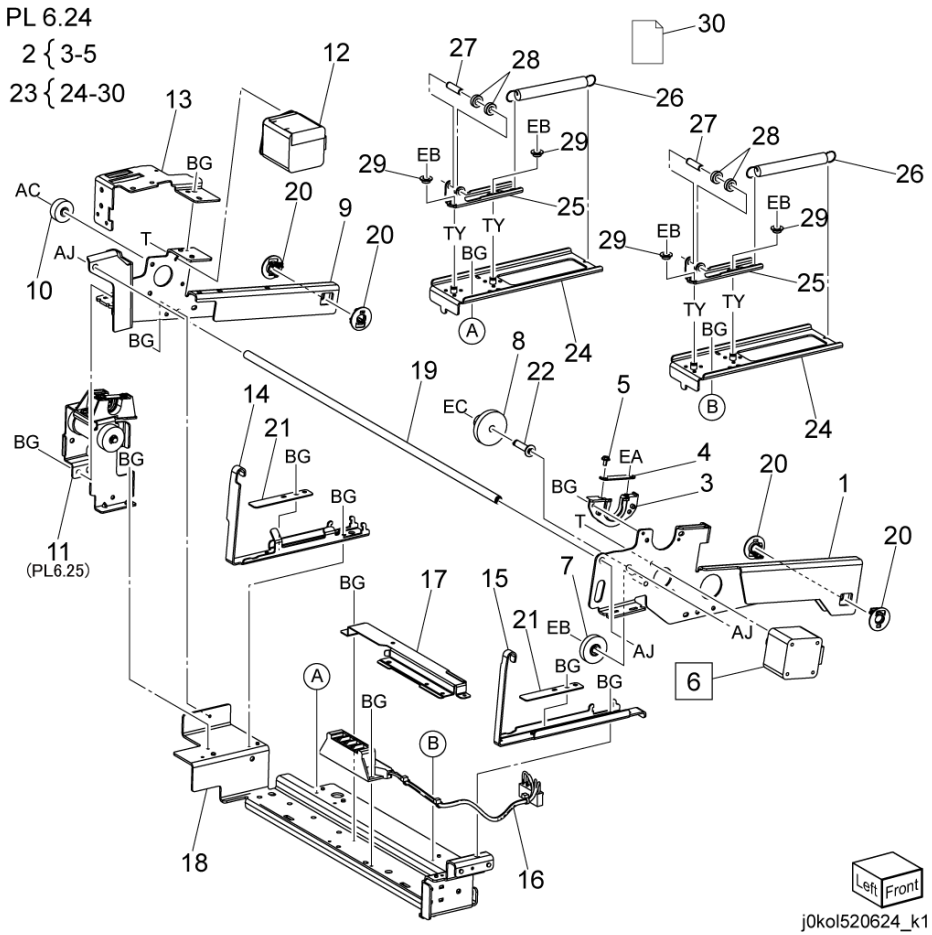
【PL6.23】
BTB Frame Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD008K9250X/	BN	Retract Cam Assembly (Item 2-7)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD127K7573X/	BU	(SCC) 2nd BTB CNT/RET Motor
10	0TD807E5537X/	BA	Cam Gear (17/42)
11	0TD835E1474X/	AH	Duct Seal
12	-----	-----	
13	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	0TD809E5231X/	AP	Spring
19	0TD413W75959/	AG	Bearing
20	0TD413W77559/	AG	Bearing
21	-----	-----	
22	0TD962K7273X/	BK	(SCC) Wire Harness
23	-----	-----	
24	-----	-----	



【PL6.24】
BTB Arm Frame Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD019K1702X／	BF	BTB Front Holder Assembly (Item 3-5)
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD127K5978X／	BG	(SCC) 2nd BTB Cleaning Motor
7	0TD807E2695X／	AL	GEAR-HERICAL,32
8	0TD807E2622X／	AN	GEAR-HERICAL,41/15
9	－－－－－	-----	
10	0TD807E0190X／	AK	GEAR-BELT,IDLE
11	－－－－－	-----	
12	0TD127K6157X／	BQ	2nd BTB Motor
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	0TD113K8296X／	BR	Connector
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	0TD826E7339X／	BA	Arm Stud
23	0TD604K9738X／	BZ	Slider Bracket Assembly (Item 24-30)
24	－－－－－	-----	
25	－－－－－	-----	
26	－－－－－	-----	
27	－－－－－	-----	
28	－－－－－	-----	
29	－－－－－	-----	
30	－－－－－	-----	



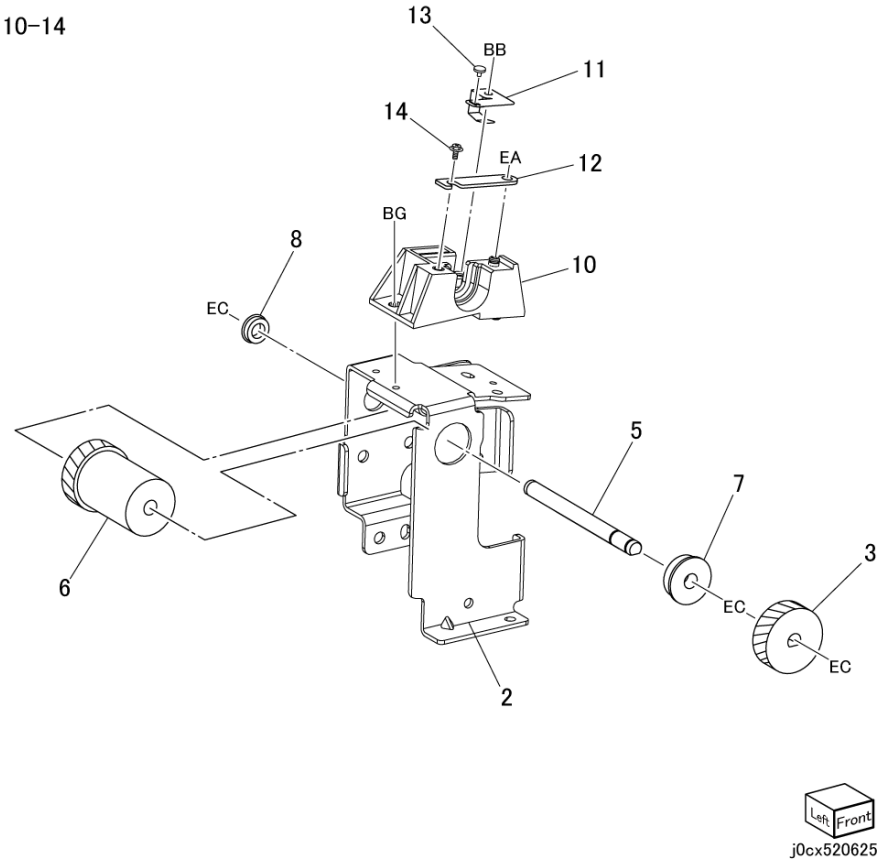
【PL6.25】
BTB Rear Holder and Torque Bracket Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD049K3542X／	BT	BRACKET ASSY-TORQUE
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD413W66250／	AL	Bearing
9	0TD019K1042X／	BH	HOLDER ASSY-BTB,RR
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	

PL 6.25

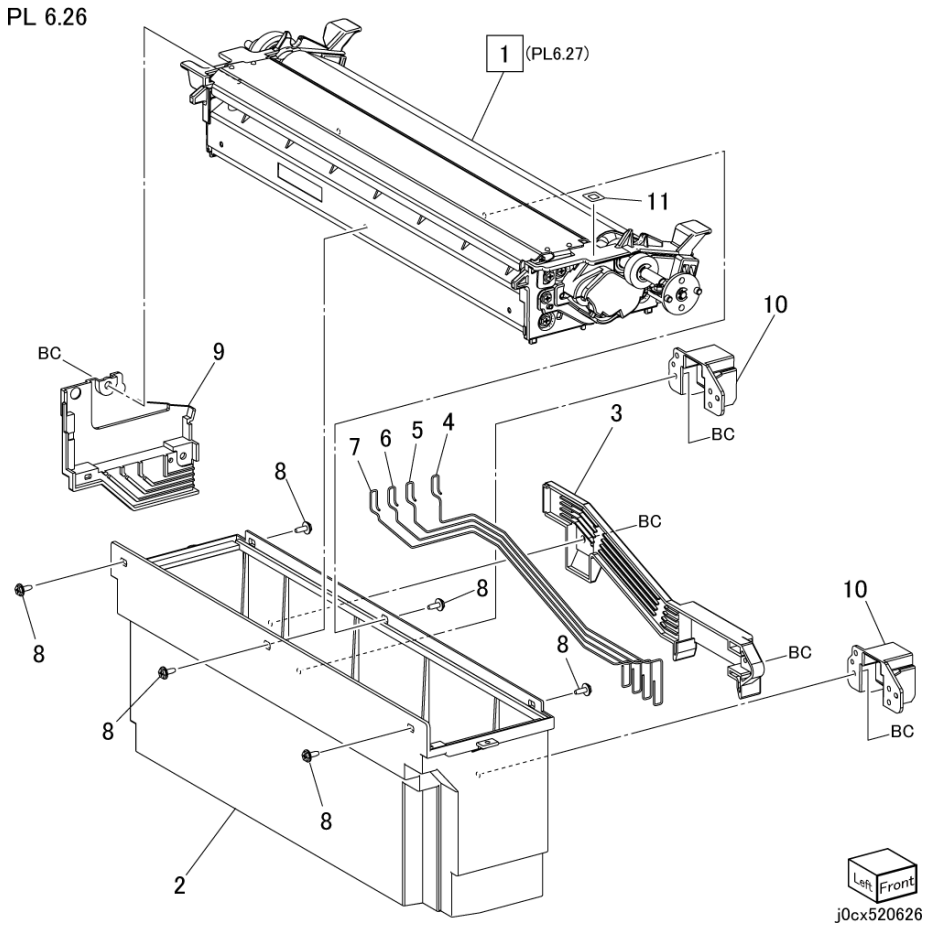
1 { 2,3,5–8

9 { 10–14



【PL6.26】
2nd Belt Assembly (1 of 3)

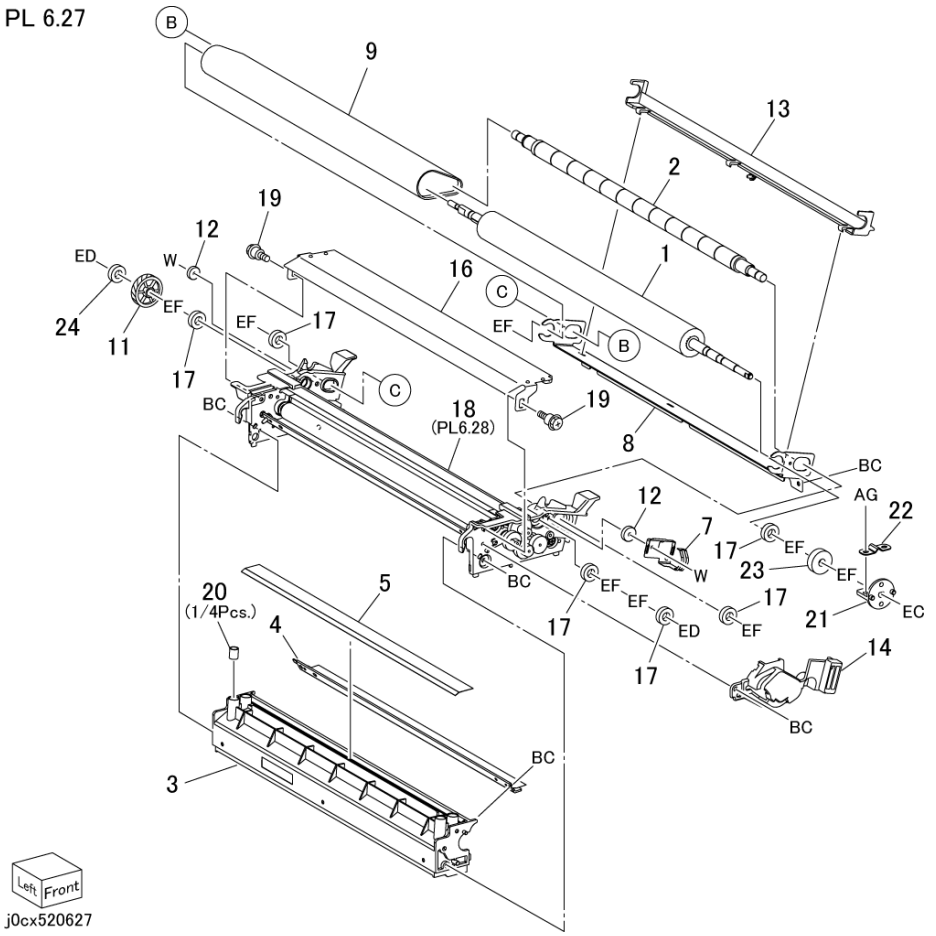
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	



【PL6.27】
2nd Belt Assembly (2 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD835E1540X／	AP	Seal
6	－－－－－	-----	
7	0TD102K8080X／	AZ	Conductor
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD807E2567X／	AS	Gear (40)
12	0TD014E4861X／	BA	Spacer
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	0TD413W08050／	AT	BEARING
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	
23	－－－－－	-----	
24	－－－－－	-----	

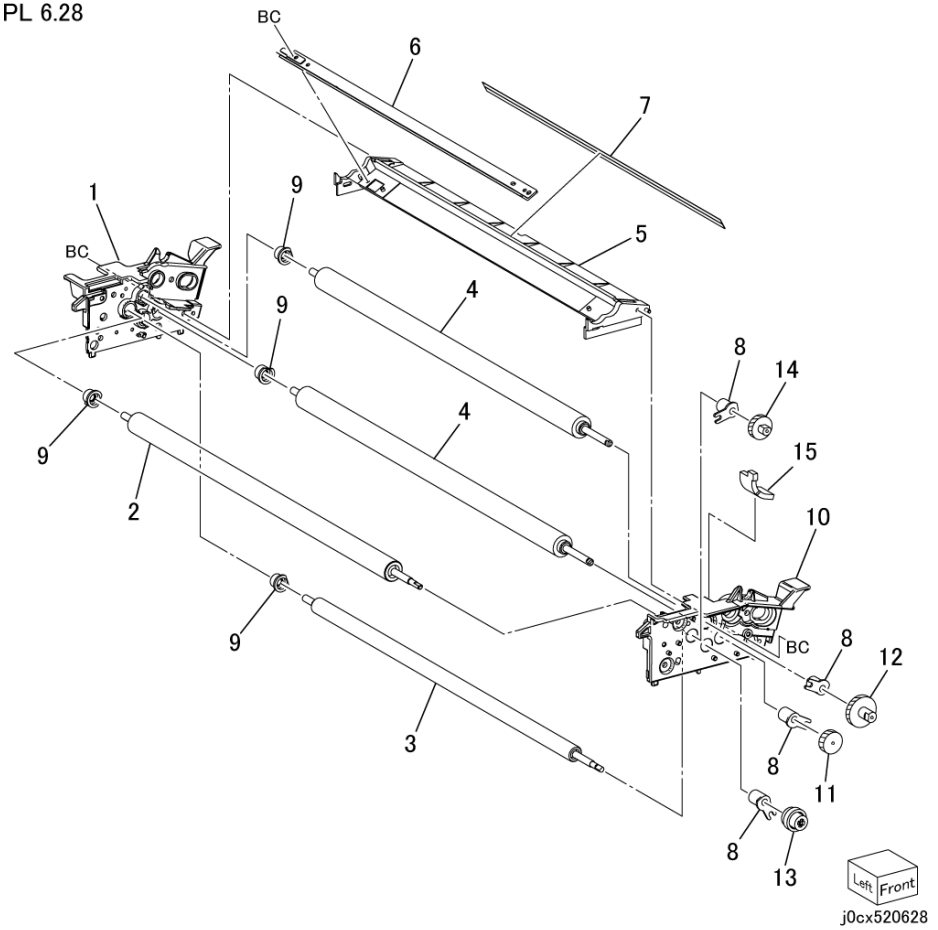
PL 6.27



【PL6.28】
2nd Belt Assembly (3 of 3)

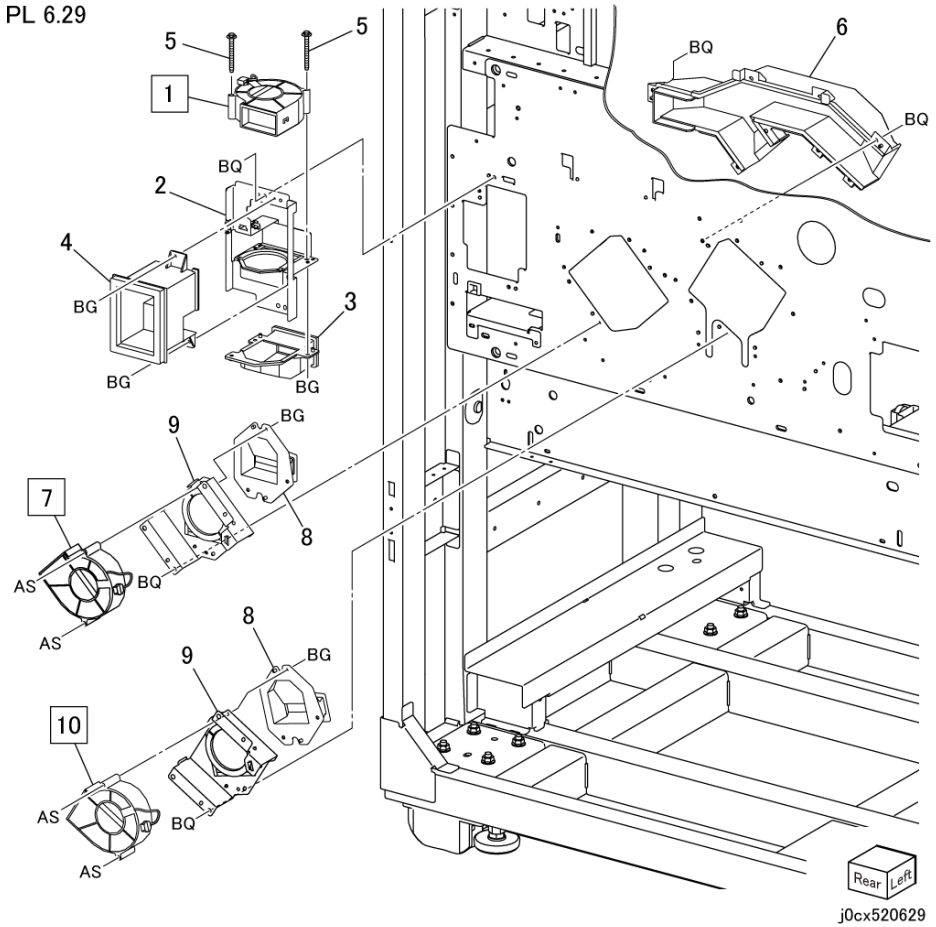
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD807E2569X/	AS	Gear (28)
13	-----	-----	
14	0TD807E2780X/	AT	Gear (19)
15	-----	-----	

PL 6.28



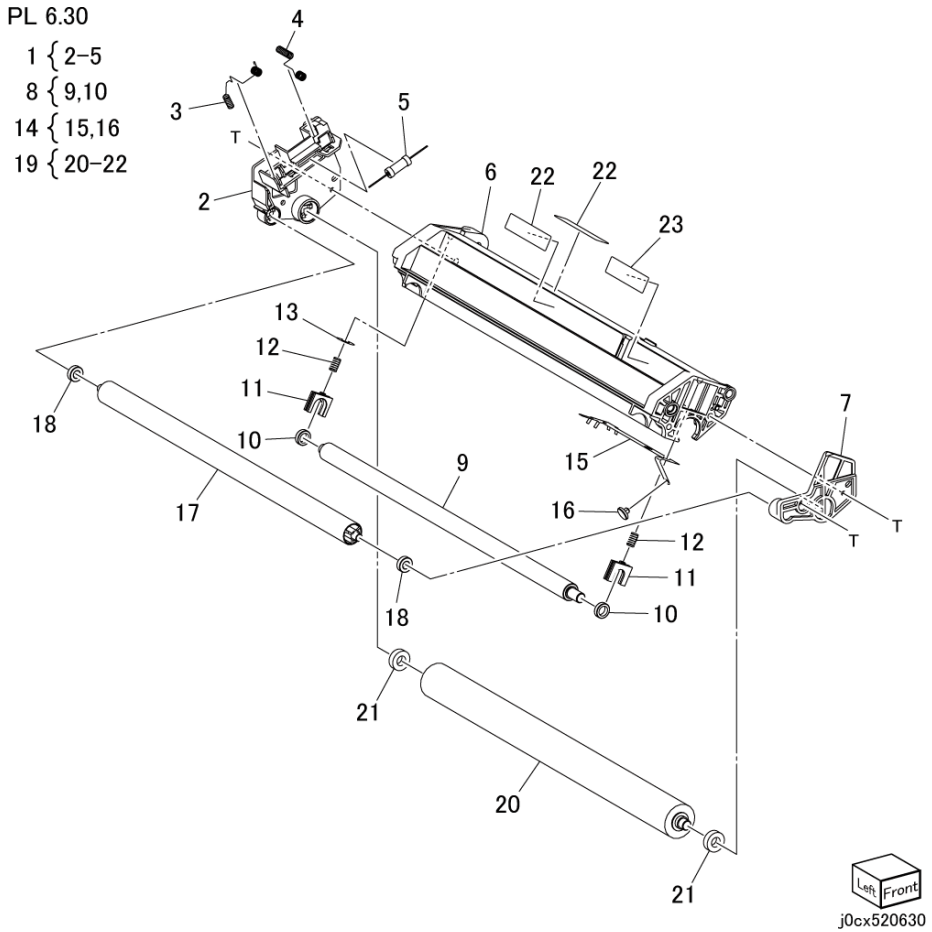
【PL6.29】
V-Transport Duct Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD127K6729X/	BK	(SCC) V-Tra. Fan 3
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD127K6729X/	BK	(SCC) V-Tra. Fan 3
8	-----	-----	
9	-----	-----	
10	0TD127K6729X/	BK	(SCC) V-Tra. Fan 3



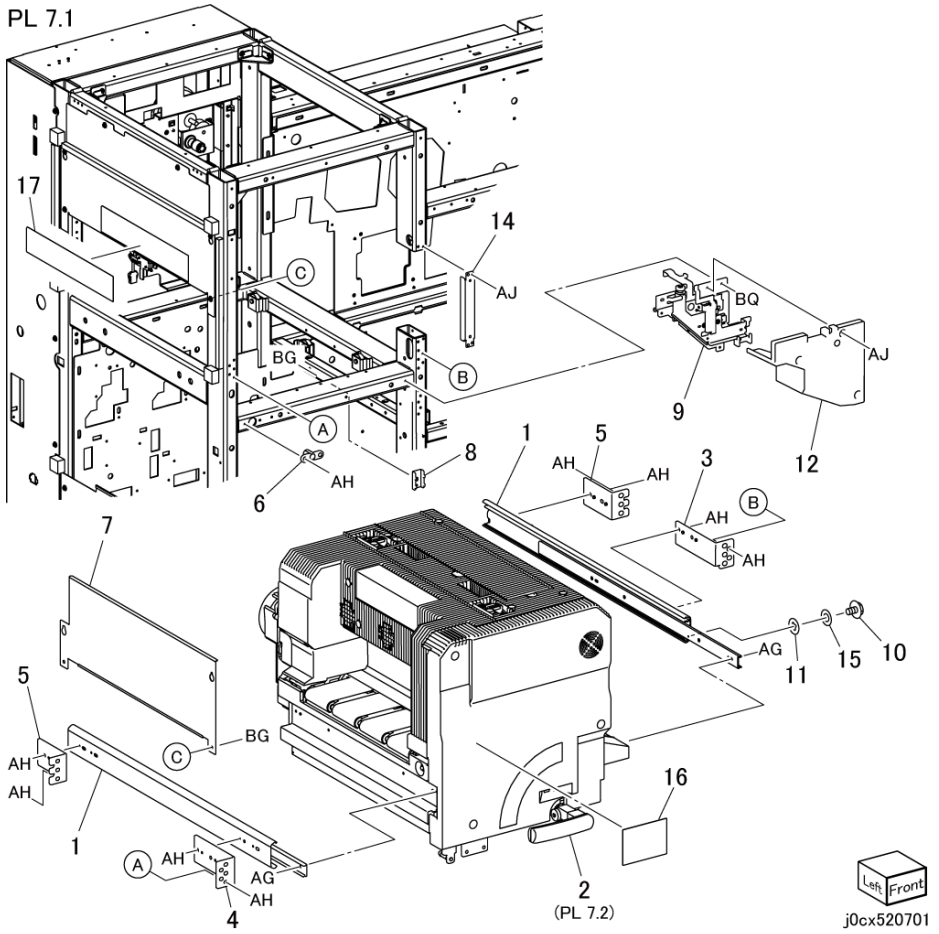
【PL6.30】
Backup Roll Assembly For Media Expansion Kit

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	0TD059K6094X/	BR	Contact Roll
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	0TD413W90350/	BA	Bearing Ball
19	0TD859K1494X/	CA	Resist BUR Roll Assembly (Item 20-22)
20	0TD059K6092X/	BX	ROLL ASSY-BUR,FIN
21	-----	-----	
22	-----	-----	
23	-----	-----	



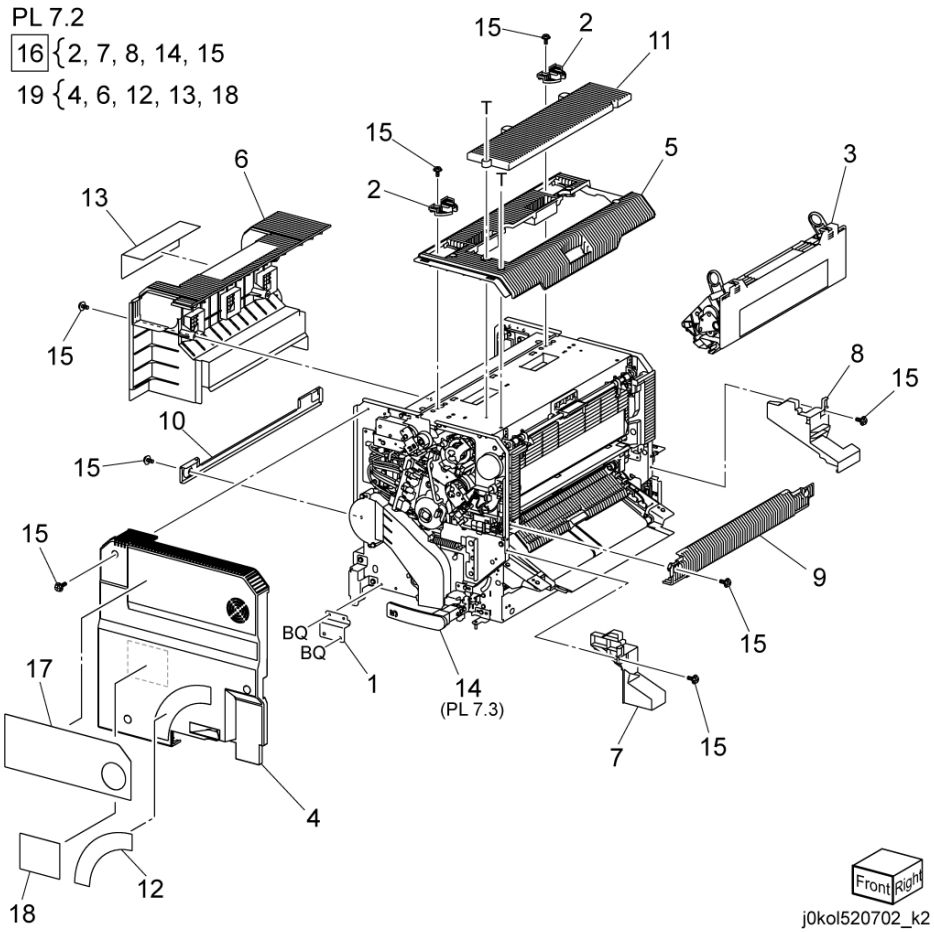
【PL7.1】
Fusing Unit

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD801K3834X／	BS	Fusing Rail Assembly
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD013E3514X／	AR	Locate Bearing
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD003K8763X／	BR	Lock Assembly
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	－－－－－	-----	



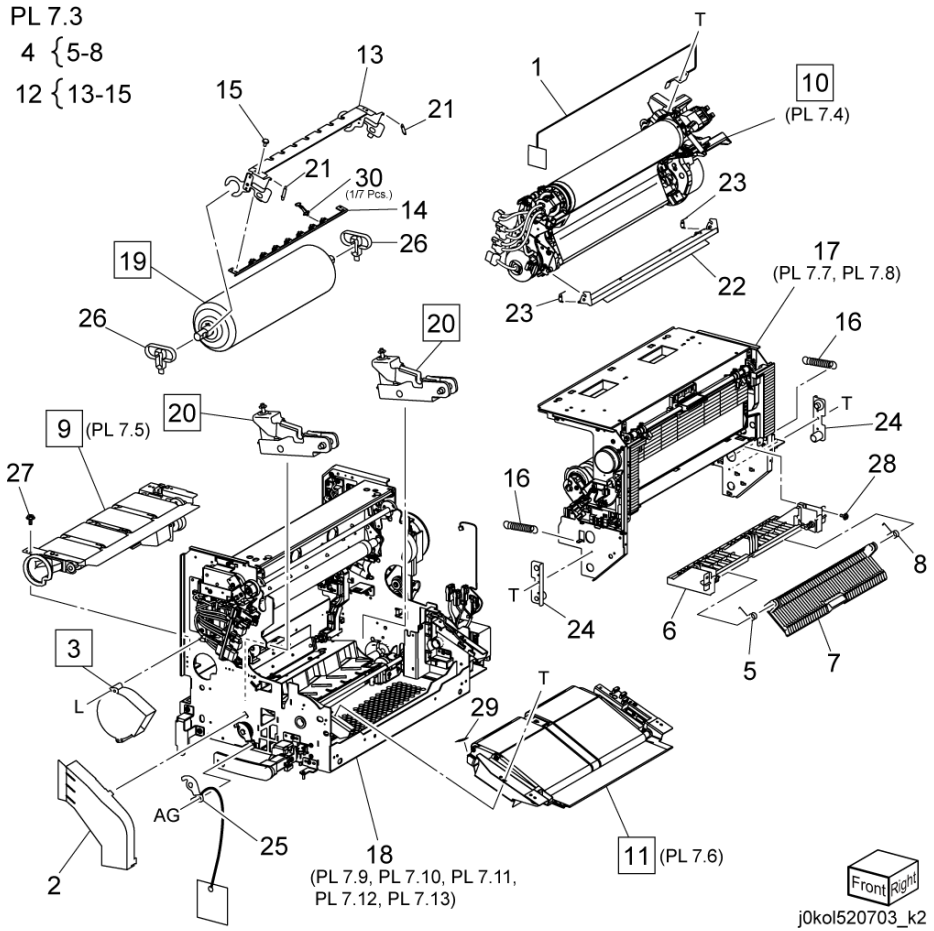
【PL7.2】
Fusing Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	-----	-----	
	-----	-----	
	-----	-----	
	-----	-----	
	-----	-----	
	-----	-----	
4	0TD948K3295X/	BX	Fusing Front Cover
5	-----	-----	
6	0TD822E6457X/	BV	Fusing Left Upper Cover
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	0TD607K2820X/	KIT	KIT-FUSING NB
17	-----	-----	
18	-----	-----	
19	0TD607K2825X/	KIT	KIT-COVER,FRONT & LEFT NB



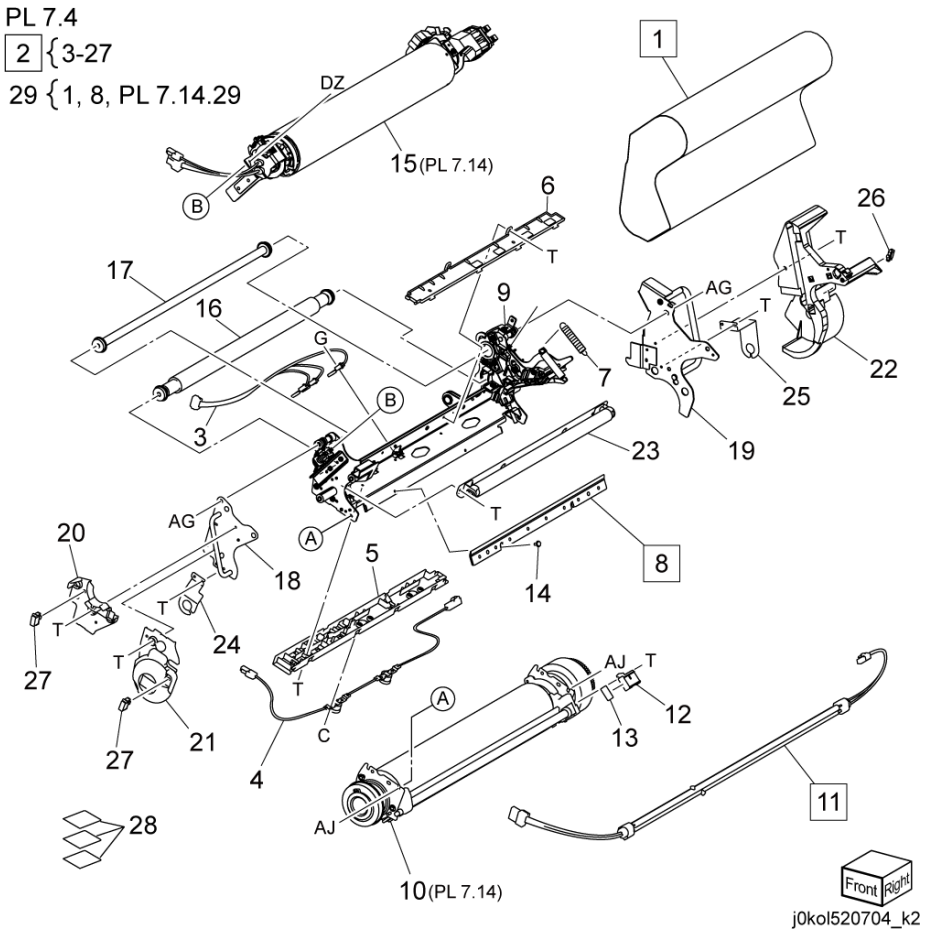
【PL7.3】
Fusing Assembly (2 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD127K7611X/	BR	(SCC) V-Tra Fan 4
4	0TD054K6660X/	BR	CHUTE ASSY-EXIT UPPER NB
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	0TD859K1520X/	DL	Exit V-Ta Unit
12	-----	-----	
	0TD054K7089X/	CN	CHUTE ASSY-FINGER PR CLAMP (Item 13-15)
13	-----	-----	
14	-----	-----	
	0TD019K2102X/	CA	Finger Assembly
15	-----	-----	
16	0TD809E9214X/	AZ	Spring
17	-----	-----	
18	-----	-----	
19	0TD059K7549X/	CV	ROLL ASSY-PRESS
20	0TD011K0339X/	BY	PRESSURE ROLL LIVER ASSEMBLY
21	-----	-----	
22	0TD055K3991X/	CG	Baffle Assembly
23	0TD809E8815X/	BA	Spring
24	-----	-----	
25	-----	-----	
26	0TD803E0389X/	AS	Handle
27	-----	-----	
28	-----	-----	
29	0TD125E9108X/	AN	Eliminator
30	0TD019E7597X/	BB	Single Item Finger



【PL7.4】
Heat Belt Unit

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD064K9330X／	CP	BELT ASSY-Fusing
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD094K9278X／	BP	WICK ASSY-BELT OIL
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD126K2608X／	BW	HEATER ROD
12	－－－－－	-----	
13	0TD032E3381X／	AK	Guide
14	－－－－－	-----	
15	－－－－－	-----	
16	0TD859K0730X／	CA	Pre nip roll assembly
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	
23	0TD059K6296X／	CA	Tension Roll Assembly
24	－－－－－	-----	
25	－－－－－	-----	
26	－－－－－	-----	
27	－－－－－	-----	
28	0TD607K4282X／	KIT	KIT-TRIM CLOTH OIL
29	0TD607K2470X／	KIT	KIT BELT ASSY

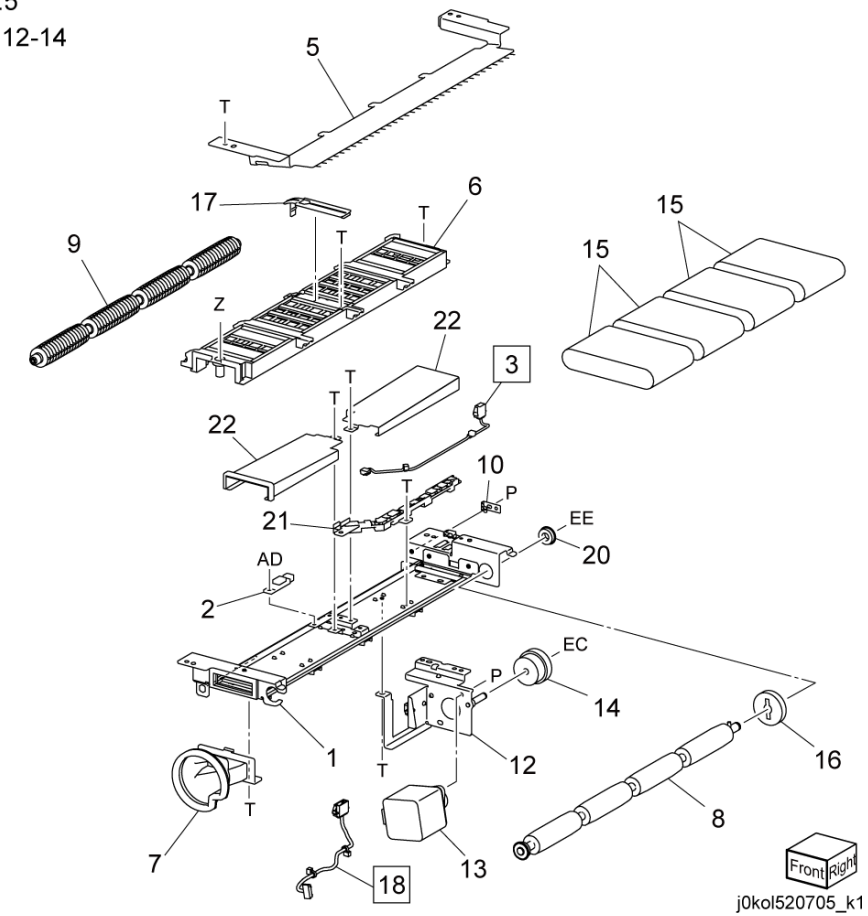


【PL7.5】
V-Tra 4 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD130K8777X／	AX	V-Tra Sensor 1/3/5
3	0TD962K7733X／	AN	(SCC) Wire Harness
4	－－－－－	-----	
5	0TD054K5846X／	CH	Chute Assembly
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD059K6466X／	BY	Drive Roll
9	0TD059K6741X／	BF	Idler Roll
10	－－－－－	-----	
11	0TD927K0020X／	BS	(SCC) V-Tra Motor 4 Assembly (Item 12-14) (REP 99.1.1)
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD023E2743X／	BQ	BELT-TRANSPORT,INLET
16	0TD807E2953X／	AN	Drive Gear
17	－－－－－	-----	
18	0TD962K8323X／	AS	(SCC) Wire Harness
19	－－－－－	-----	
20	0TD413W91450／	AZ	Ball Bearing
21	－－－－－	-----	
22	－－－－－	-----	

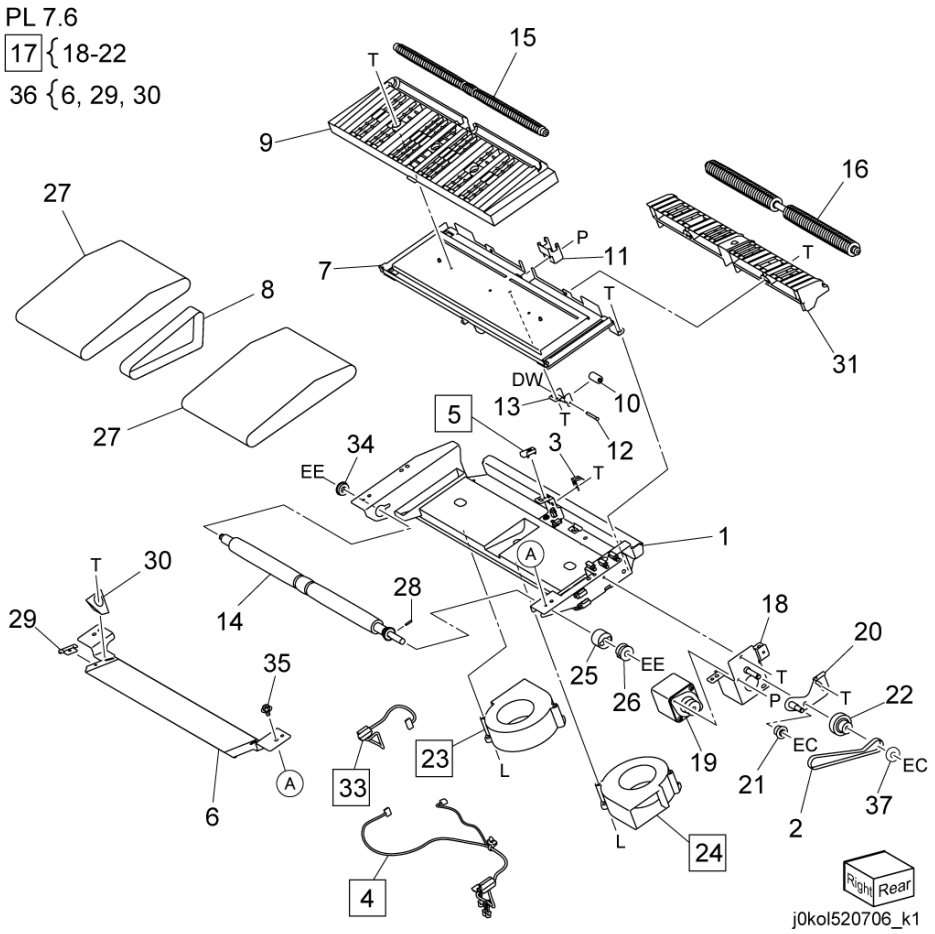
PL 7.5

11 { 12-14



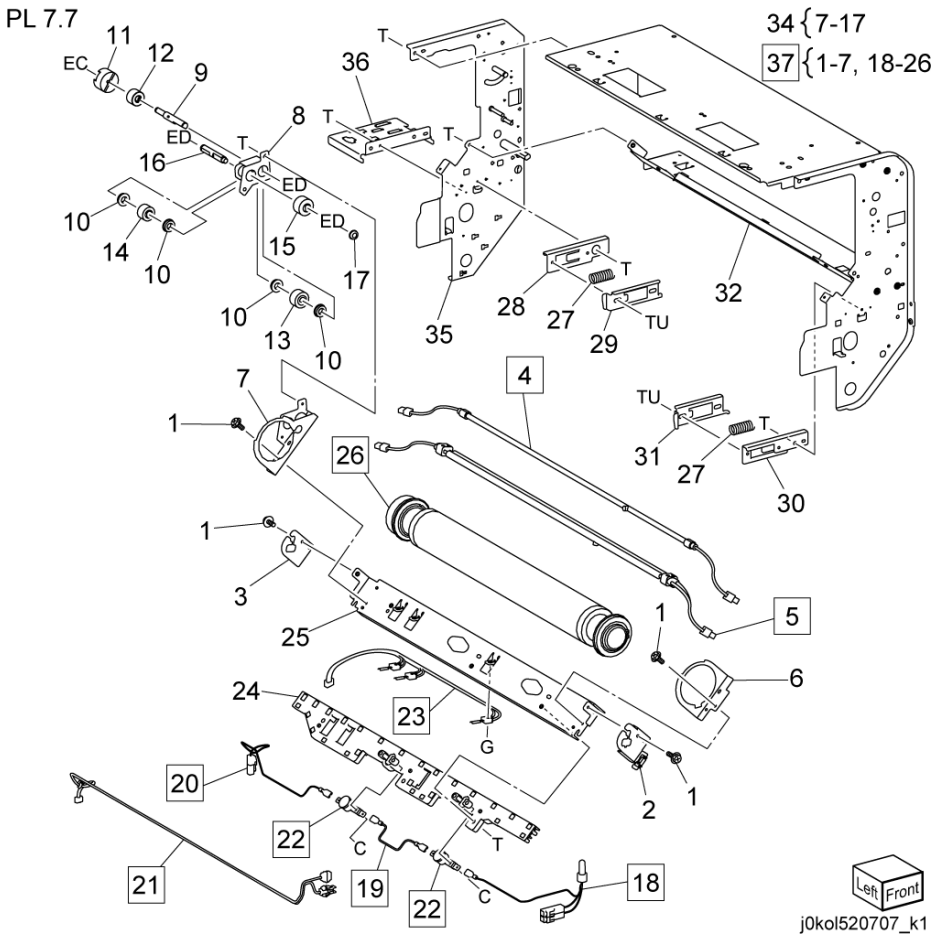
【PL7.6】
Exit V-Tra Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD423W48354/	AX	Exit V-Tra Belt
3	-----	-----	
4	0TD952K0973X/	BG	(SCC) Harness Assembly
5	0TD930W00222/	AU	(SCC) Fusing Unit Exit Sensor
6	-----	-----	
7	-----	-----	
8	0TD023E2758X/	BN	BELT-TRANSPORT EXIT S
9	0TD054E4275X/	BB	Transport Chute
10	0TD059E0682X/	AL	Idler Roll
11	-----	-----	
12	0TD806E3224X/	AP	Shaft
13	-----	-----	
14	0TD059K6467X/	BX	Exit V-Tra Drive Roll
15	0TD059K6725X/	BB	Idler Roll 2
16	0TD059K6742X/	BA	Idler Roll 1
17	0TD127K6030X/	BV	Exit V-Tra Motor Assembly (Item 18-22)
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	0TD127K7611X/	BR	(SCC) V-Tra Fan 4
24	0TD127K7611X/	BR	(SCC) V-Tra Fan 4
25	0TD011E2449X/	BE	Torque Joint
26	0TD020E4696X/	AN	Drive Pulley
27	0TD023E2757X/	BT	BELT-TRANSPORT EXIT W
28	0TD029E4823X/	AH	Pin
29	-----	-----	
30	-----	-----	
31	-----	-----	
32	-----	-----	
33	0TD962K8324X/	AS	(SCC) Wire Harness
34	0TD413W91450/	AZ	Ball Bearing
35	-----	-----	
36	0TD054K6021X/	BT	Exit Chute Assembly
37	-----	-----	



【PL7.7】
Right Fusing Assembly (1 of 2)

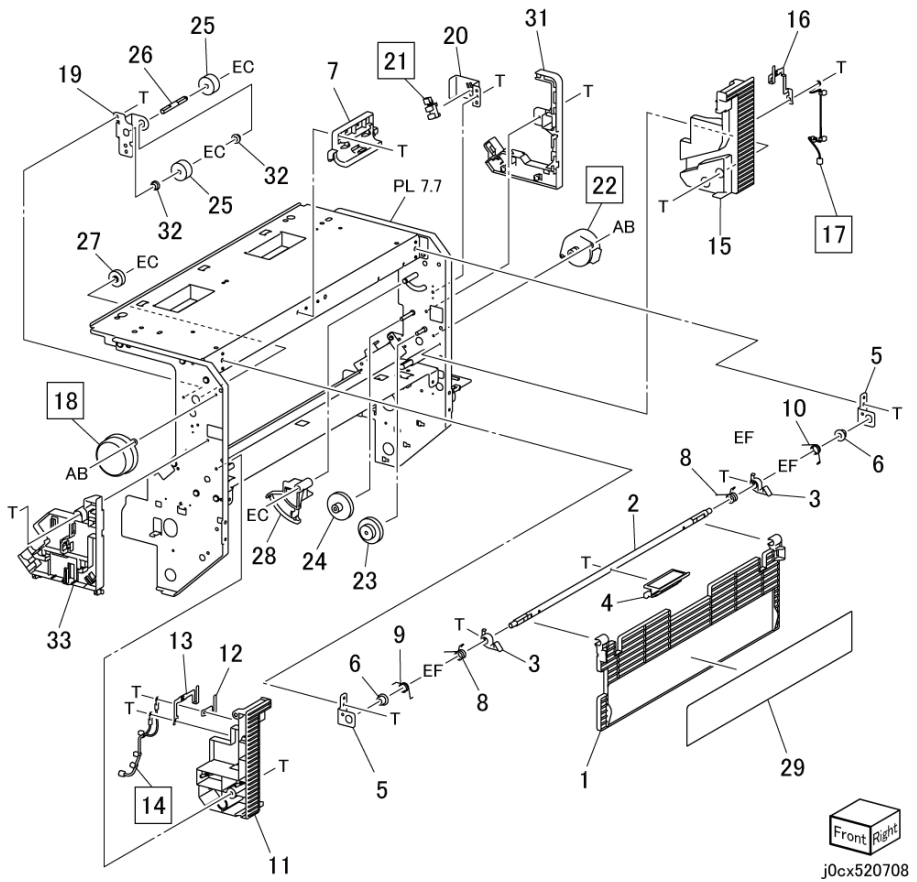
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD126K3626X／	BQ	(SCC) E/R Sub Lamp
5	0TD126K3627X／	BS	(SCC) E/R Main Lamp 1/2
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD060K0410X／	AX	Gear Box
9	0TD006K3533X／	BE	Shaft
10	0TD413W08650／	AN	Ball Bearing
11	0TD005E3945X／	AY	Coupling
12	0TD011E2961X／	BK	Torque Joint
13	0TD807E2944X／	AY	Idler Gear 3
14	0TD807E2945X／	AY	Idler Gear 4
15	0TD807E2946X／	AZ	Idler Gear 5
16	－－－－－	-----	
17	0TD413W66250／	AL	Bearing
18	0TD962K7522X／	BA	(SCC) Harness Assembly
19	0TD962K7523X／	AZ	(SCC) Harness Assembly
20	0TD962K7524X／	AZ	(SCC) Harness Assembly
21	0TD962K7528X／	BB	(SCC) Harness Assembly
22	0TD130K7323X／	BD	(SCC) E/R Thermostat 1/2
23	0TD130K7284X／	BL	(SCC) E/R STS 1/2/3
24	－－－－－	-----	
25	－－－－－	-----	
26	0TD059K6462X／	CS	ROLL ASSY-EXTERNAL
27	－－－－－	-----	
28	－－－－－	-----	
29	－－－－－	-----	
30	－－－－－	-----	
31	－－－－－	-----	
32	－－－－－	-----	
33	－－－－－	-----	
34	0TD007K2241X／	BZ	Gear Box Assembly (Item 7-17)
35	0TD801K7757X／	BP	Rear Right Frame
36	－－－－－	-----	
37	0TD859K0688X／	DL	(SCC) Fusing External Roll Assembly (Item 1-7, 18-26) (REP 99.1.1)



【PL7.8】
Right Fusing Assembly (2 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD055E5773X/	BD	Web Shutter
2	-----	-----	
3	0TD019E7603X/	BA	HOOK-LATCH WEB
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD868E3710X/	BA	Latch Support
8	0TD809E9123X/	AZ	Latch Spring
9	0TD809E8812X/	AY	Shutter Spring (Front)
10	0TD809E8813X/	AY	Shutter Spring (Rear)
11	0TD032K0597X/	BF	Web Front Guide
12	-----	-----	
13	-----	-----	
14	0TD962K7410X/	AZ	(SCC) Wire Harness
15	0TD032K0599X/	BF	Web Rear Guide
16	-----	-----	
17	0TD962K7411X/	AY	(SCC) Wire Harness
18	0TD127K5896X/	BW	(SCC) Fusing Web Motor
19	-----	-----	
20	-----	-----	
21	0TD930W00121/	AT	(SCC) Fusing Belt Steering Sensor
	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
22	0TD127K6176X/	BP	(SCC) Fusing Belt Walk Motor
23	0TD807E2949X/	AY	Gear (Z53/22)
24	0TD807E2950X/	AY	Gear (Z42/Z10)
25	0TD807E3193X/	AZ	Idler Gear (Z21)
26	0TD806E3248X/	AX	Idler Shaft
27	0TD807E3192X/	AZ	Gear (Z18)
28	0TD011E2321X/	AZ	Steering Lever
29	-----	-----	
30	-----	-----	
31	-----	-----	
32	-----	-----	
33	-----	-----	

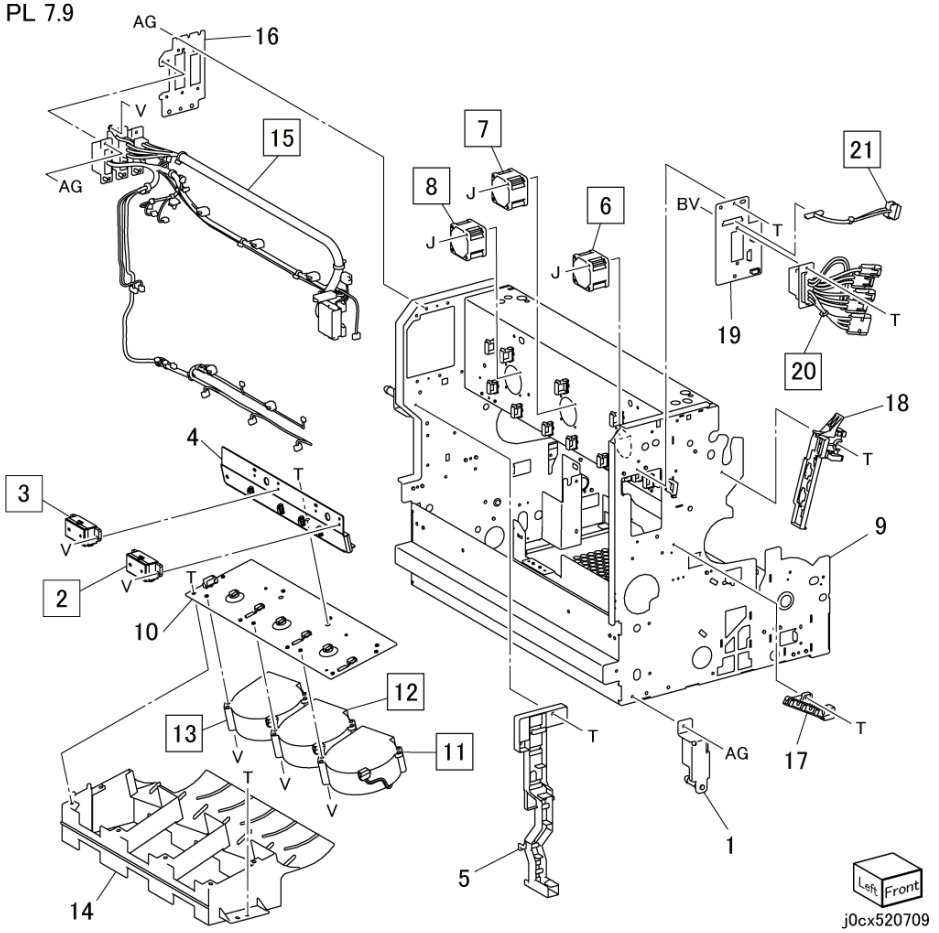
PL 7.8



【PL7.9】
Left Fusing Assembly (1 of 5)

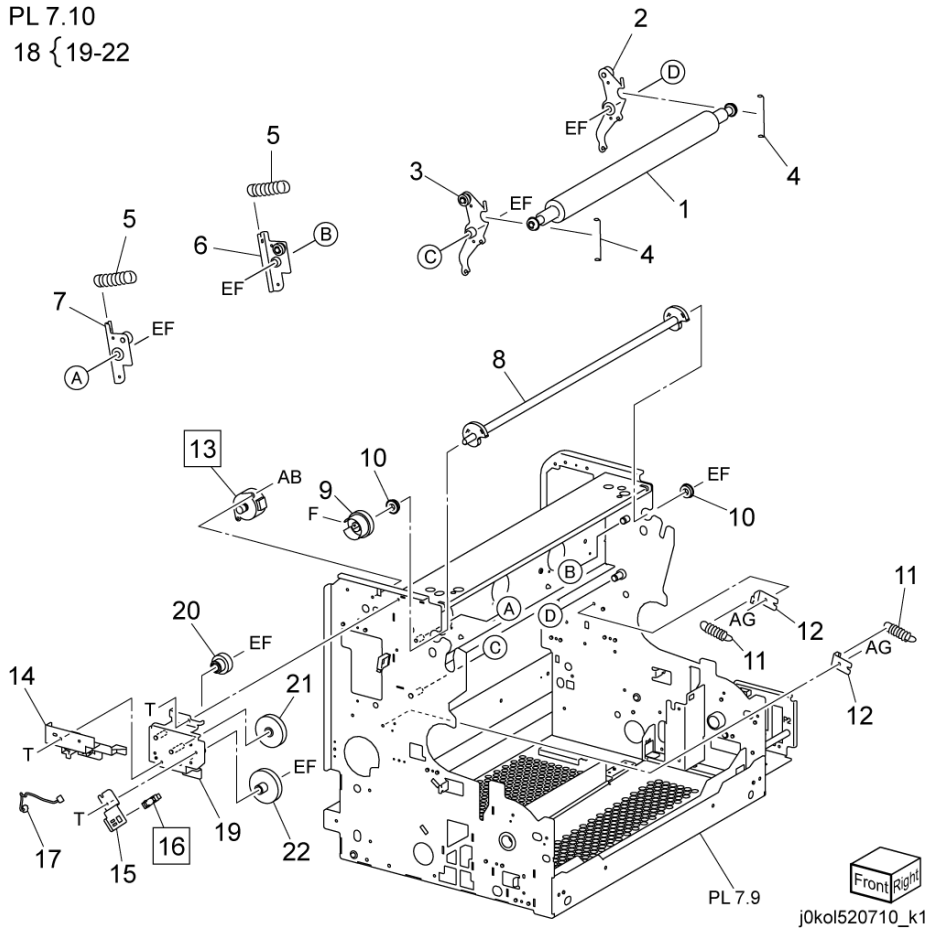
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD815K0094X/	BE	Stud Plate Assembly
2	0TD130K7980X/	BN	(SCC) IRS Sensor 1 (Rear)
3	0TD130K7980X/	BN	(SCC) IRS Sensor 1 (Rear)
4	-----	-----	
5	-----	-----	
6	0TD127K6023X/	BF	(SCC) Fusing Belt Fan 1
7	0TD127K6023X/	BF	(SCC) Fusing Belt Fan 1
8	0TD127K6023X/	BF	(SCC) Fusing Belt Fan 1
9	-----	-----	
10	-----	-----	
11	0TD127K7611X/	BR	(SCC) V-Tra Fan 4
12	0TD127K7611X/	BR	(SCC) V-Tra Fan 4
13	0TD127K7611X/	BR	(SCC) V-Tra Fan 4
14	-----	-----	
15	0TD962K7726X/	CA	(SCC) Wire Harness
16	-----	-----	
17	-----	-----	
18	0TD868E4472X/	BA	Harness Guide
19	-----	-----	
20	0TD962K8322X/	BK	(SCC) Wire Harness (Lamp)
21	0TD952K3673X/	BC	(SCC) Wire Harness (STS)

PL 7.9



【PL7.10】
Left Fusing Assembly (2 of 5)

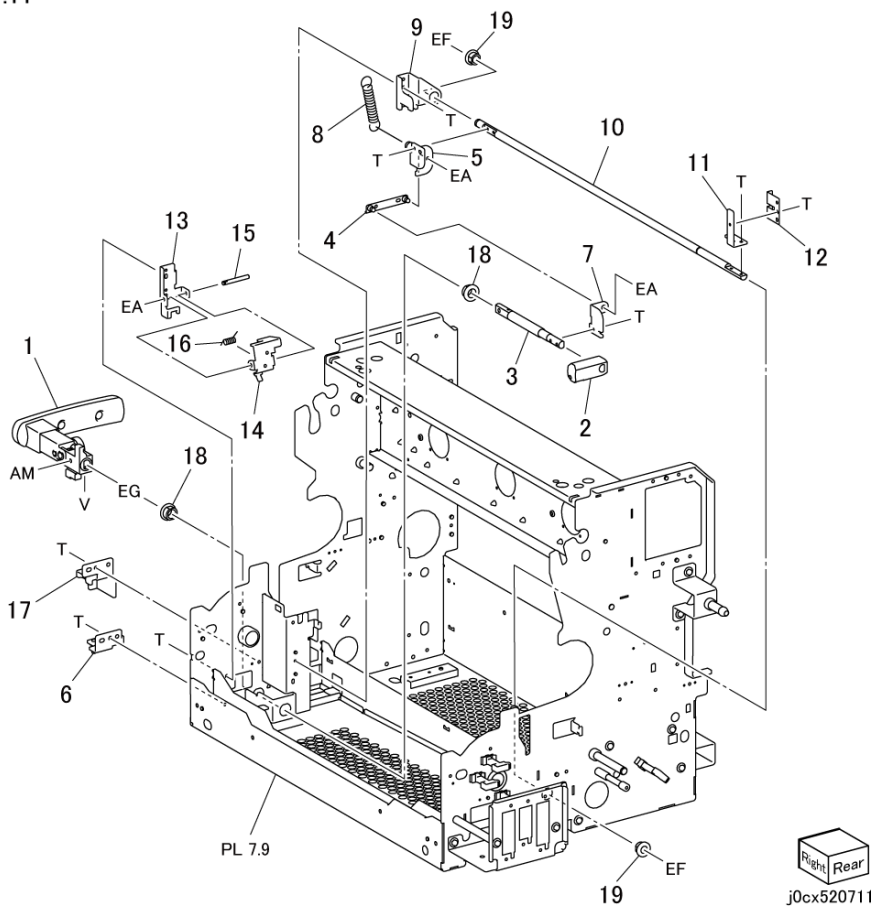
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD059K6455X/	CA	ROLL ASSY-REFRESH
2	0TD011K0341X/	BC	Rear Lever Assembly
3	0TD011K0342X/	BC	Front Lever Assembly
4	0TD809E8895X/	AZ	Spring
5	0TD809E8742X/	AZ	Nip Spring
6	0TD012K9665X/	AY	Rear Link Assembly
7	0TD012K9666X/	AY	Front Link Assembly
8	-----	-----	
9	0TD807E3565X/	AZ	Retract Gear
10	0TD413W91350/	AK	Ball Bearing
11	0TD809E8743X/	AZ	Spring
12	-----	-----	
13	0TD127K5897X/	BP	(SCC) Refresh Roll Retract Motor
14	-----	-----	
15	-----	-----	
16	0TD930W00121/	AT	(SCC) Fusing Belt Steering Sensor
	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
17	-----	-----	
18	0TD003K8740X/	BM	Latch Assembly (Item 19-22)
19	-----	-----	
20	-----	-----	
21	-----	-----	
22	-----	-----	



【PL7.11】
Left Fusing Assembly (3 of 5)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD003K2556X/	BZ	HANDLE ASSY-NB
2	0TD003K8696X/	BF	Stopper
3	-----	-----	
4	0TD068K6541X/	AX	Link Bracket
5	0TD023K9163X/	AQ	Link Assembly
6	0TD068K6623X/	BE	Bracket Assembly
7	-----	-----	
8	0TD809E8898X/	AY	Spring
9	0TD868E3824X/	BA	Support Bracket
10	-----	-----	
11	0TD868E3825X/	BA	Bracket
12	0TD815E5249X/	AX	Switch Plate
13	0TD868E3826X/	BB	Stopper Bracket
14	0TD003K8844X/	BL	Lock Bracket
15	-----	-----	
16	-----	-----	
17	0TD868E2540X/	BN	Support Bracket
18	0TD413W79359/	AF	Bearing
19	0TD413W77559/	AG	Bearing

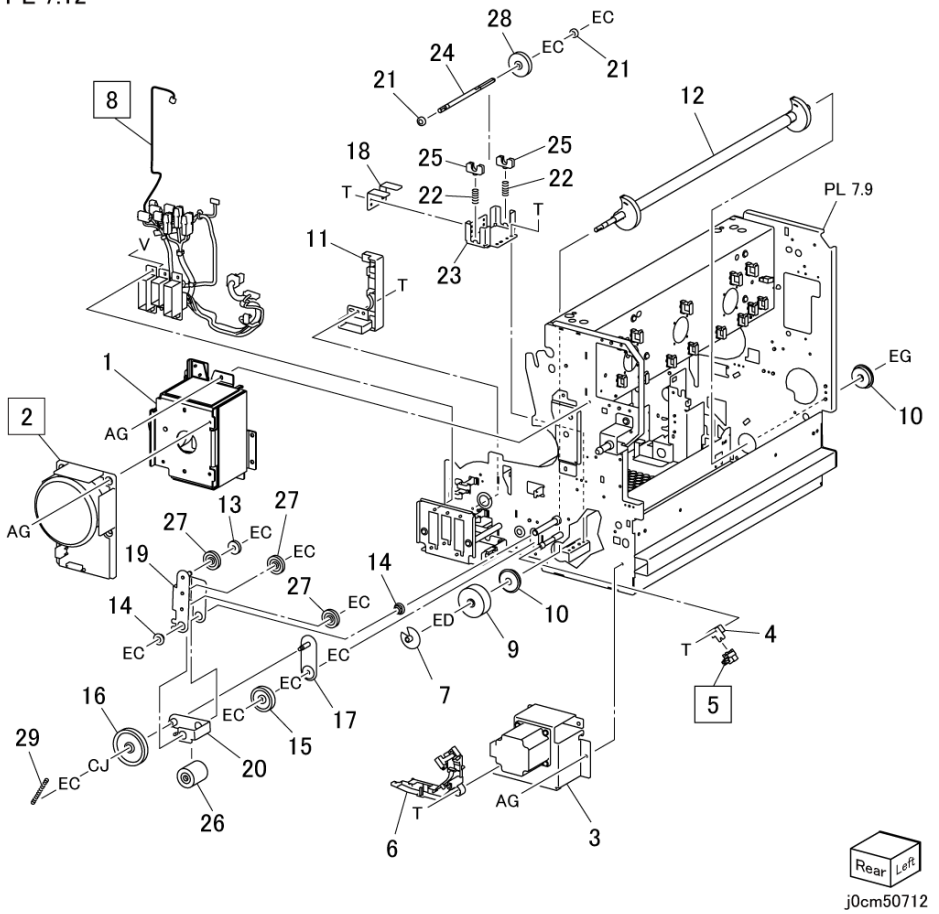
PL 7.11



【PL7.12】
Left Fusing Assembly (4 of 5)

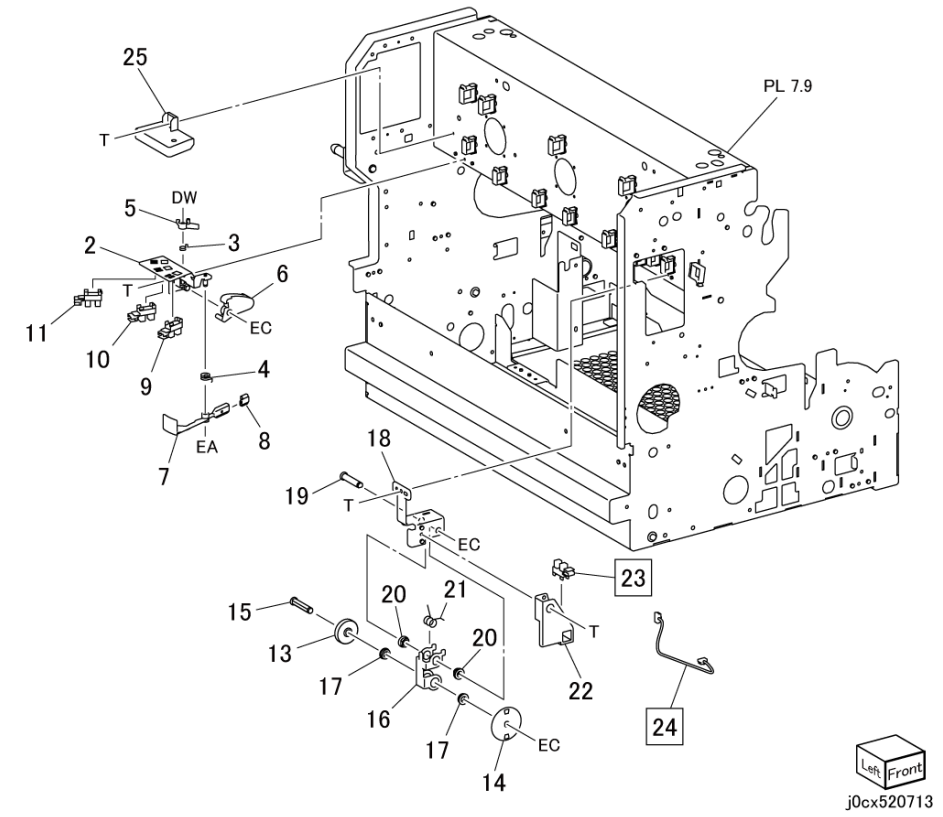
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD007K2332X/	CH	Drive Gear Assembly
	0TD007K1667X/	CG	Drive Assy-Fuser
2	0TD127K6011X/	CP	(SCC) Fusing Motor
3	0TD007K1630X/	CB	P/R Latch Motor Assembly
4	-----	-----	
5	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
6	-----	-----	
7	0TD120E3194X/	AY	Actuator
8	0TD952K0970X/	BQ	(SCC) Wire Harness
9	0TD807E2809X/	BG	Retract Gear (42T)
10	-----	-----	
11	-----	-----	
12	0TD008K9205X/	BU	Cam Assembly
13	-----	-----	
14	-----	-----	
15	0TD807E3262X/	BB	Gear (34T)
16	0TD807E3261X/	BB	Gear (52T)
17	0TD801K4201X/	BA	Plate Assembly
18	0TD803E0655X/	BC	Stopper
19	0TD801K4199X/	BF	Idler Frame
20	-----	-----	
21	0TD413W90350/	BA	Bearing Ball
22	0TD809E8575X/	AX	Spring
23	-----	-----	
24	0TD806E3205X/	BA	Shaft
25	-----	-----	
26	0TD007K1703X/	BB	Gear
27	0TD807E3158X/	AR	Gear
	0TD807E6334X/	BA	Gear (Side of Item 13)
28	0TD059E0569X/	AW	Idler Roll
29	0TD809E8738X/	AY	Spring Idle

PL 7.12



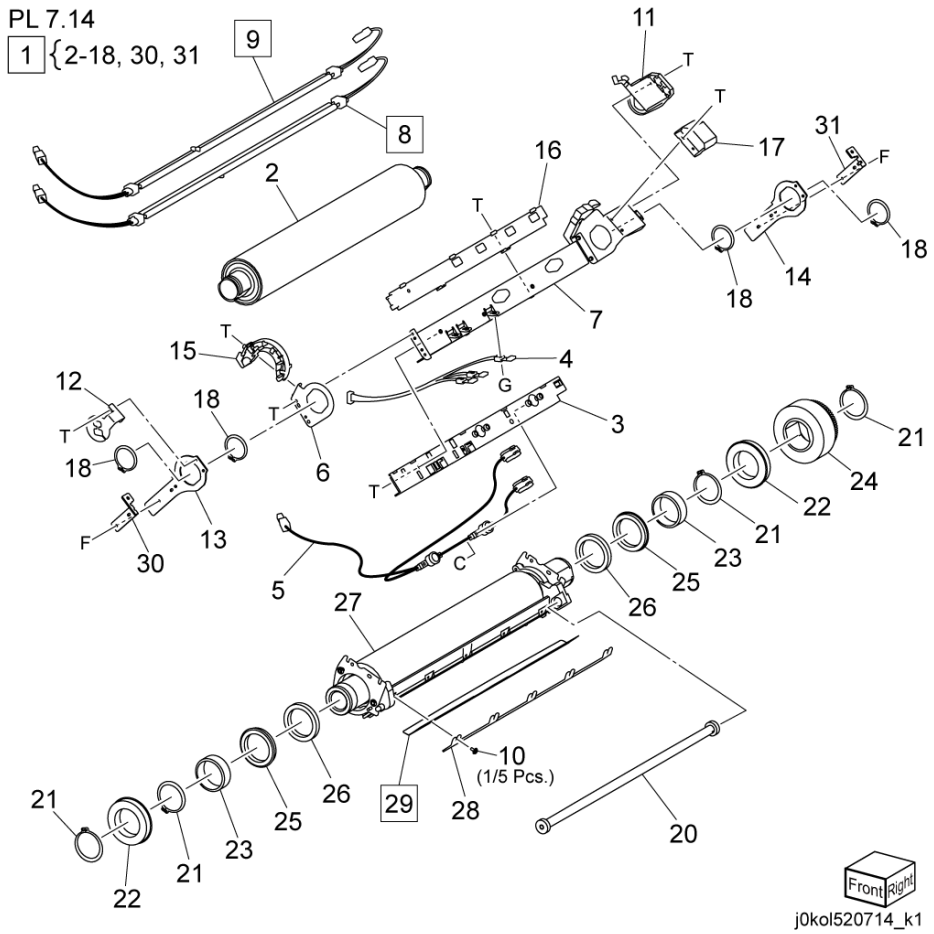
【PL7.13】
Left Fusing Assembly (5 of 5)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD130K7317X/	BN	Belt Walk Sensor Assembly (Item 2-11)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD146K9087X/	BT	ENCODER ASSY-BELT
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	0TD930W00121/	AT	(SCC) Fusing Belt Steering Sensor
	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
24	0TD962K8023X/	AY	FUSER BELT SPEED SENSOR HARNESS
25	-----	-----	



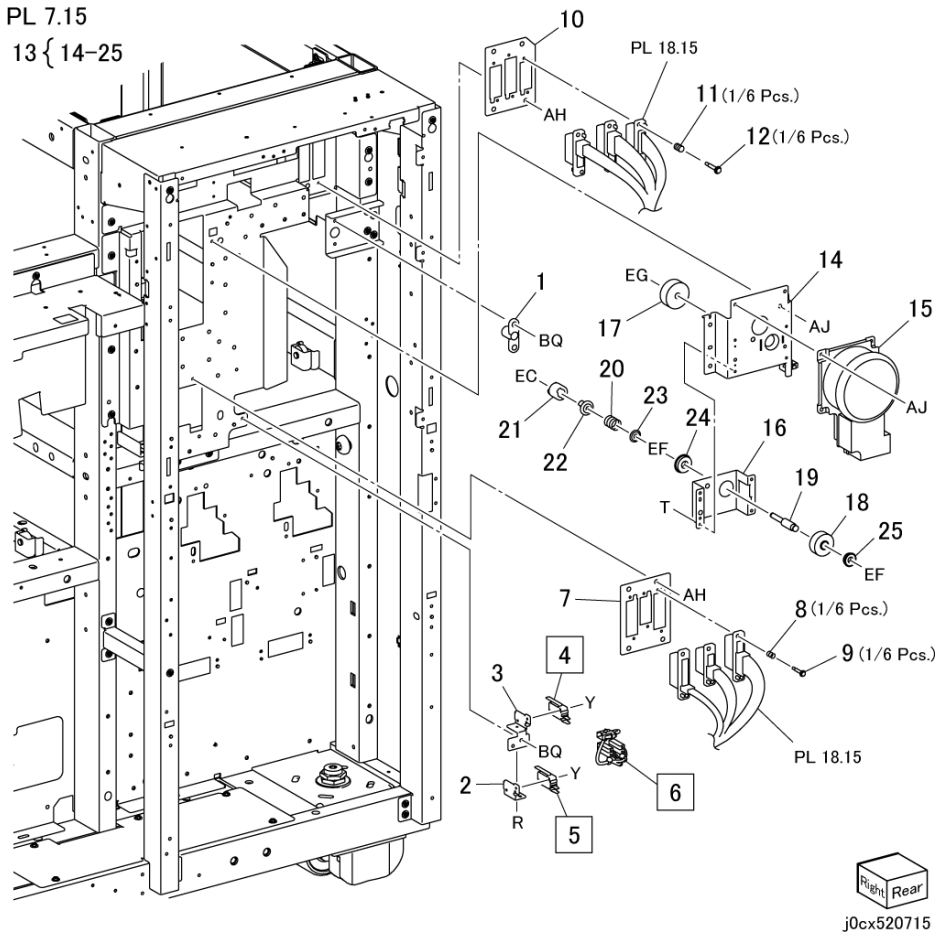
【PL7.14】
Heat Roll Unit and Tension Steering Roll Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K2458X/	DK	(SCC) Internal Heat Roll Assembly (Item 2-18,30,31) (REP 99.1.1)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	0TD859K0690X/	BP	Post Nip Roll Assembly
21	-----	-----	
22	0TD013E3543X/	BA	HEAT ROLL BEARINGS
23	0TD005E2767X/	AZ	Collar
24	0TD807E6058X/	BF	INTERNAL HEAT ROLL ASSEMBLY
25	0TD013E3845X/	BD	HEAT ROLL BEARINGS
26	-----	-----	
27	-----	-----	
28	0TD815K0279X/	BF	Plate Assembly
29	0TD815K2367X/	BW	PLATE ASSY-PAD
30	-----	-----	
31	-----	-----	



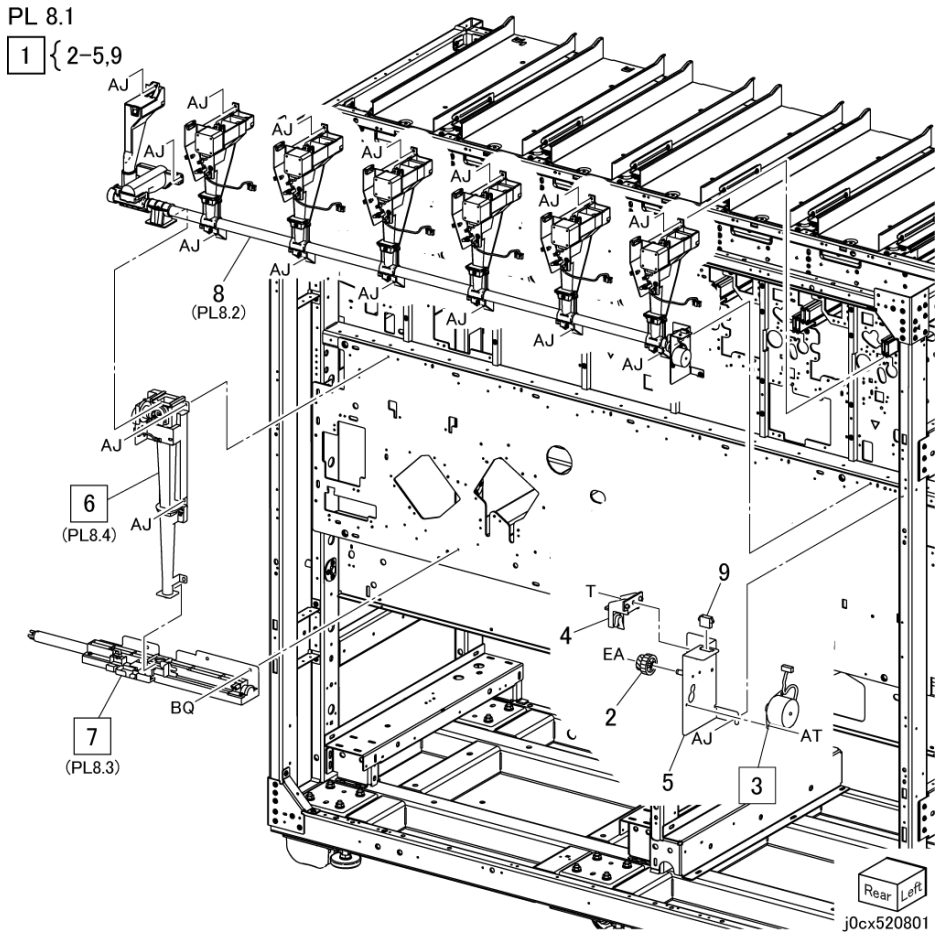
【PL7.15】
Fusing (Rear)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD013E3514X/	AR	Locate Bearing
2	-----	-----	
3	-----	-----	
4	0TD110E1514X/	BP	(SCC) Fusing Drawer Interlock Switch (Logic)
5	0TD110E1514X/	BP	(SCC) Fusing Drawer Interlock Switch (Logic)
6	0TD952K3877X/	BQ	(SCC) Harness Assembly
7	-----	-----	
8	0TD809E4999X/	AN	Connector Spring
9	0TD826E0808X/	AN	Shoulder Screw
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	0TD127K6028X/	CE	E/R Motor Assembly (Item 14-25)
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	0TD809E4200X/	AL	Spring
21	-----	-----	
22	0TD005E2597X/	AL	Slide Coupling
23	0TD120E2788X/	AX	Retainer
24	0TD413W91450/	AZ	Ball Bearing
25	-----	-----	



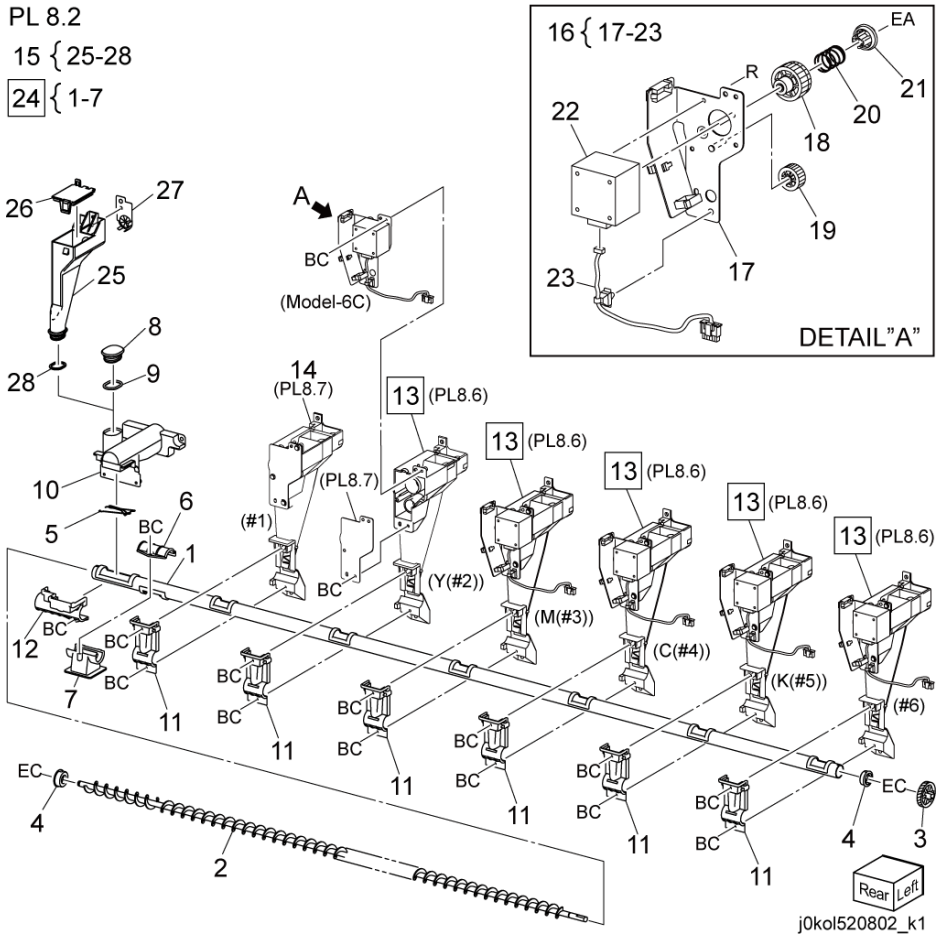
【PL8.1】
Toner Collection System

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD049K0191X/	BL	Auger Motor 1 Assembly (Item 2-5, 9)
2	0TD807E2525X/	AL	Gear (28T)
3	0TD127K3767X/	BC	(SCC) Auger Motor 2
4	0TD868E5031X/	AP	Stopper
5	0TD049K0192X/	BA	Bracket Assembly
6	0TD011K9905X/	BZ	Down Joint Assembly
7	0TD011K9911X/	BT	BTB Joint Assembly
8	-----	-----	
9	-----	-----	



【PL8.2】
Toner Collection Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

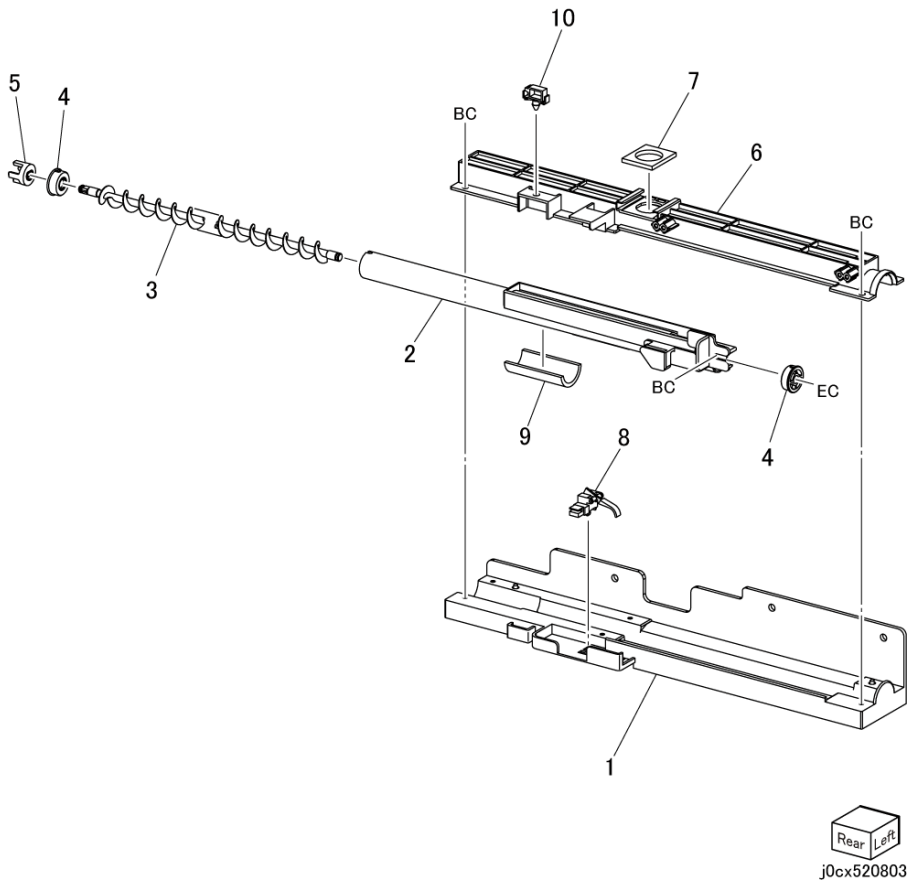
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD807E2522X／	AZ	Gear (T36)
4	0TD013K8250X／	BB	Bearing
5	0TD809E9099X／	BF	Spring
6	－－－－－	-----	
7	0TD868E2238X／	AZ	Pipe Support
8	0TD021E1306X／	AX	Cap
9	0TD835E2133X／	AK	O-Ring
10	0TD011E2225X／	BA	Joint
11	0TD848E2899X／	AT	Pipe Lower Cover
12	0TD848K2216X／	AX	Joint Cover
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD011K0321X／	BH	Joint Assembly (Item 25-28)
16	0TD049K0193X／	BN	Cleaner Motor Assembly (#1/ #6) (Item 17-23)
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	0TD127K5978X／	BG	(SCC) 2nd BTB Cleaning Motor
23	0TD962K7469X／	AT	(SCC) Wire Harness (#1/ #6)
24	0TD052K9687X／	CA	Main Pipe Assembly (Item 1-7)
25	－－－－－	-----	
26	－－－－－	-----	
27	－－－－－	-----	
28	－－－－－	-----	



【PL8.3】
BTB Joint Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD130K7278X／	AR	WASTE TONER POSITION SENSOR
9	－－－－－	-----	
10	－－－－－	-----	

PL 8.3

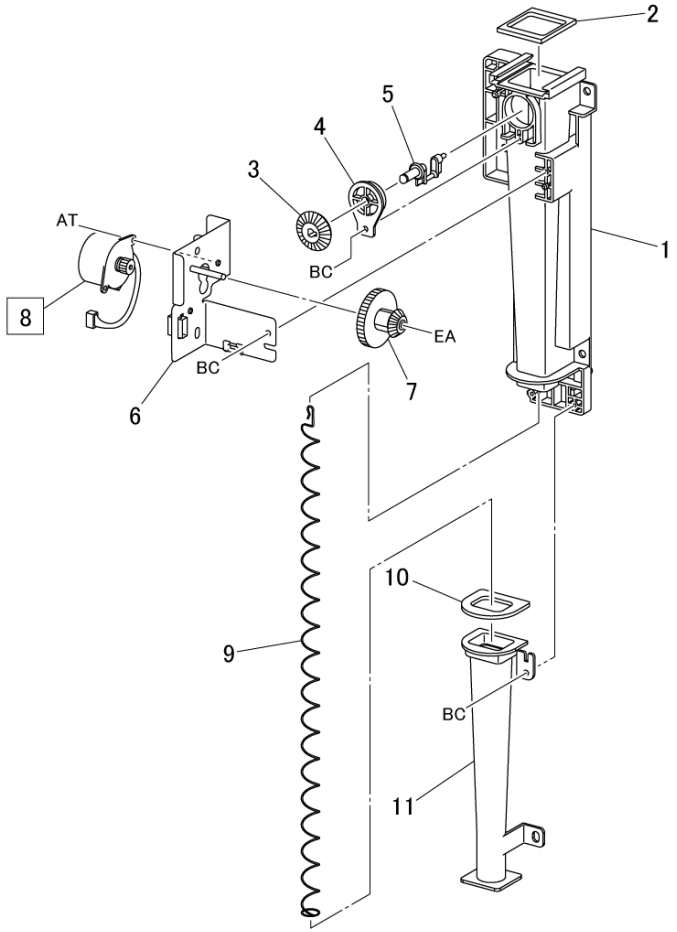


【PL8.4】
Down Joint Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	0TD127K37677X／	BC	(SCC) Auger Motor 2
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	

PL 8.4

12 { 6–8



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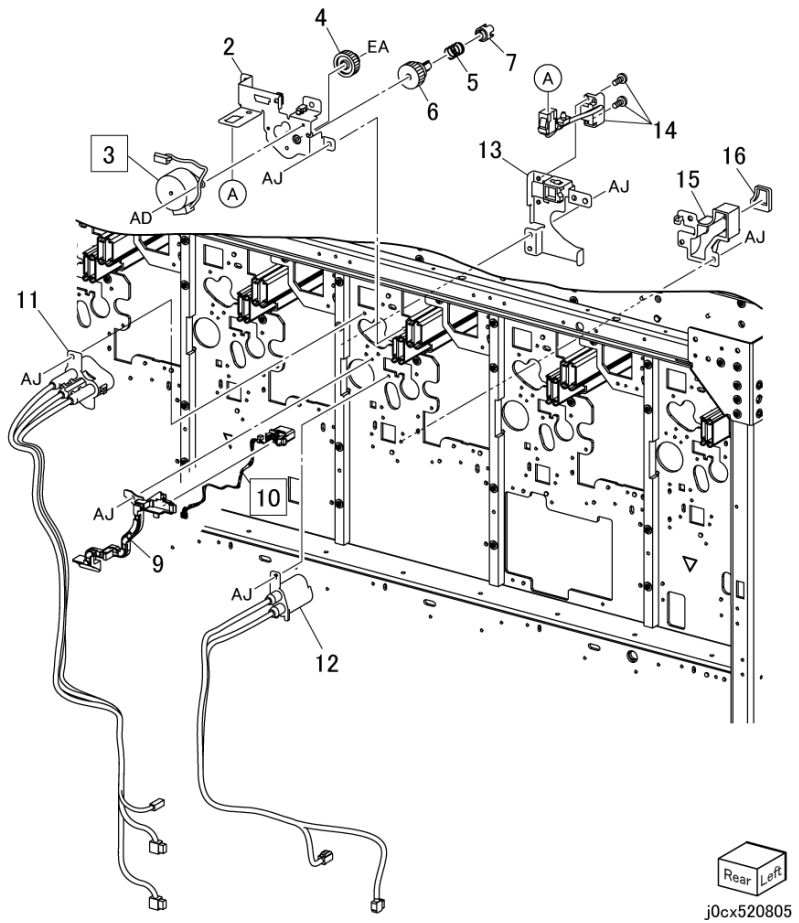
【PL8.5】
Cleaner Motor and EPG Connector (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

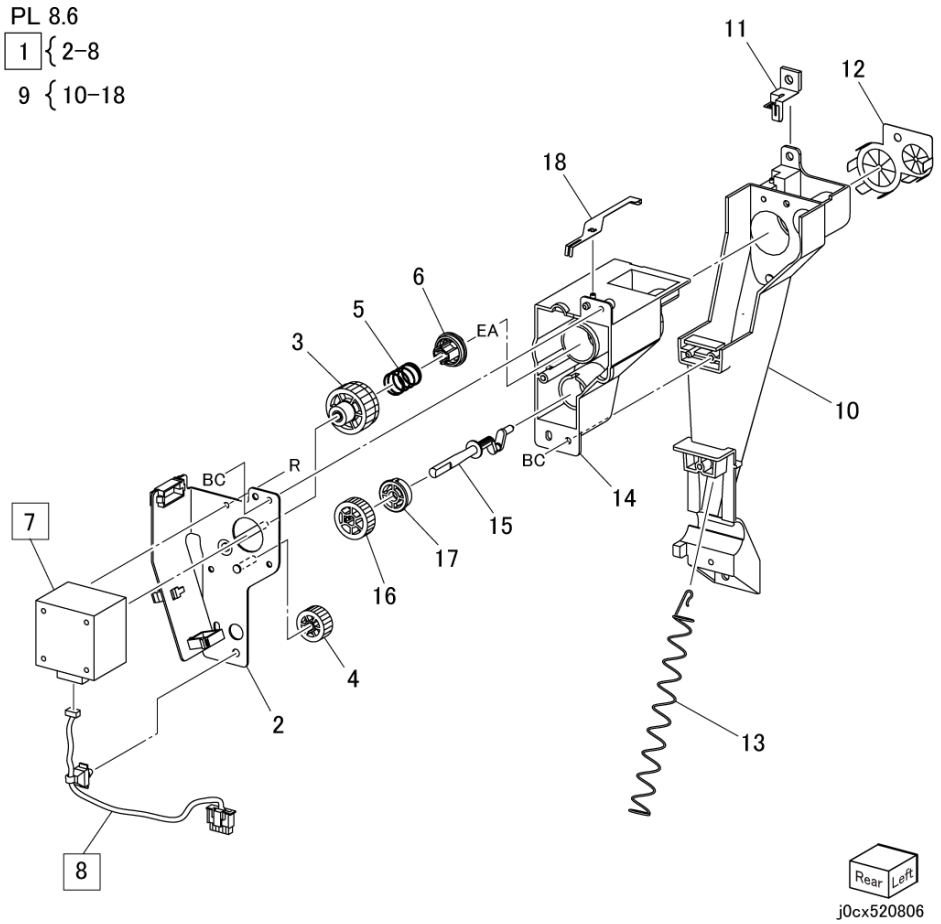
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD127K7970X/	BM	CC Cleaner Motor Assembly (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (Item 2-7)
2	-----	-----	
3	0TD127K3767X/	BC	(SCC) Auger Motor 2
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	0TD019K1681X/	BE	DRW Holder Assembly (Item 9, 10)
9	0TD819E0228X/	AS	DRW CRUM Holder
10	-----	-----	
11	0TD114K8248X/	BR	CC-Connector (Y (#2))
	0TD114K8250X/	BS	CC-Connector (M (#3))
	0TD114K8254X/	BS	CC-Connector (C (#4))
	0TD114K8255X/	BS	CC-Connector (K (#5))
	0TD114K8246X/	BS	CC-Connector (#1/ #6)
12	0TD114K8252X/	BM	PCC-Connector (Y (#2))
	0TD114K8256X/	BM	PCC-Connector (M (#3))
	0TD114K8253X/	BM	PCC-Connector (C (#4))
	0TD114K8257X/	BL	PCC-Connector (K (#5))
	0TD114K8251X/	BL	PCC-Connector (#1/ #6)
13	-----	-----	
14	0TD962K6756X/	AY	Wire Harness (ESV2)
15	-----	-----	
16	0TD835E1517X/	AV	Seal
17	0TD114K8245X/	BA	Main Connector Assembly (Item 13, 14)

PL 8.5
1 { 2-7
8 { 9,10
17 { 13,14



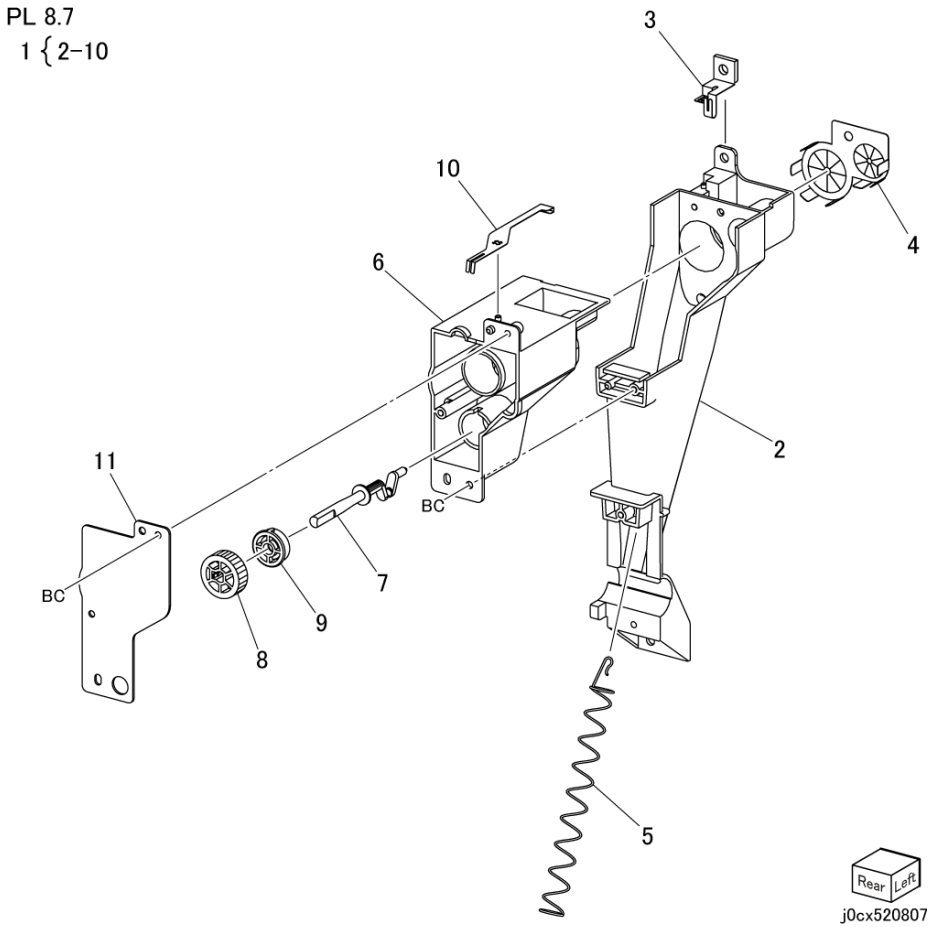
【PL8.6】
Cleaner Motor and Joint Assembly (Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD049K0193X/	BN	Cleaner Motor Assembly (#1/ #6) (Item 17-23)
	0TD049K0193X/	BN	Cleaner Motor Assembly (#1/ #6) (Item 17-23)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD127K5978X/	BG	(SCC) 2nd BTB Cleaning Motor
8	0TD962K7469X/	AT	(SCC) Wire Harness (#1/ #6)
9	0TD011K9901X/	BM	WT JOINT ASSEMBLY
	0TD011K9899X/	BL	Joint Assembly (Item 10-18)
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	



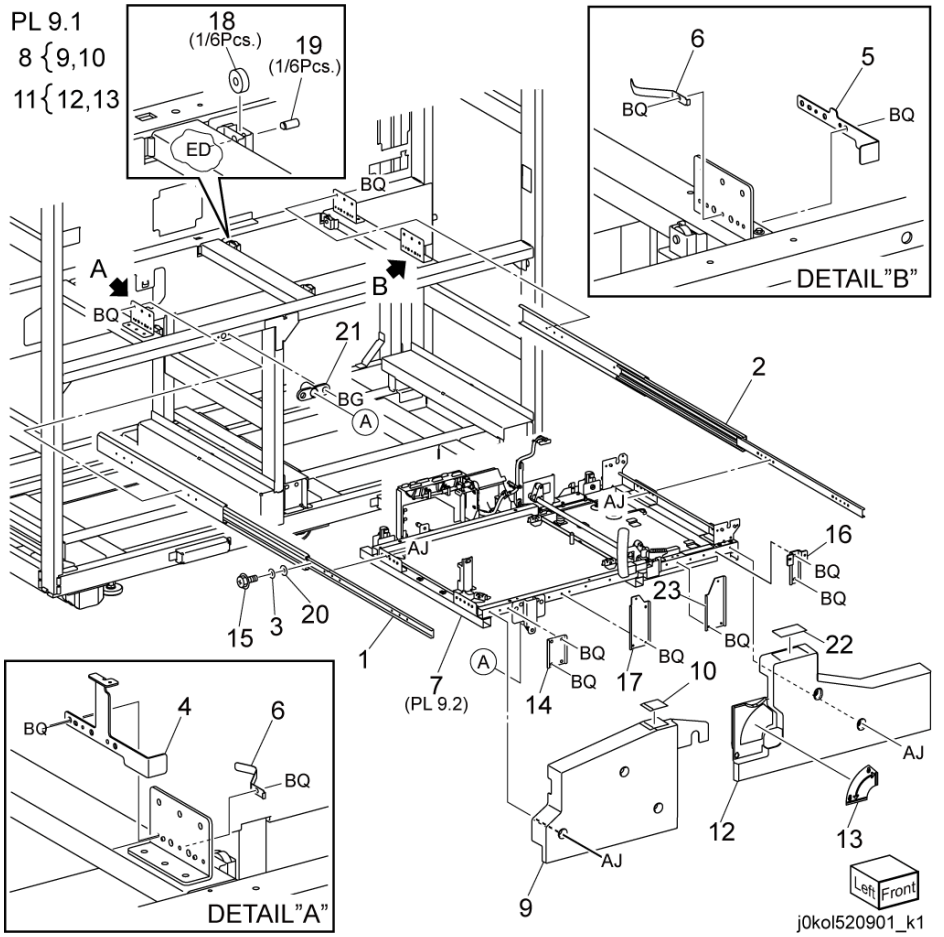
【PL8.7】
Joint Assembly (#1)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD011K9900X／	BP	Joint Assembly (#1) (Item 2-10)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	



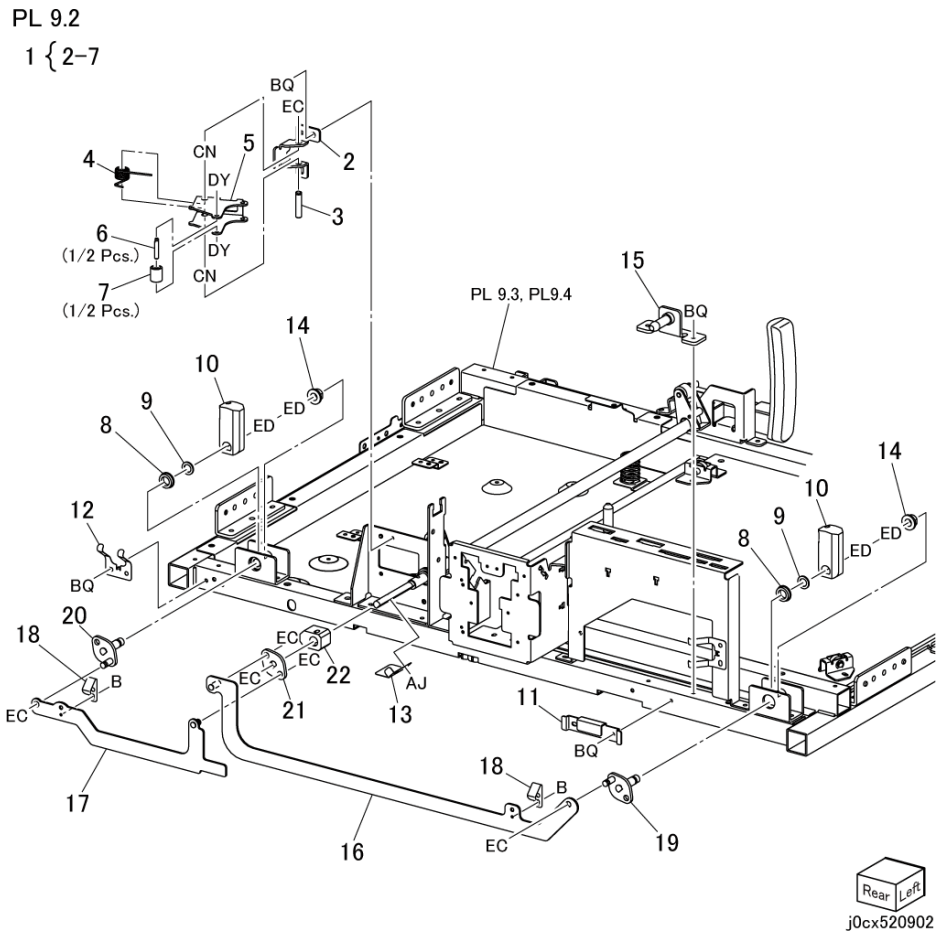
【PL9.1】
Drawer Frame Component

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD801E0937X/	BV	Drawer Left Rail
2	0TD801E0937X/	BV	Drawer Left Rail
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD809E2099X/	AG	Earth Spring
7	0TD850K0323X/	DW	DRAWER ASSY-BIG M C2 NB
8	0TD948K5170X/	BV	COVER ASSY-LH C2 NB
9	-----	-----	
10	-----	-----	
11	0TD948K5171X/	BZ	COVER ASSY-RH C2 NB
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	0TD413W08550/	AP	Bearing
19	0TD806E3140X/	AU	Shaft
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	-----	-----	



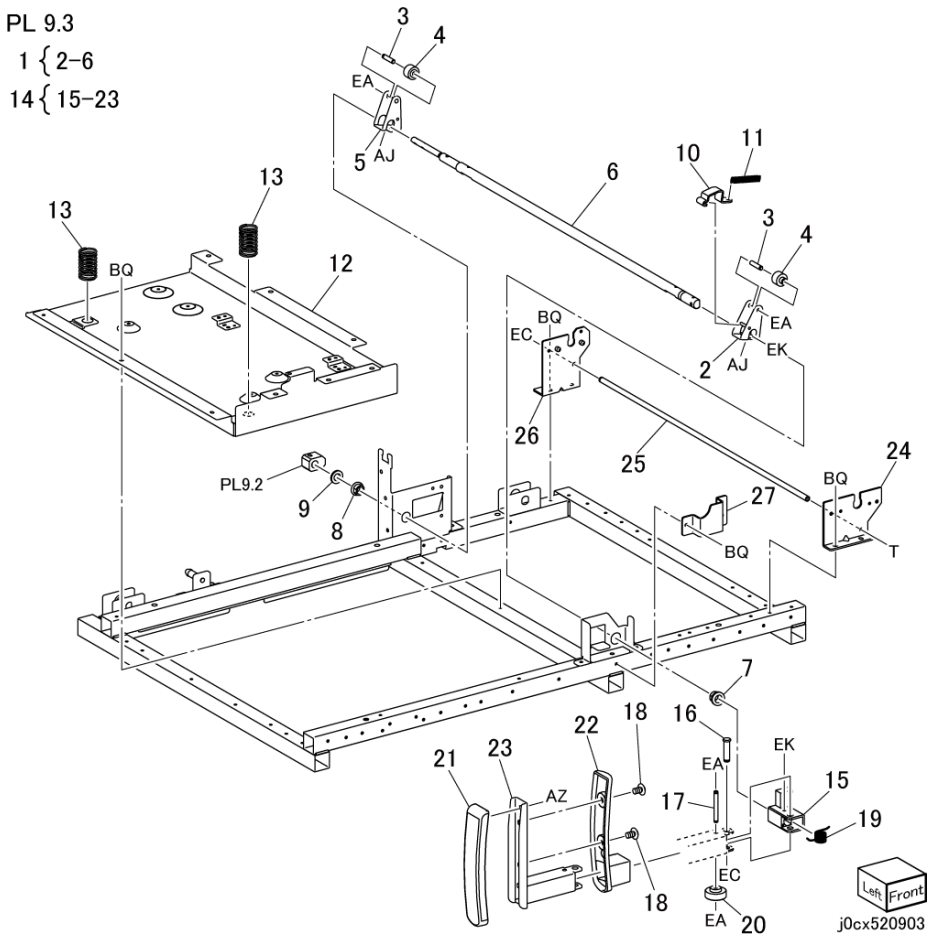
【PL9.2】
Drawer Frame Assembly (1 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD068K6588X/	BF	Stopper Bracket Assembly (Item 2-7)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD028E1783X/	AN	Washer
10	0TD003K8696X/	BF	Stopper
11	0TD032E3260X/	AX	Rail Guide
12	0TD809E8735X/	AQ	EME Spring
13	-----	-----	
14	-----	-----	
15	0TD068K6289X/	AZ	Stud Bracket
16	0TD012K9659X/	BF	Link 1
17	0TD012K9660X/	BB	Link 2
18	0TD809E2128X/	AH	Earth Spring
19	0TD020K1703X/	AZ	Left Pulley
20	0TD020K1704X/	AZ	Right Pulley
21	-----	-----	
22	-----	-----	



【PL9.3】
Drawer Frame Assembly (2 of 3)

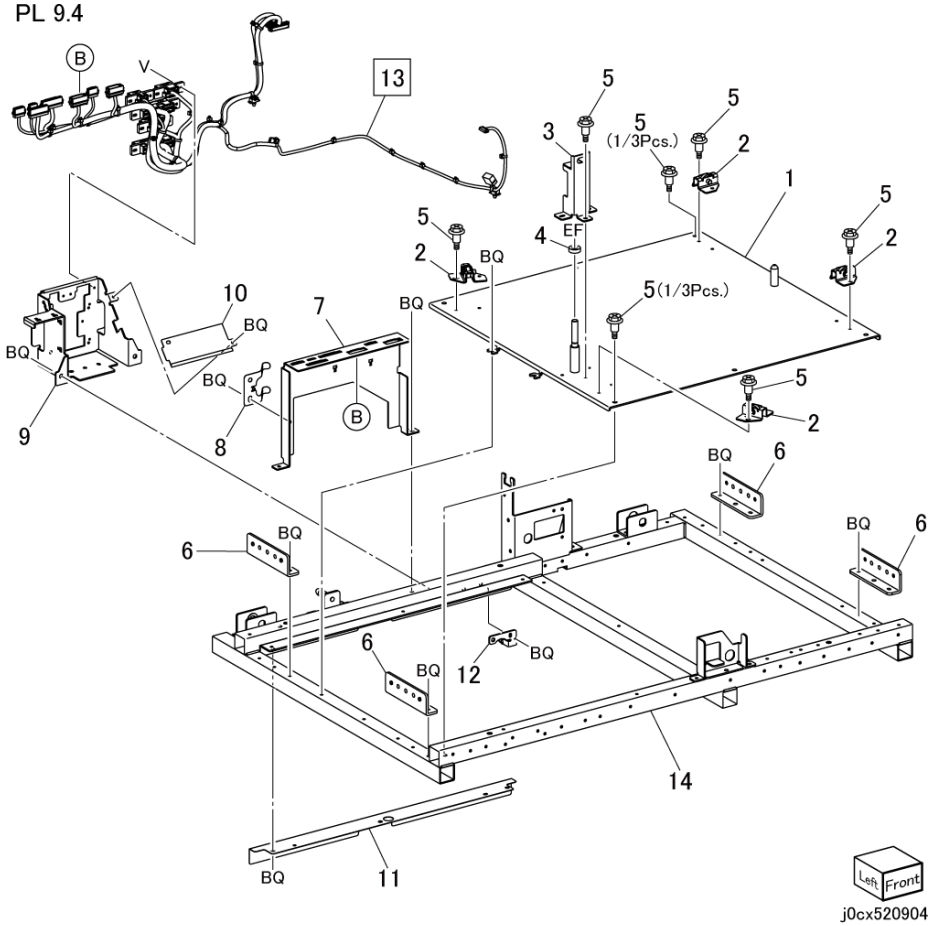
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD006K8800X/	BQ	Handle Shaft Assembly (Item 2-6)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD013E8861X/	AK	Bearing
8	0TD413W79359/	AF	Bearing
9	0TD413W79159/	AG	Bearing
10	-----	-----	
11	0TD809E8867X/	AN	Spring
12	0TD068K6537X/	BW	Bottom Bracket
13	0TD809E8866X/	AK	Spring
14	0TD003K2567X/	BX	HANDLE ASSY-BIG M C2 NB
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	-----	-----	
24	-----	-----	
25	-----	-----	
26	-----	-----	
27	-----	-----	



【PL9.4】
Drawer Frame Assembly (3 of 3)

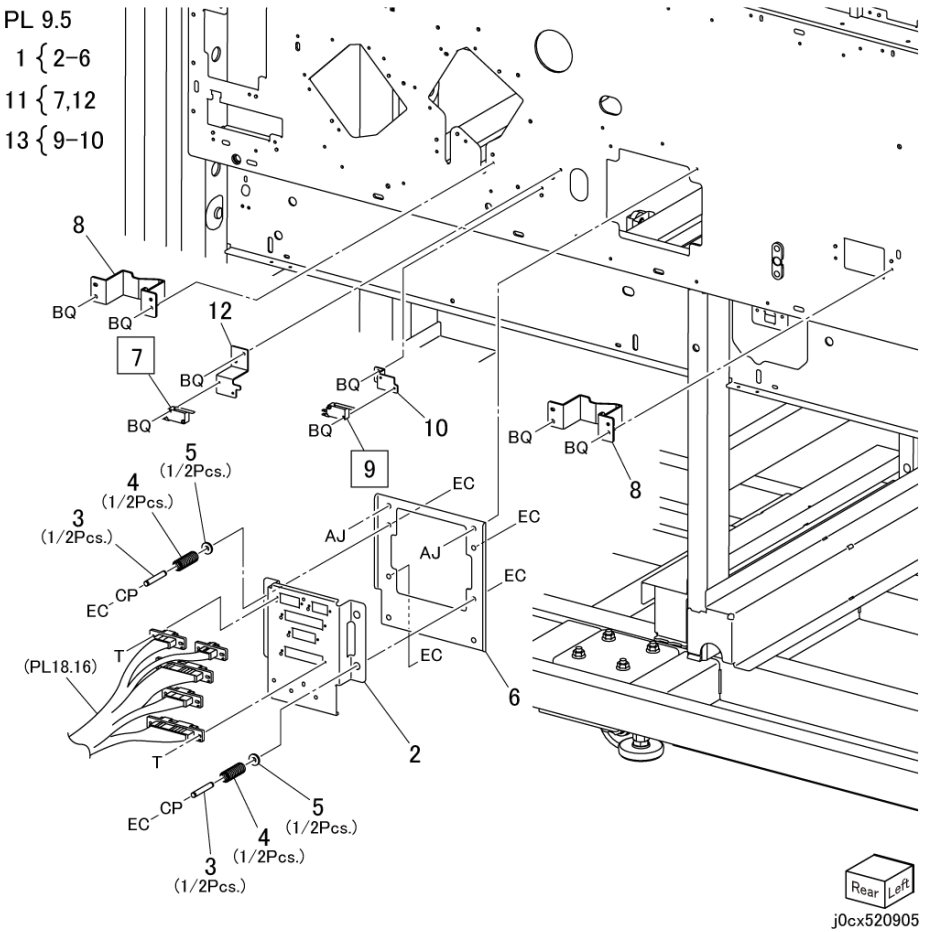
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD413W08050／	AT	BEARING
5	0TD826E0954X／	AD	Screw
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD809E8735X／	AQ	EME Spring
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD068K6535X／	BA	Support Bracket Assembly
13	0TD952K0901X／	BZ	(SCC) Wire Harness
14	－－－－－	-----	

PL 9.4



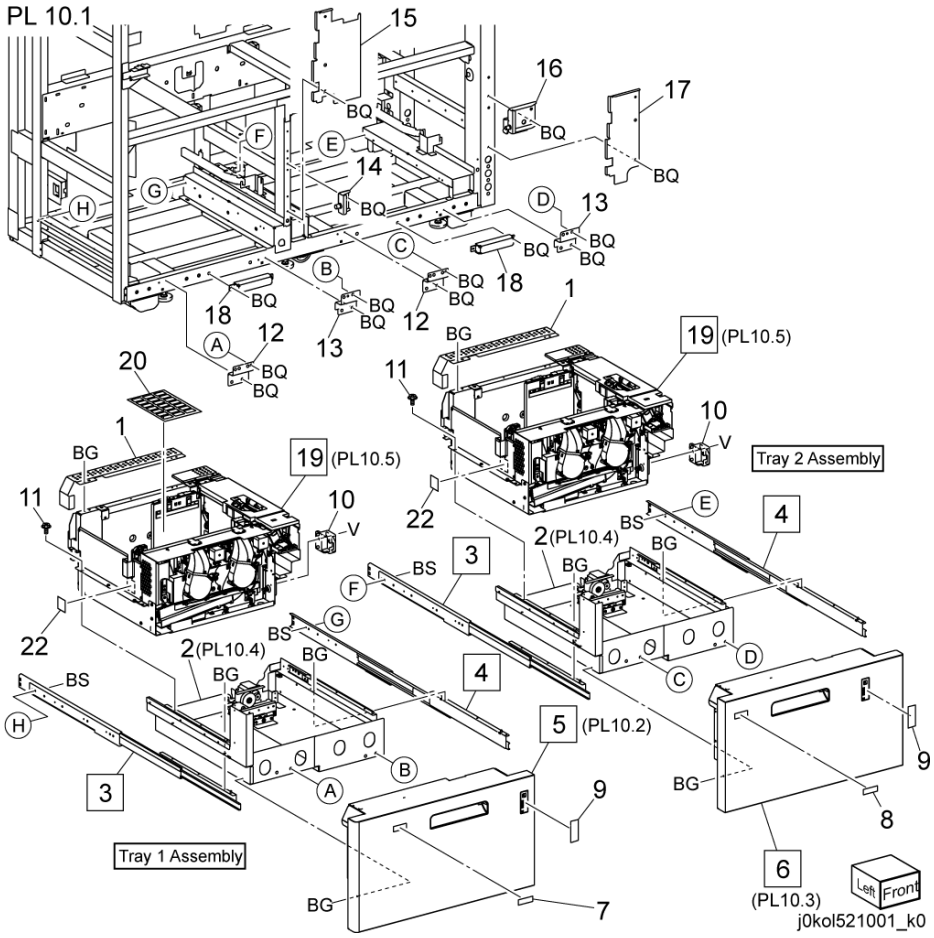
【PL9.5】
Drawer Rear (BGM Interlock Switch 1,2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD068K6429X／	BP	Main Connector Bracket Assembly (Item 2-6)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD413W75659／	AF	Bearing
6	－－－－－	-----	
7	0TD110E1514X／	BP	(SCC) Fusing Drawer Interlock Switch (Logic)
8	－－－－－	-----	
9	0TD110E1514X／	BP	(SCC) Fusing Drawer Interlock Switch (Logic)
10	－－－－－	-----	
11	0TD049K1851X／	BG	BGM Interlock Switch Assembly 1 (Item 7, 12)
12	－－－－－	-----	
13	0TD049K1850X／	BD	Interlock Switch Assembly 1 (Item 9-10)



【PL10.1】
Tray 1/2 Assembly Components

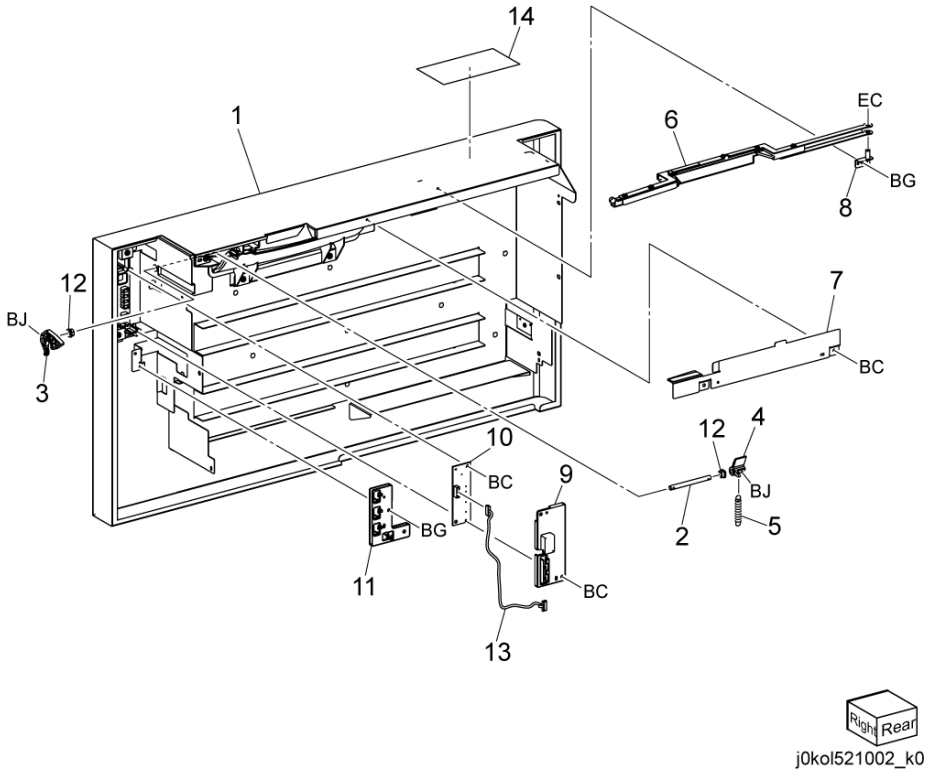
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD801K3684X／	BU	Tray 1/2 Left Rail Assembly
4	0TD801K3685X／	BS	Tray 1/2 Right Rail Assembly
5	0TD948K5218X／	DR	COVER ASSY-TRAY L NB
6	0TD948K5219X／	DQ	COVER ASSY-TRAY R NB
7	0TD970E8066X／	AR	LABEL-TRAY NO1 NB
8	0TD970E8067X／	AR	LABEL-TRAY NO2 NB
9	－－－－－	-----	
10	0TD869E5969X／	AY	BRACKET-COVER HARN NB
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	0TD068K6439X／	AW	Left Latch Bracket
15	－－－－－	-----	
16	0TD068K6440X／	BF	Right Latch Bracket
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	



【PL10.2】
Tray 1 Front Cover Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD806E2906X／	BA	Shaft
3	0TD803E0258X／	BB	Latch
4	0TD012E1727X／	AP	Link
5	0TD809E8697X／	AU	Spring
6	0TD003K2506X／	BM	HANDLE ASSY-NB
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	

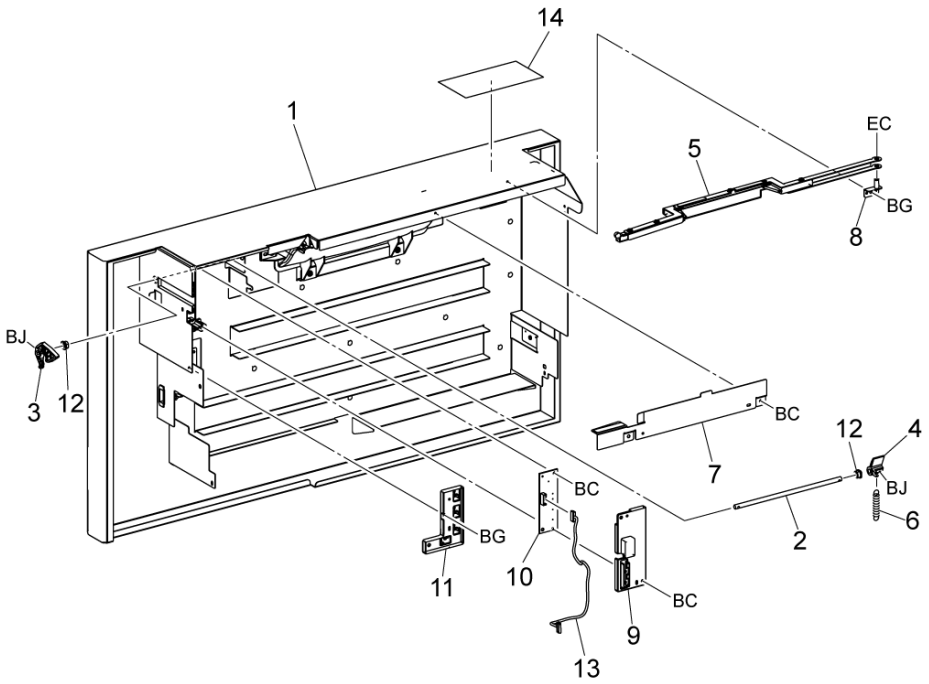
PL 10.2



【PL10.3】
Tray 2 Front Cover Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD803E0258X／	BB	Latch
4	0TD012E1727X／	AP	Link
5	0TD003K2506X／	BM	HANDLE ASSY-NB
6	0TD809E8697X／	AU	Spring
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	

PL 10.3



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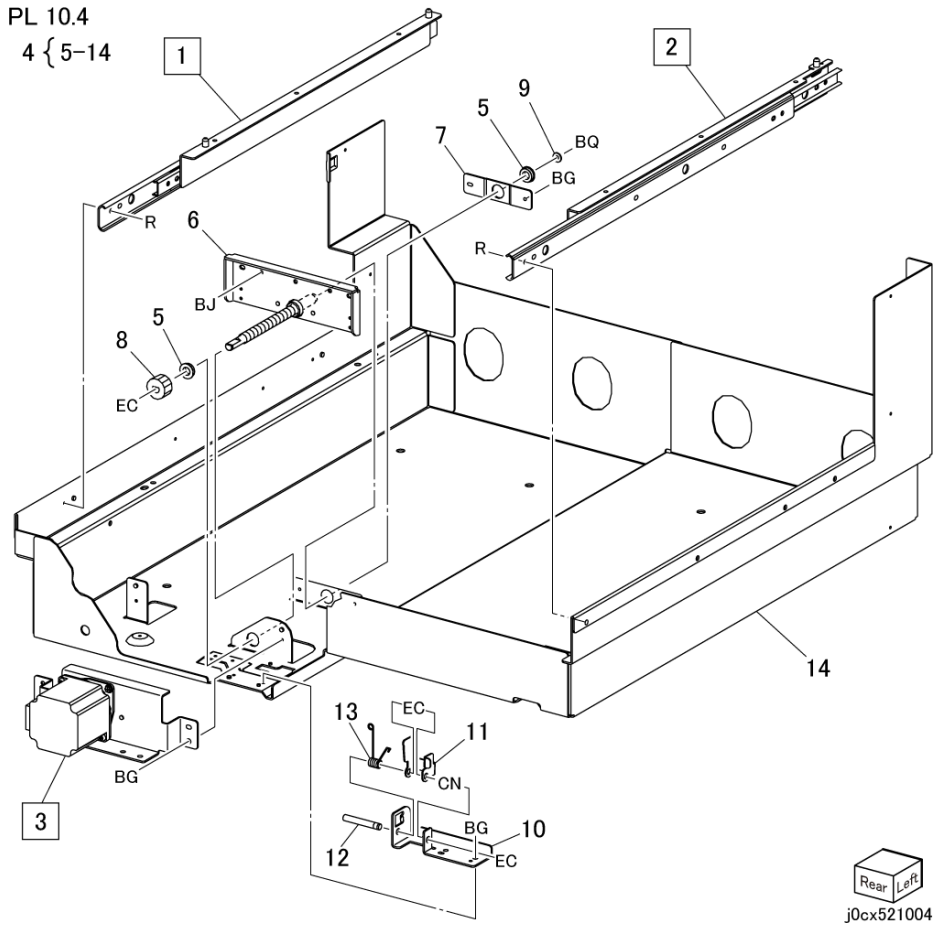
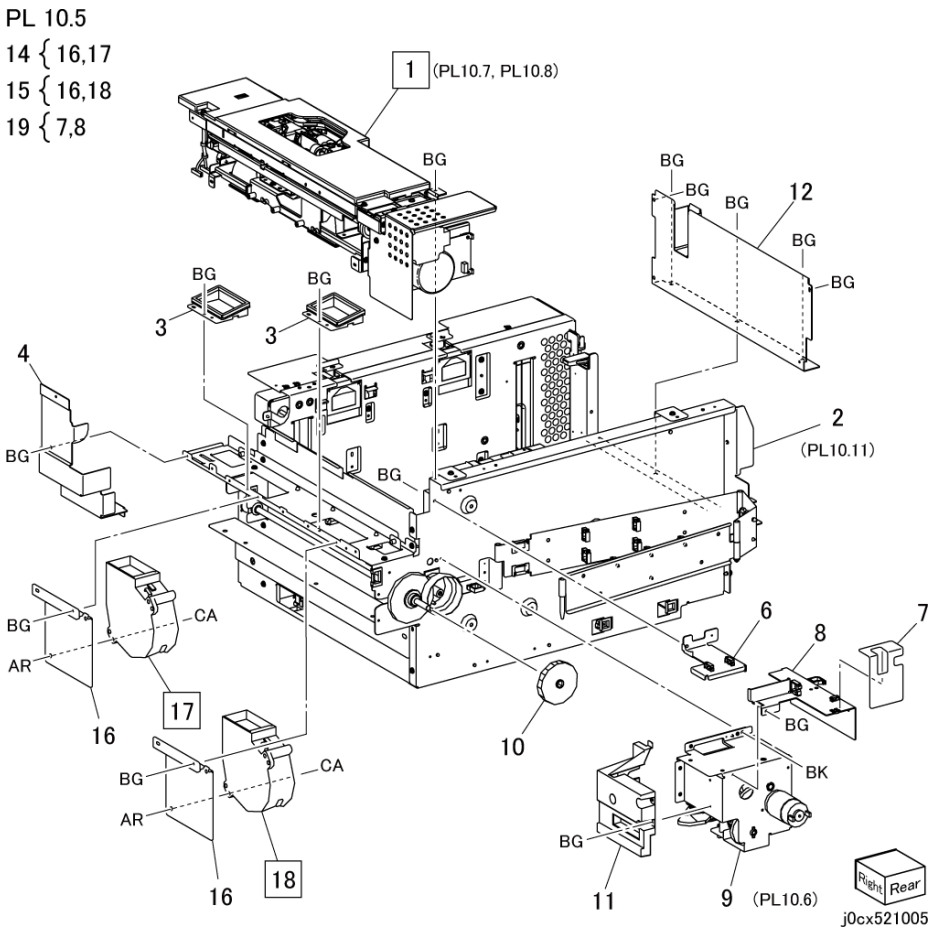
【PL10.4】
Tray 1/2 Base Frame Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD801K3164X/	BE	Shift Right Rail
2	0TD801K3163X/	BE	Shift Left Rail
3	0TD127K5783X/	BV	(SCC) Tray 1/2 Shift Motor
4	0TD801K3584X/	CS	Tray 1/2 Base Frame Assembly (Item 5-14)
5	0TD413W08650/	AN	Ball Bearing
6	0TD068K5997X/	BS	Shift Bracket Assembly
7	0TD869E1033X/	BA	Bracket
8	0TD807E2469X/	BH	Gear (19)
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	0TD809E8696X/	AV	Spring
14	-----	-----	



【PL10.5】
Tray 1/2 Assembly

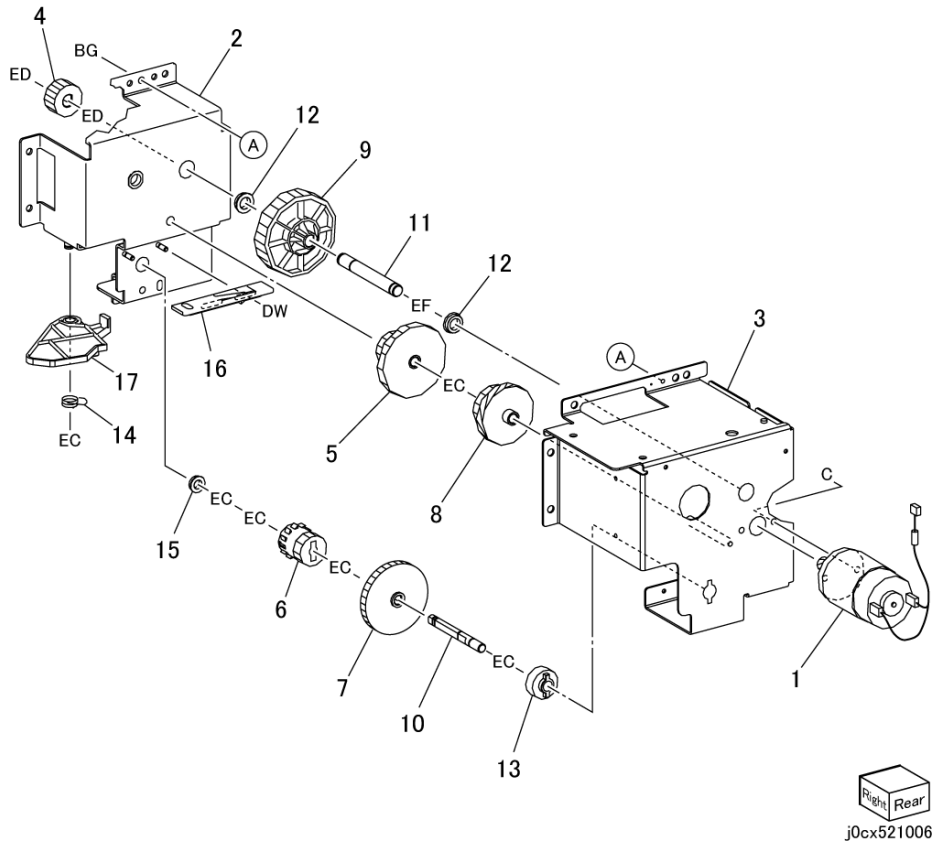
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K3008X/	CW	FEEDER ASSY-SMH
2	0TD850K0331X/	DW	TRAY ASSY-SMH TRAY NB
3	0TD054K4059X/	BA	Lower Duct
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD068K6192X/	BX	Tray 1/2 Lift Motor and Bracket
10	0TD807E2520X/	BE	Gear (60T)
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	0TD068K6375X/	BN	Tray 1/2 Front Blower Assembly (Item 16, 17)
15	0TD068K6375X/	BN	Tray 1/2 Front Blower Assembly (Item 16, 17)
16	-----	-----	
17	0TD127K5951X/	BQ	(SCC) Tray 1/2 Front Blower Fan
18	0TD127K5951X/	BQ	(SCC) Tray 1/2 Front Blower Fan
19	0TD068K6451X/	BC	Guard Bracket Assembly (Item 7, 8)



【PL10.6】
Tray 1/2 Lift Motor and Bracket Assembly

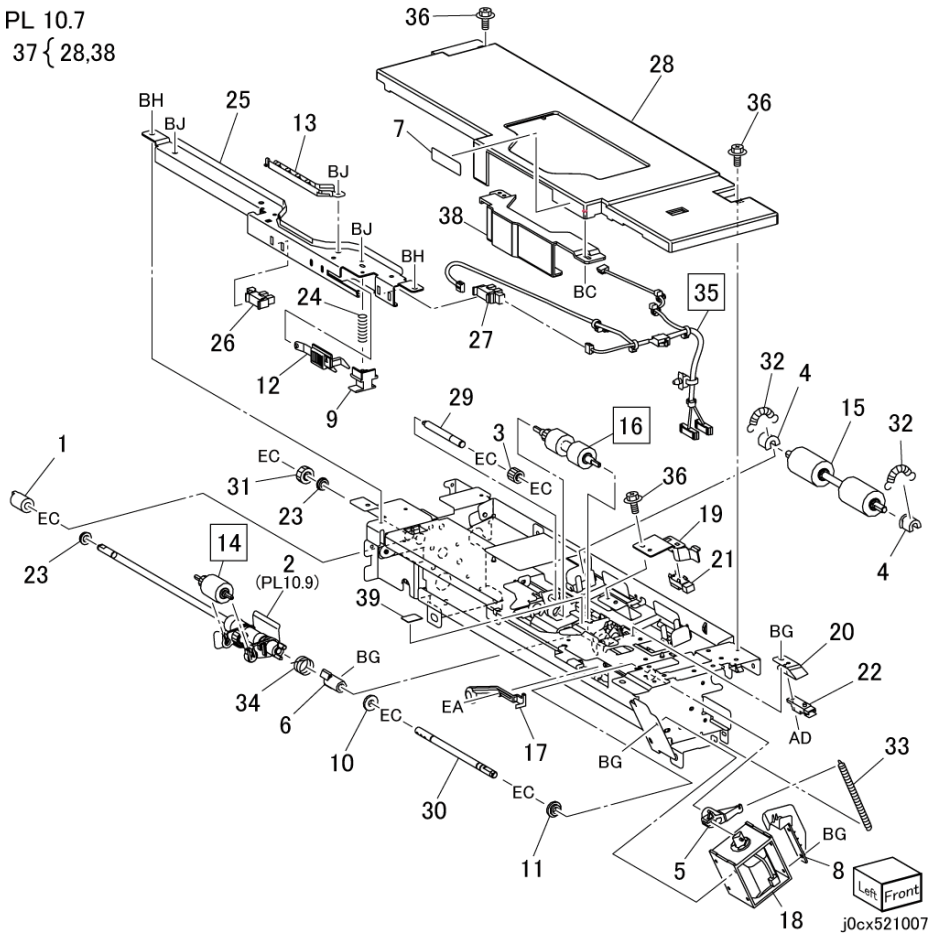
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD413W88650／	AL	Bearing
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD413W66250／	AL	Bearing
	0TD413W60270／	AS	Bearing
16	－－－－－	-----	
17	－－－－－	-----	

PL 10.6



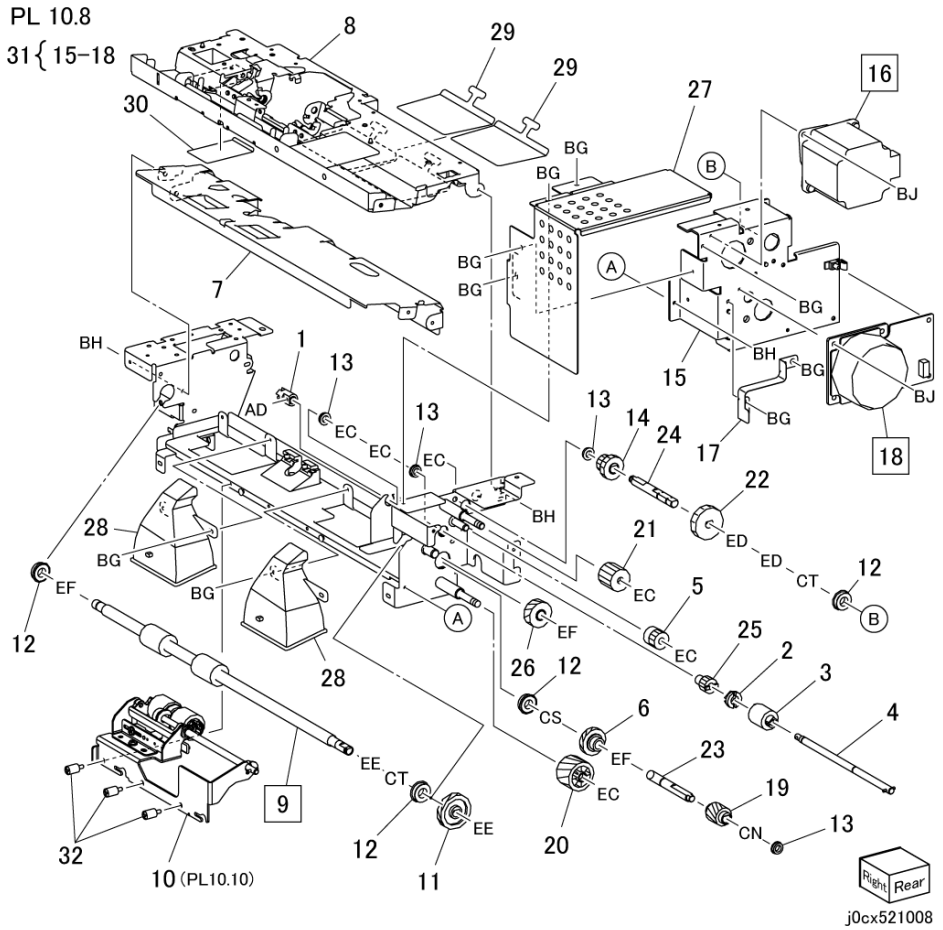
【PL10.7】
Tray 1/2 Feeder Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD005K8175X/	AQ	Oneway Clutch
2	0TD006K8807X/	BM	Feed Shaft Assembly
3	0TD807E2720X/	AZ	Gear (20)
4	0TD019E7152X/	AU	Holder
5	0TD011E1503X/	AX	Nudger Lever
6	0TD012E1738X/	AV	Nudger Link
7	0TD970E7981X/	BE	LABEL-PAPER GUIDE ADJUSTER(FEEDER)
8	-----	-----	
9	0TD038E3719X/	AG	Guide
10	0TD413W11560/	BB	Bearing
11	0TD413W75659/	AF	Bearing
12	0TD011E2424X/	AZ	Lever
13	0TD032E2153X/	AN	Harness Guide
14	0TD059K5813X/	BB	ROLL ASSY NUD
15	0TD059K5731X/	BB	Pinch Roll
16	0TD059K6158X/	BC	ROLL ASSY-FEED
17	0TD120E3507X/	AT	Actuator
18	0TD121K3134X/	CA	Tray 1/2 Nudger Solenoid
19	-----	-----	
20	-----	-----	
21	0TD930W00212/	AS	Pre and registration sensors
22	0TD930W00211/	AS	HCF Tray 1/2 Pre Feed Sensor
23	0TD413W66250/	AL	Bearing
	0TD413W60270/	AS	Bearing
24	0TD809E8119X/	AN	Compression Spring
25	-----	-----	
26	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
27	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
28	-----	-----	
29	0TD806E2877X/	AW	Shaft
30	0TD806E2742X/	AW	Shaft
31	0TD807E0199X/	AL	Gear (16)
32	0TD809E8695X/	AT	Tension Spring
33	0TD809E5235X/	AG	Tension Spring
34	0TD809E5236X/	AH	Torsion Spring
35	0TD962K7248X/	BA	(SCC) Feeder Wire Harness
36	-----	-----	
37	0TD948K4549X/	BV	COVER ASSY-FDR NB
38	-----	-----	
39	-----	-----	



【PL10.8】
Tray 1/2 Feeder Assembly (2 of 2)

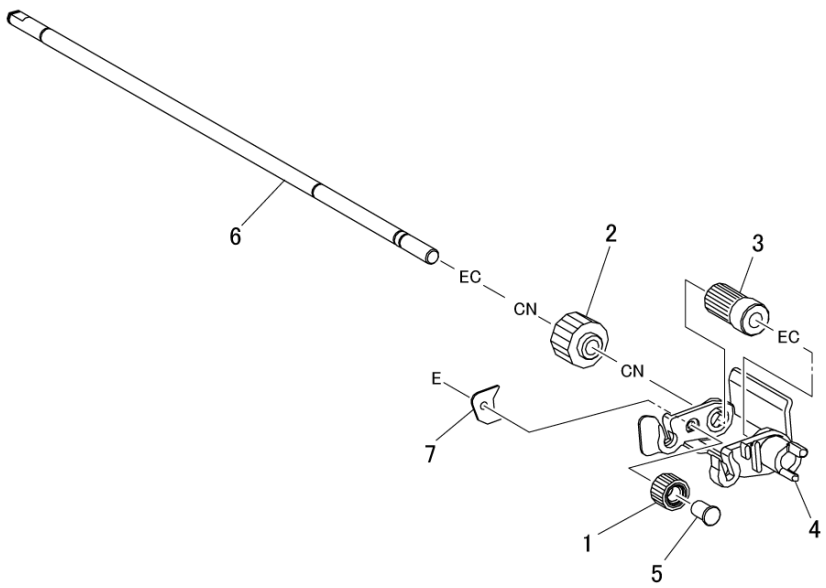
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD005E1850X/	AS	Coupling
2	0TD005E8332X/	AP	Collar
3	0TD005K0957X/	BF	Friction Clutch
4	0TD006K8772X/	BC	Shaft
5	0TD007K8899X/	AW	Gear (18)
6	0TD007K9382X/	BA	Gear (28)
7	-----	-----	
8	-----	-----	
9	0TD059K5814X/	BH	Tray 1/2 Take Away Roll
10	0TD859K2886X/	BV	ROLL ASSY-BRACKET RETARD NB
11	0TD407W08737/	AX	Gear (37)
12	0TD413W08350/	AK	Bearing
13	0TD413W66250/	AL	Bearing
14	0TD807E0197X/	BA	Gear (17/25)
15	-----	-----	
16	0TD127K5953X/	BU	(SCC) Tray 1/2 Feed Motor
17	-----	-----	
18	0TD127K5734X/	BZ	ROLL ASSY-TA
19	0TD807E2460X/	AZ	Gear (18)
20	0TD807E2461X/	AY	Gear (30)
21	0TD007K1575X/	AV	Gear (19)
22	0TD807E0195X/	AR	Gear (28)
23	0TD806E2584X/	BA	Shaft
24	0TD806E2585X/	AZ	Shaft
25	0TD807E0200X/	BF	Gear (15)
26	0TD807E0202X/	BF	Gear (27)
27	-----	-----	
28	-----	-----	
29	0TD038E3841X/	AU	Guide
30	0TD038E3840X/	AV	Guide
31	0TD049K5701X/	CC	BRACKET ASSY-FDR35 DRV NB
32	-----	-----	
	-----	-----	



【PL10.9】
Feed Shaft Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	

PL 10.9



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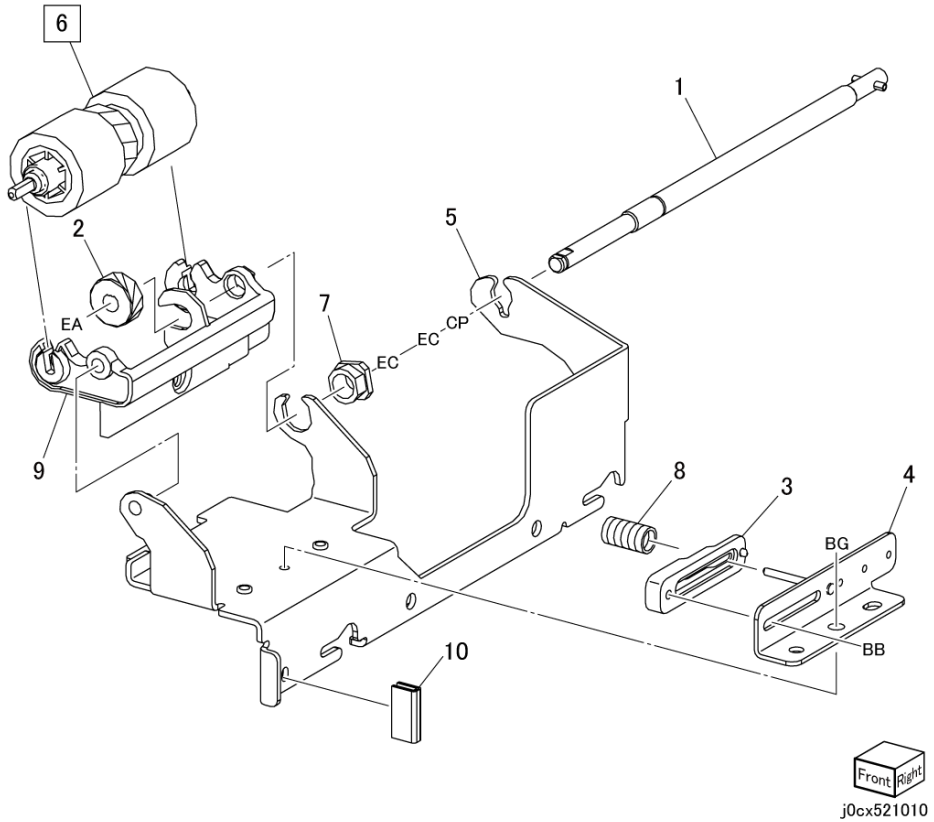
【PL10.10】
Retard Roll Assembly

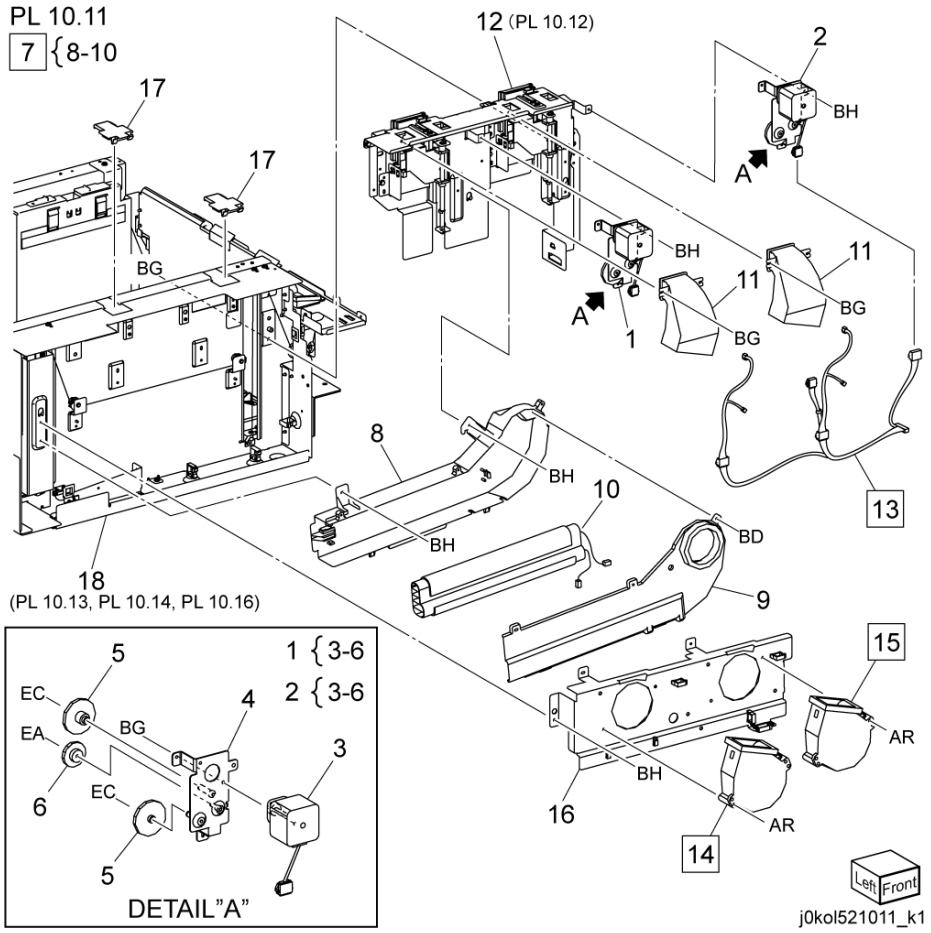
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD006K8771X／	AX	Shaft
2	0TD807E0265X／	BA	Gear (15)
3	0TD010E9332X／	AU	Slide
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD859K2733X／	AX	ROLL ASSY-RETARD
7	0TD013E8826X／	AF	Bearing
8	0TD809E5234X／	AG	Compression Spring
9	－－－－－	-----	
10	－－－－－	-----	

PL 10.10



【PL10.11】
Tray 1/2 Air System

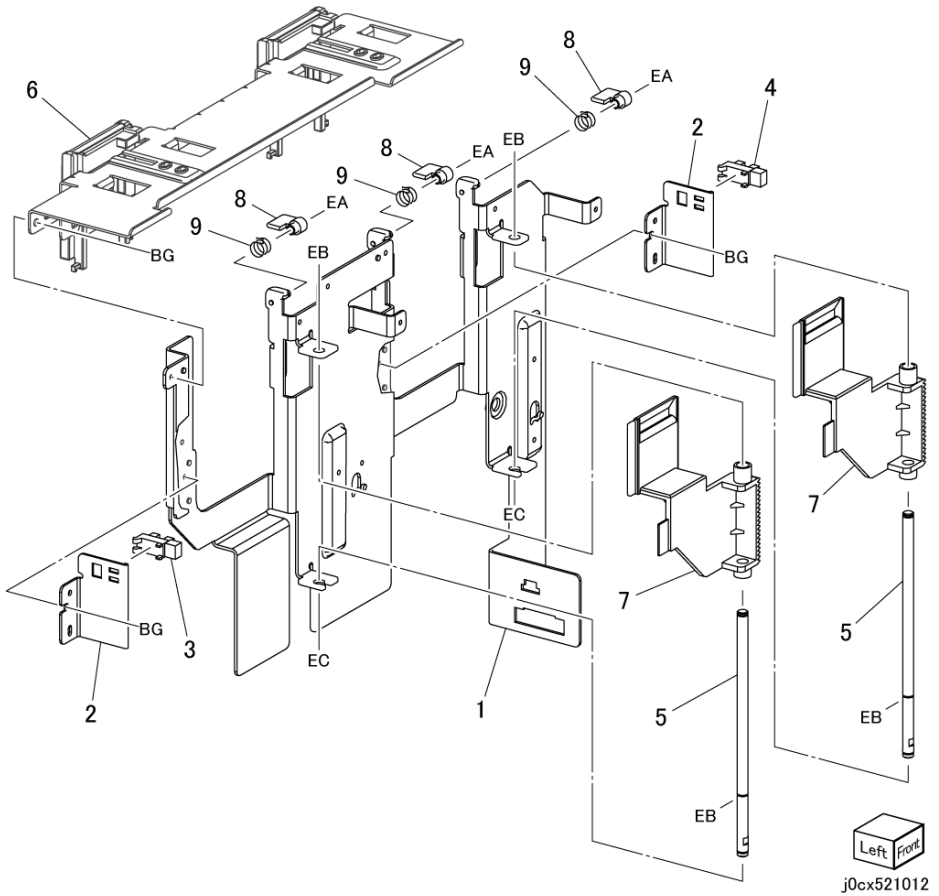
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD049K1736X/	BV	Tray 1/2 End Shutter Motor Assembly (Item 3-6)
2	0TD049K1736X/	BV	Tray 1/2 End Shutter Motor Assembly (Item 3-6)
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD054K4001X/	BV	Heater and Duct (Item 8-10)
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD815K0488X/	BZ	Shutter Plate Assembly
13	0TD962K7249X/	BA	(SCC) Wire Harness
14	0TD127K5951X/	BQ	(SCC) Tray 1/2 Front Blower Fan
15	0TD127K5951X/	BQ	(SCC) Tray 1/2 Front Blower Fan
16	-----	-----	
17	-----	-----	
18	-----	-----	



【PL10.12】
Shutter Plate Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD809E1728X／	AY	Torsion Spring

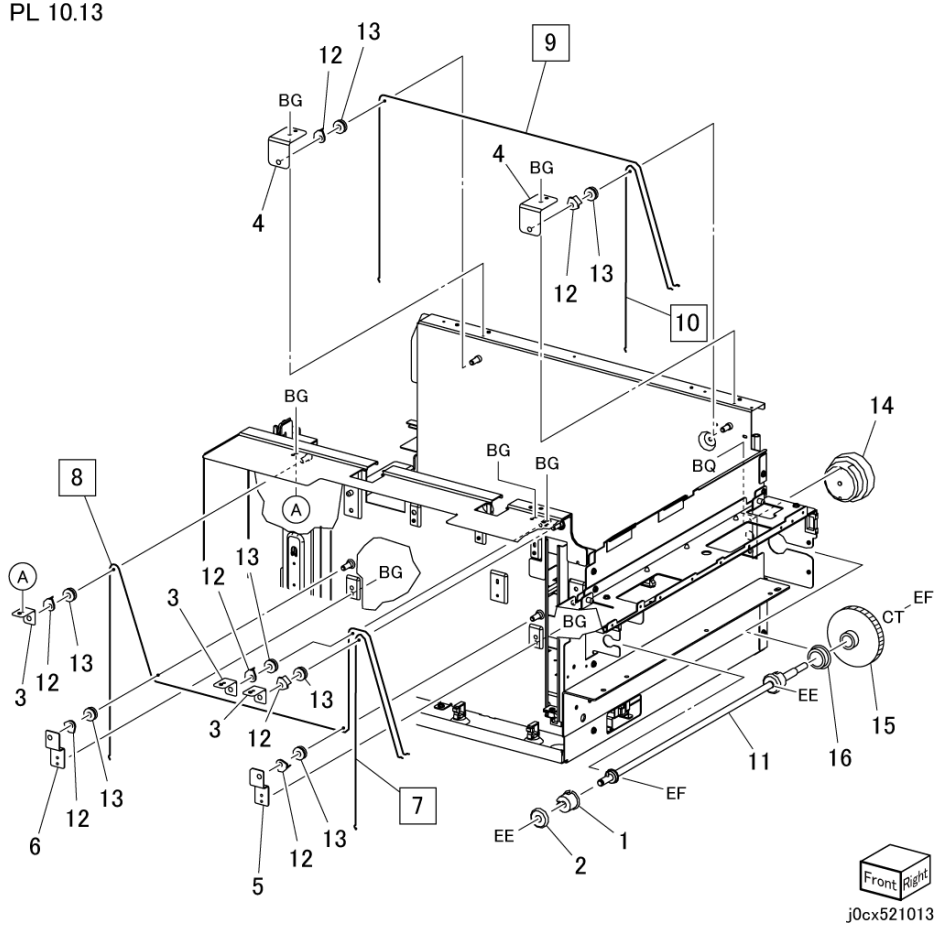
PL 10.12



【PL10.13】
Tray 1/2 Front/Rear Cable

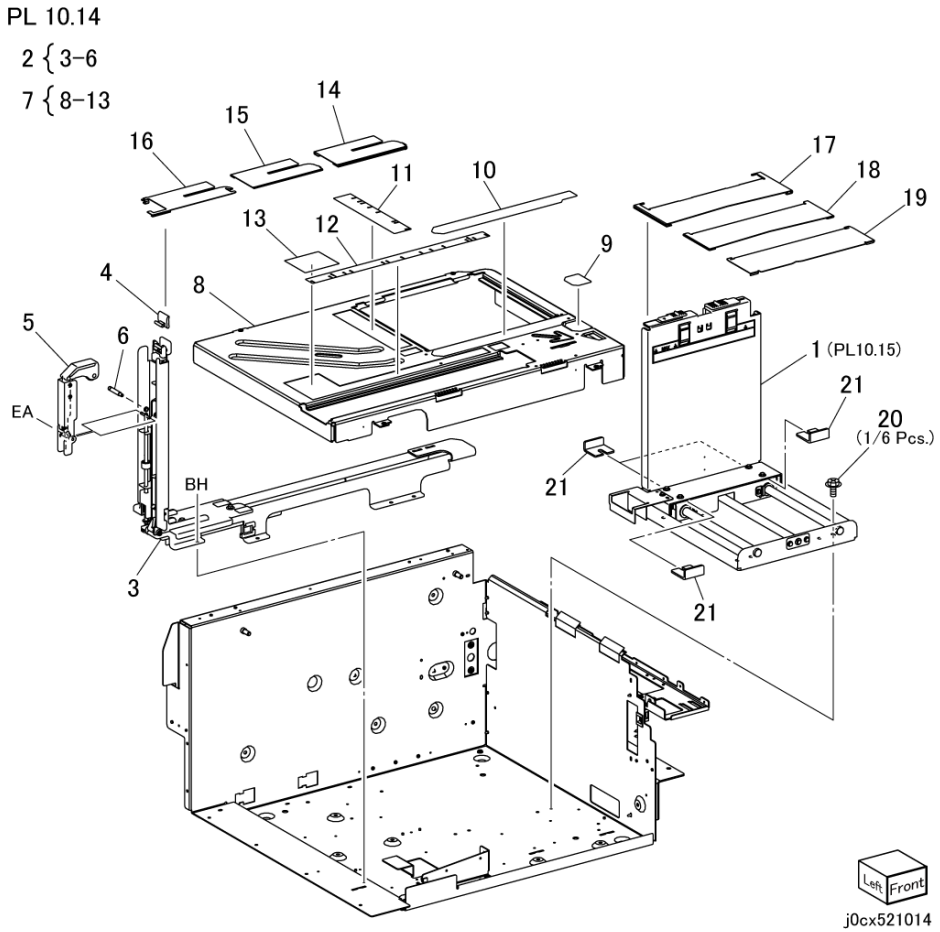
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD020E3278X/	AR	Pulley
2	0TD032E2567X/	AX	Cable Guide
3	0TD868E3401X/	AZ	Bracket
4	0TD868E1795X/	AV	Bracket
5	0TD830E2280X/	AG	Bracket
6	0TD830E2310X/	AK	Bracket
7	0TD012E1721X/	BE	FRONT CABLE SHORT FS
8	0TD012E1722X/	BG	FRONT CABLE SHORT FL
9	0TD012E1724X/	BG	REAR CABLE SHORT FL
10	0TD012E1723X/	BD	REAR CABLE SHORT FS
11	-----	-----	
12	0TD032E2768X/	AF	GUIDE
13	0TD020E4440X/	AW	PULLEY
14	0TD019K0829X/	BC	Brake
15	0TD007K8366X/	BA	Gear Assembly
16	0TD413W12350/	AR	Bearing

PL 10.13



【PL10.14】
Tray 1/2 Side/End Guide

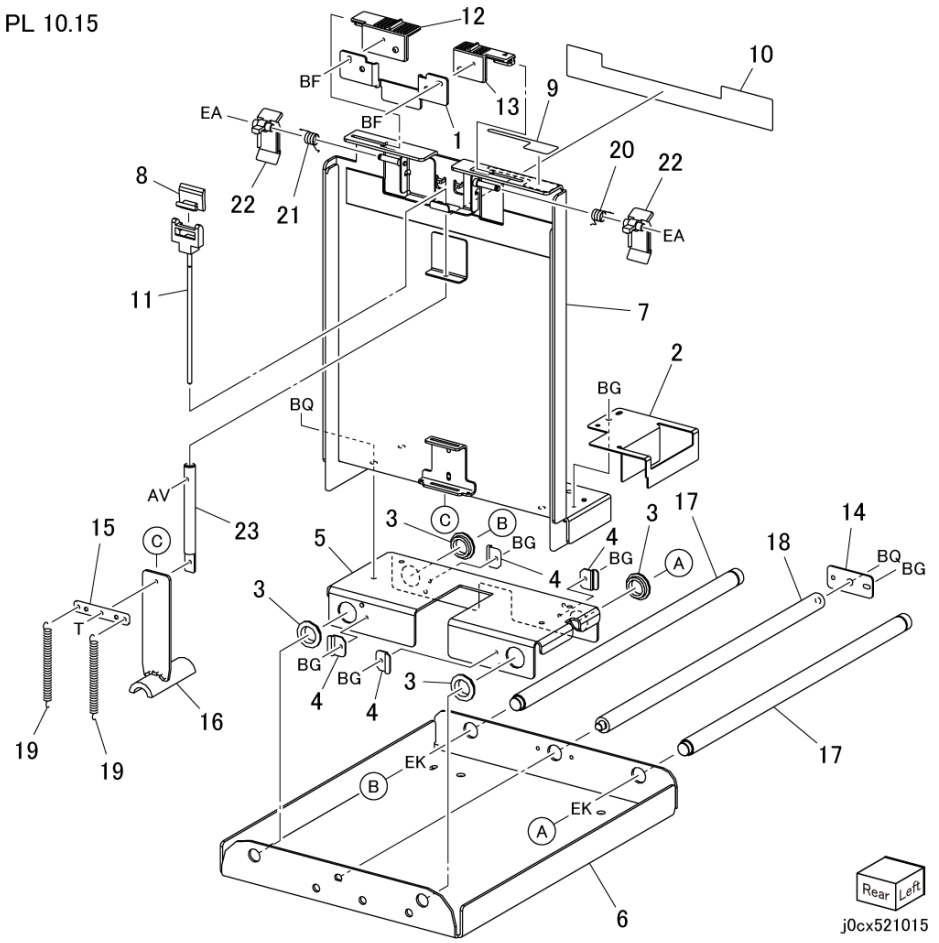
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD038K2616X/	CB	GUIDE ASSY-SIDE32 NB
2	0TD038K2615X/	CB	GUIDE ASSY-END NB
3	-----	-----	
4	0TD803E3456X/	BE	KNOB-NB
5	-----	-----	
6	-----	-----	
7	0TD815K2630X/	BZ	PLATE ASSY-BTM PF32 NB
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	0TD970E7985X/	BF	LABEL-PAPER REGISTRATION SIDE GUIDE
12	0TD970E7986X/	BF	LABEL-PAPER REGISTRATION END GUIDE
13	0TD970E7428X/	BF	LABEL-SET NOTE
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	0TD014E6321X/	AT	Spacer



【PL10.15】
Tray 1/2 Side Guide Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	- - - - -	-----	
2	- - - - -	-----	
3	- - - - -	-----	
4	- - - - -	-----	
5	- - - - -	-----	
6	- - - - -	-----	
7	- - - - -	-----	
8	0TD803E3456X／	BE	KNOB-NB
9	- - - - -	-----	
10	- - - - -	-----	
11	- - - - -	-----	
12	- - - - -	-----	
13	- - - - -	-----	
14	- - - - -	-----	
15	- - - - -	-----	
16	- - - - -	-----	
17	- - - - -	-----	
18	- - - - -	-----	
19	- - - - -	-----	
20	- - - - -	-----	
21	- - - - -	-----	
22	- - - - -	-----	
23	- - - - -	-----	

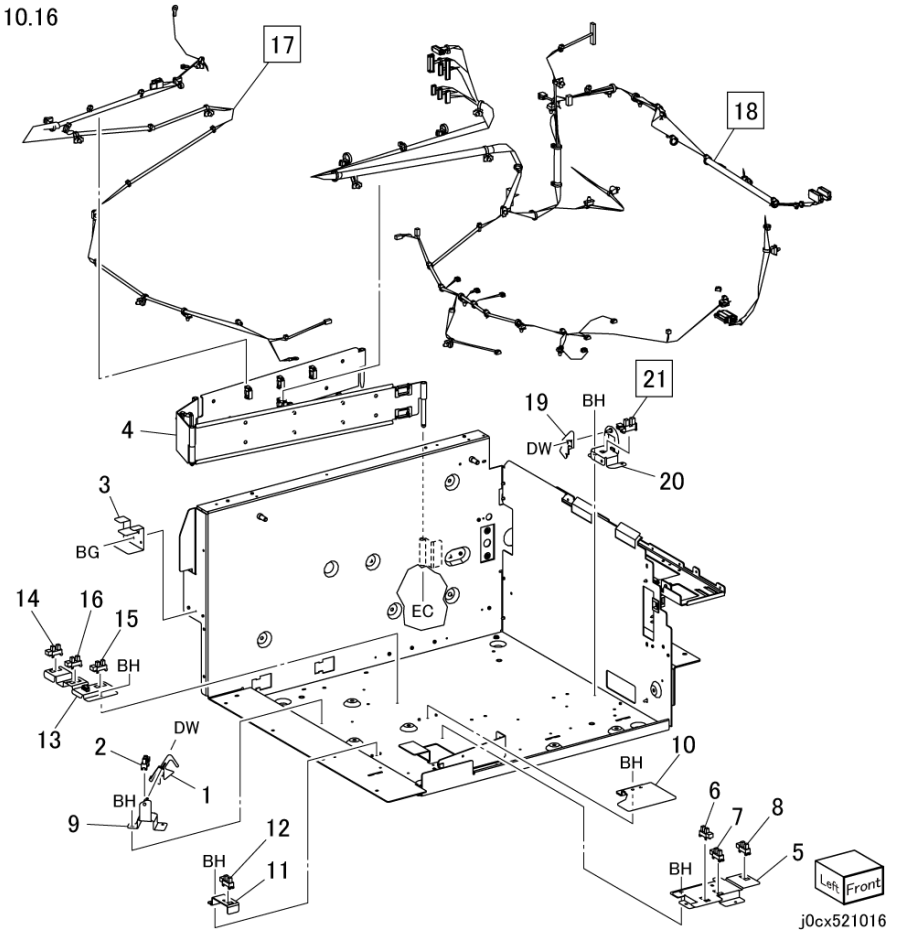
PL 10.15



【PL10.16】
Tray 1/2 Size Sensor

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD120E2135X/	BA	Actuator
2	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
3	0TD120E3261X/	AX	Actuator
4	-----	-----	
5	-----	-----	
6	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
7	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
8	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
13	-----	-----	
14	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
15	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
16	0TD130E2147X/	AS	Tray 1/2 Front Misset Sensor
17	0TD962K6610X/	BE	(SCC) AC Wire Harness
18	0TD962K7290X/	BX	TRAY DC HARNESS
19	0TD120E3122X/	AZ	Actuator
20	-----	-----	
21	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor

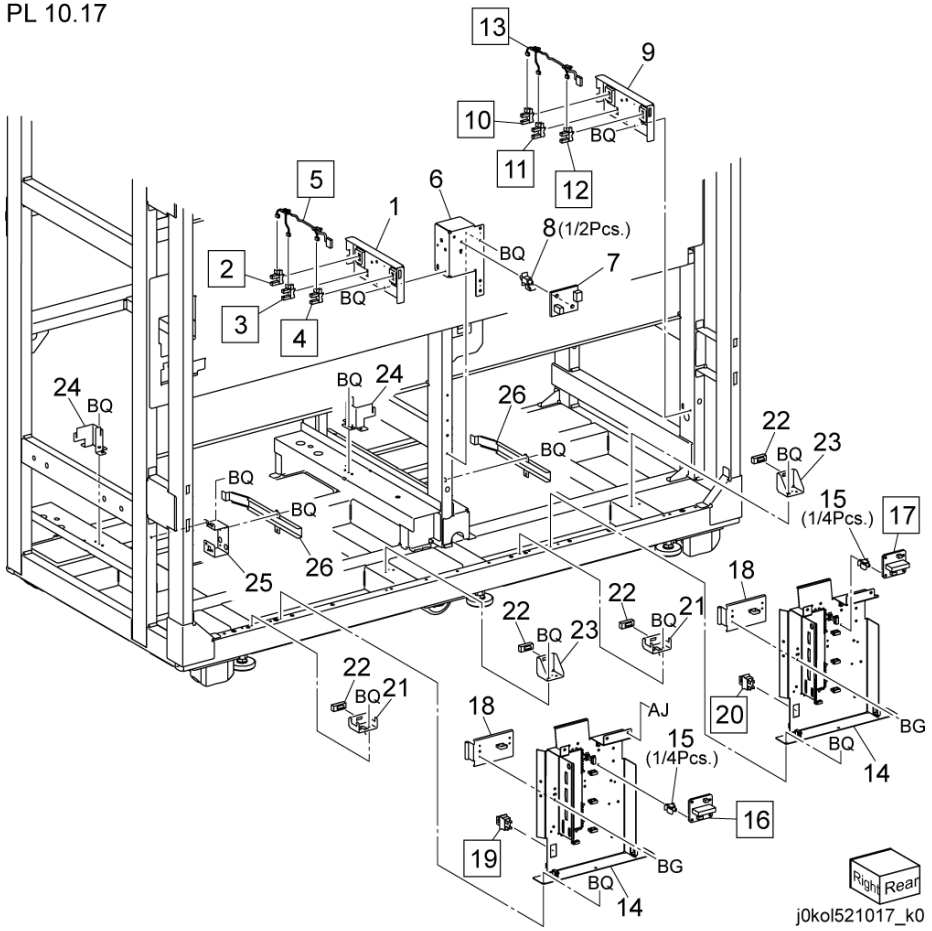
PL 10.16



【PL10.17】
Tray 1/2 Interlock Switch and Tray Shift Sensor

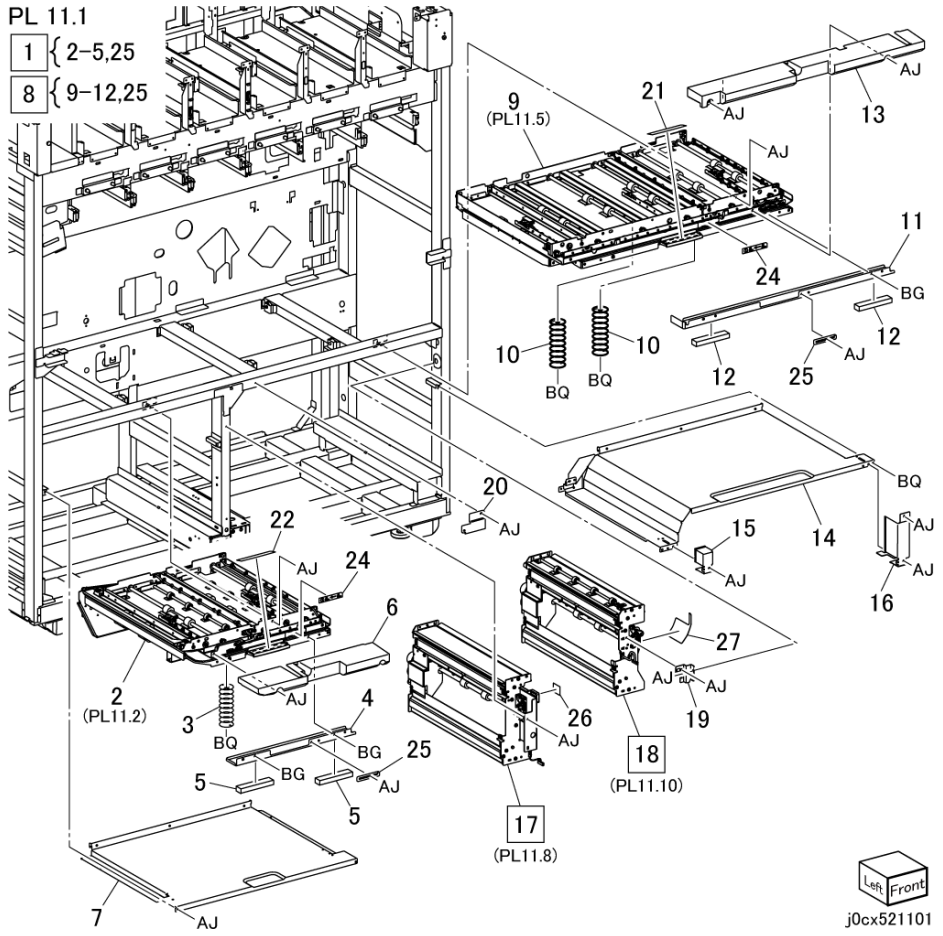
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD130E9494X／	AY	TRAY SENSOR
3	0TD130E9494X／	AY	TRAY SENSOR
4	0TD130E9494X／	AY	TRAY SENSOR
5	0TD962K7293X／	BC	(SCC) Wire Harness
6	－－－－－	-----	
7	0TD130K8798X／	AY	Temp & Humidity Sensor
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD130E9494X／	AY	TRAY SENSOR
11	0TD130E9494X／	AY	TRAY SENSOR
12	0TD130E9494X／	AY	TRAY SENSOR
13	0TD962K7293X／	BC	(SCC) Wire Harness
14	－－－－－	-----	
15	－－－－－	-----	
16	0TD160K7073X／	CB	(SCC) Tray 2 Air Heater PWB
17	0TD160K7073X／	CB	(SCC) Tray 2 Air Heater PWB
18	－－－－－	-----	
19	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
20	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	－－－－－	-----	
	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	
23	－－－－－	-----	
24	－－－－－	-----	
25	－－－－－	-----	
26	－－－－－	-----	

PL 10.17



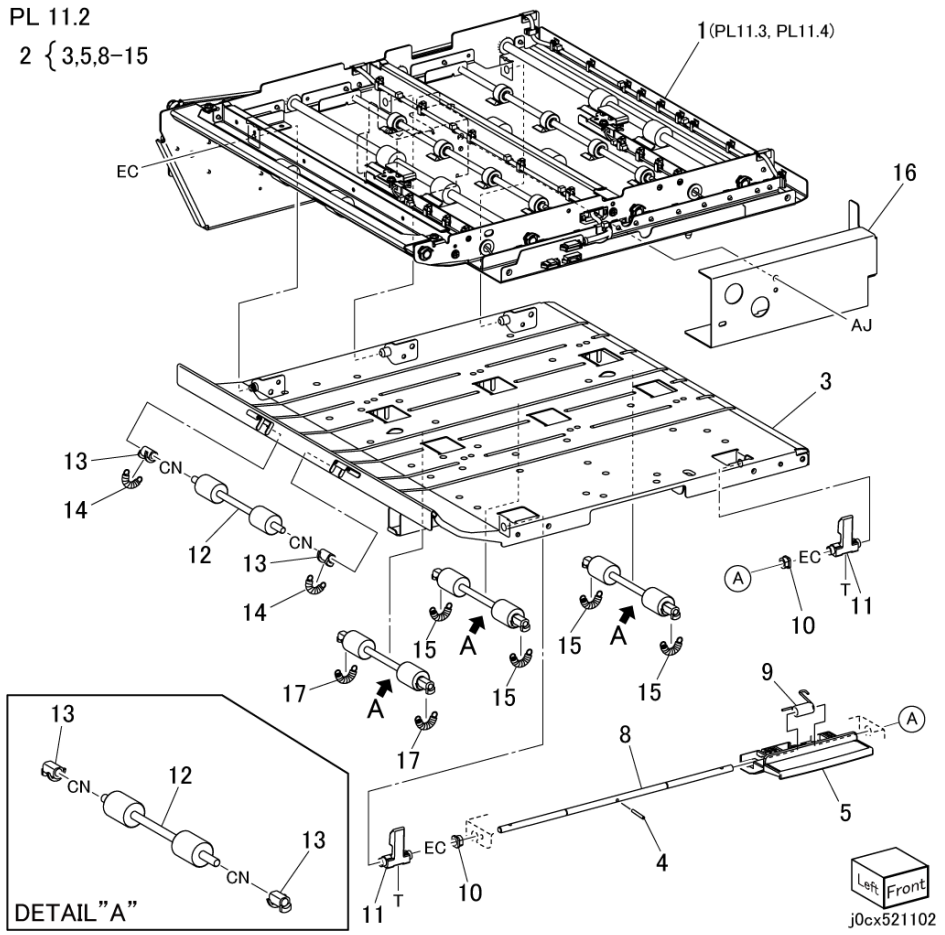
【PL11.1】
H-Tra 1/2 Assembly and J-Tra 1/2 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K2847X/	DQ	TRANSPORT ASSY-H1 TOP NB
2	0TD859K0591X/	CZ	H-Tra 1
3	0TD809E9174X/	AQ	Spring
4	0TD848E4883X/	BE	Chute Cover
5	0TD004E1887X/	AH	Cushion
6	-----	-----	
7	-----	-----	
8	0TD859K2850X/	DV	TRANSPORT ASSY-H2 TOP NB
9	-----	-----	
10	0TD809E9174X/	AQ	Spring
11	-----	-----	
12	0TD004E1887X/	AH	Cushion
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	0TD859K2854X/	DF	TRANSPORT ASSY-J1 NB
18	0TD859K2856X/	CV	TRANSPORT ASSY-J2 NB
19	-----	-----	
20	-----	-----	
21	-----	-----	
22	-----	-----	
23	-----	-----	
24	-----	-----	
25	-----	-----	
26	-----	-----	
27	-----	-----	



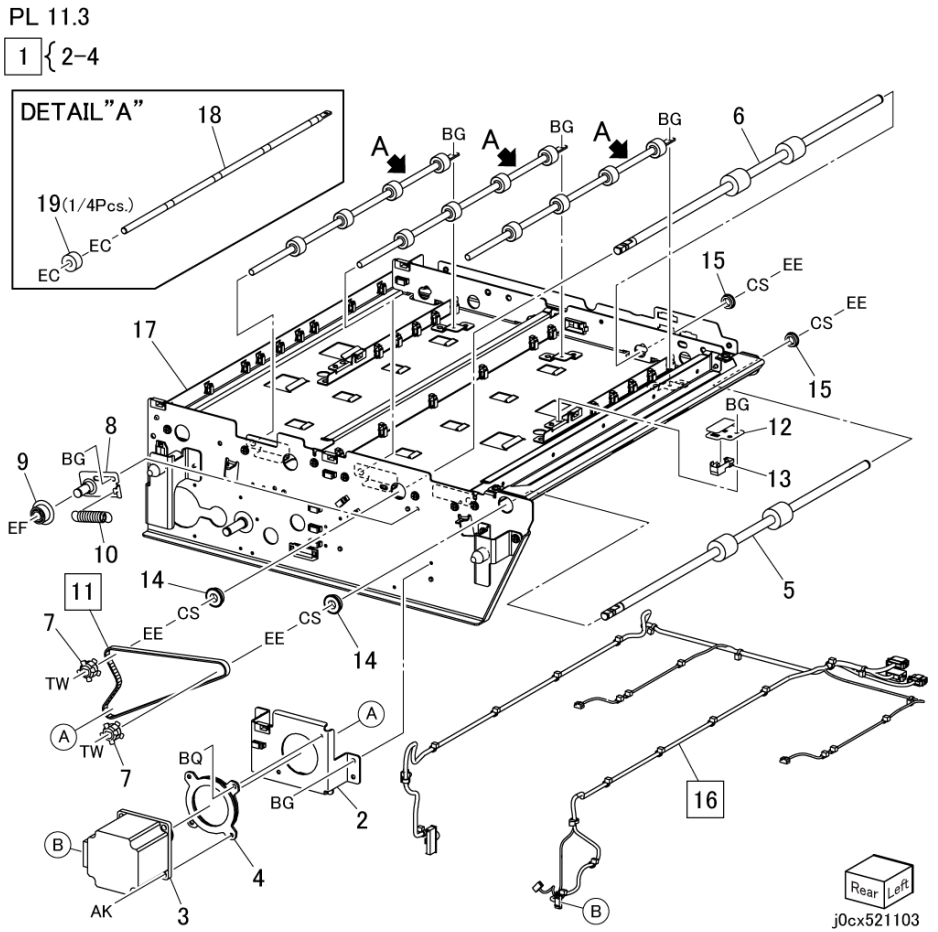
【PL11.2】
H-Tra 1 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K0591X/	CZ	H-Tra 1
2	0TD859K2849X/	CE	TRANSPORT ASSY-LOW H1 NB
3	0TD054K3984X/	CA	H-Tra 1 Lower Chute
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	0TD019E7575X/	AK	Latch
12	0TD059K5556X/	AS	Pinch Roll
13	0TD013E2705X/	AQ	Bearing
14	0TD899E1651X/	AU	Spring
15	0TD809E9240X/	AH	Spring
16	-----	-----	
17	0TD899E1650X/	AT	Spring



【PL11.3】
H-Tra 1 Upper Transport Assembly (1 of 2)

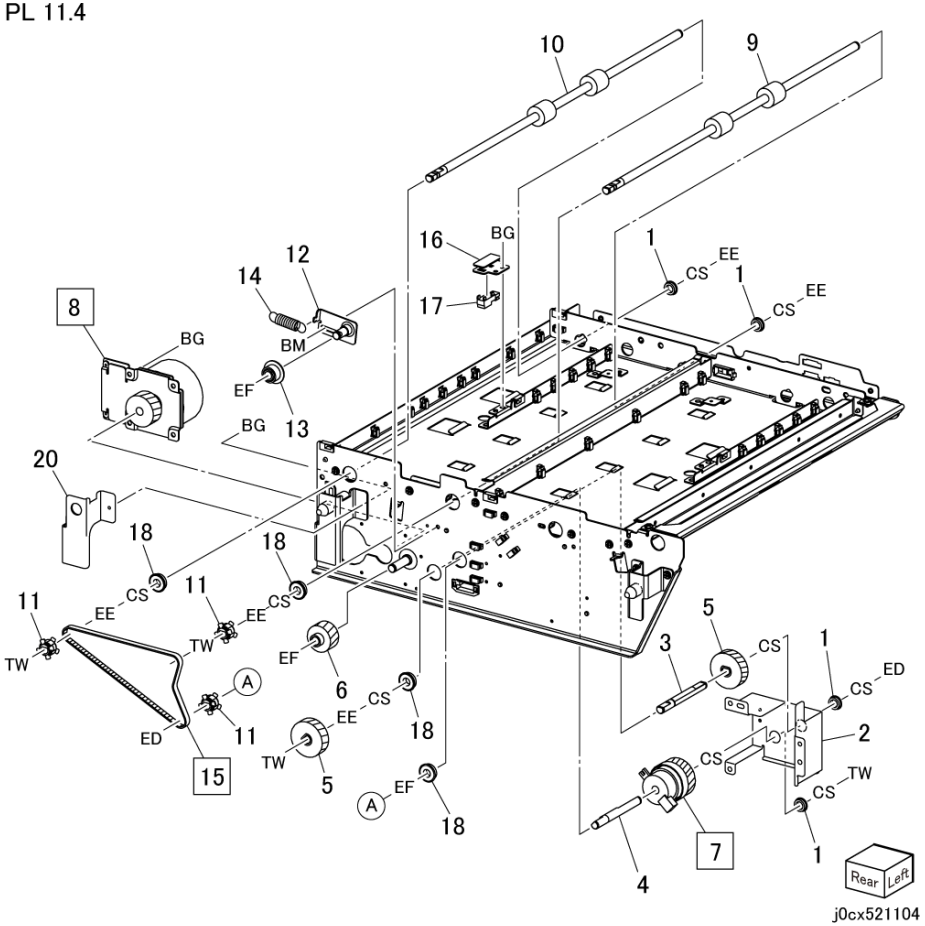
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD068K6360X／	BU	H-Tra 1 Motor 1 Assembly (Item 2-4)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD859K1186X／	BL	H-Tra Roll 1
6	0TD859K1185X／	BD	H-Tra Roll 2
7	0TD020E4721X／	BF	Pulley
8	－－－－－	-----	
9	0TD499W17081／	AX	Idler Pulley
10	0TD809E8773X／	AP	Spring
11	0TD423W38654／	AT	H-Tra 1 Belt 1
12	－－－－－	-----	
13	0TD930W00212／	AS	Pre and registration sensors
14	0TD413W08350／	AK	Bearing
15	0TD413W88650／	AL	Bearing
16	0TD962K7119X／	BF	(SCC) Wire Harness (H-Tra 1)
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	



【PL11.4】
H-Tra 1 Upper Transport Assembly (2 of 2)

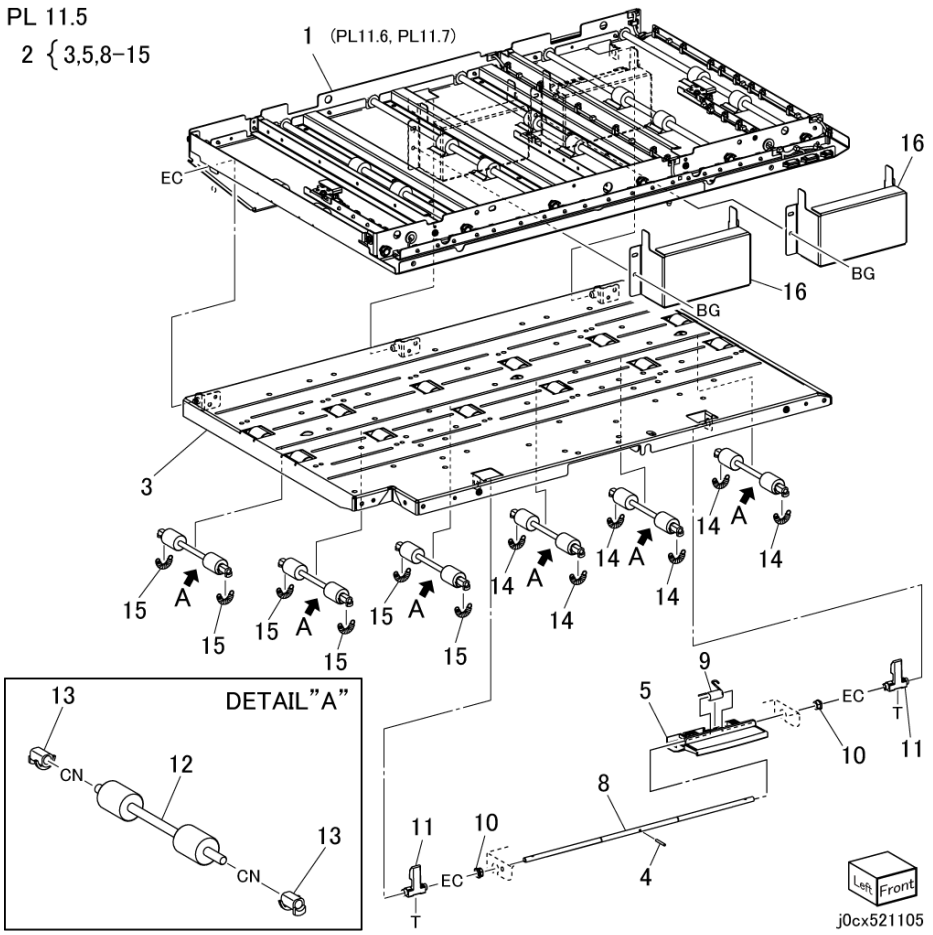
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD413W88650/	AL	Bearing
2	-----	-----	
3	0TD806E2867X/	AS	Pulley Shaft
4	0TD806E2866X/	AS	Clutch Shaft
5	0TD807E2719X/	AL	Gear (Z41)
6	0TD807E2717X/	AX	Gear (Z31)
7	0TD121K4553X/	BQ	(SCC) H-Tra 1 Clutch
8	0TD127K5949X/	BS	(SCC) H-Tra 1 Motor 2
9	0TD859K1185X/	BD	H-Tra Roll 2
10	0TD859K1185X/	BD	H-Tra Roll 2
11	0TD020E4721X/	BF	Pulley
12	-----	-----	
13	0TD499W17081/	AX	Idler Pulley
14	0TD809E8773X/	AP	Spring
15	0TD423W38654/	AT	H-Tra 1 Belt 1
16	-----	-----	
17	0TD930W00212/	AS	Pre and registration sensors
18	0TD413W08350/	AK	Bearing
19	-----	-----	
20	-----	-----	

PL 11.4



【PL11.5】
H-Tra 2 Assembly

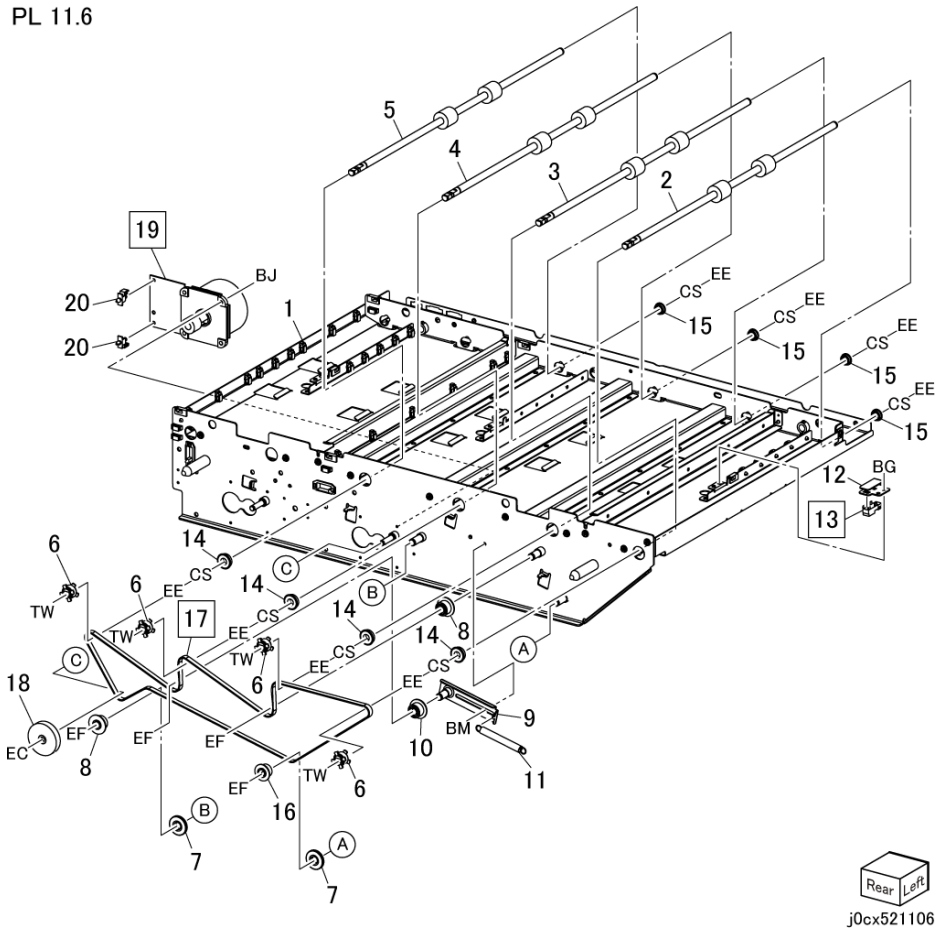
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K0585X/	DB	H-Tra 2 Assembly (Item 9-12, 25)
2	0TD859K2852X/	CH	TRANSPORT ASSY-LOW NB
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	0TD019E7575X/	AK	Latch
12	0TD059K5556X/	AS	Pinch Roll
13	0TD013E2705X/	AQ	Bearing
14	0TD899E1650X/	AT	Spring
15	0TD809E9240X/	AH	Spring
16	-----	-----	



【PL11.6】
H-Tra 2 Upper Transport Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD859K1185X／	BD	H-Tra Roll 2
3	0TD859K1185X／	BD	H-Tra Roll 2
4	0TD859K1185X／	BD	H-Tra Roll 2
5	0TD859K1185X／	BD	H-Tra Roll 2
6	0TD020E4721X／	BF	Pulley
7	0TD005E2850X／	AG	Flange
8	0TD499W17081／	AX	Idler Pulley
9	－－－－－	-----	
10	0TD499W17081／	AX	Idler Pulley
11	0TD809E8775X／	AP	Tension Spring
12	－－－－－	-----	
13	0TD930W00212／	AS	Pre and registration sensors
14	0TD413W08350／	AK	Bearing
15	0TD413W88650／	AL	Bearing
16	0TD499W14624／	AX	Pulley
17	0TD023E2886X／	AX	H-Tra 2 Belt (OUT)
18	0TD020K1719X／	BG	Pulley/Gear (24T/Z44)
19	0TD127K6128X／	BV	(SCC) H-Tra 2 Out Motor
20	－－－－－	-----	

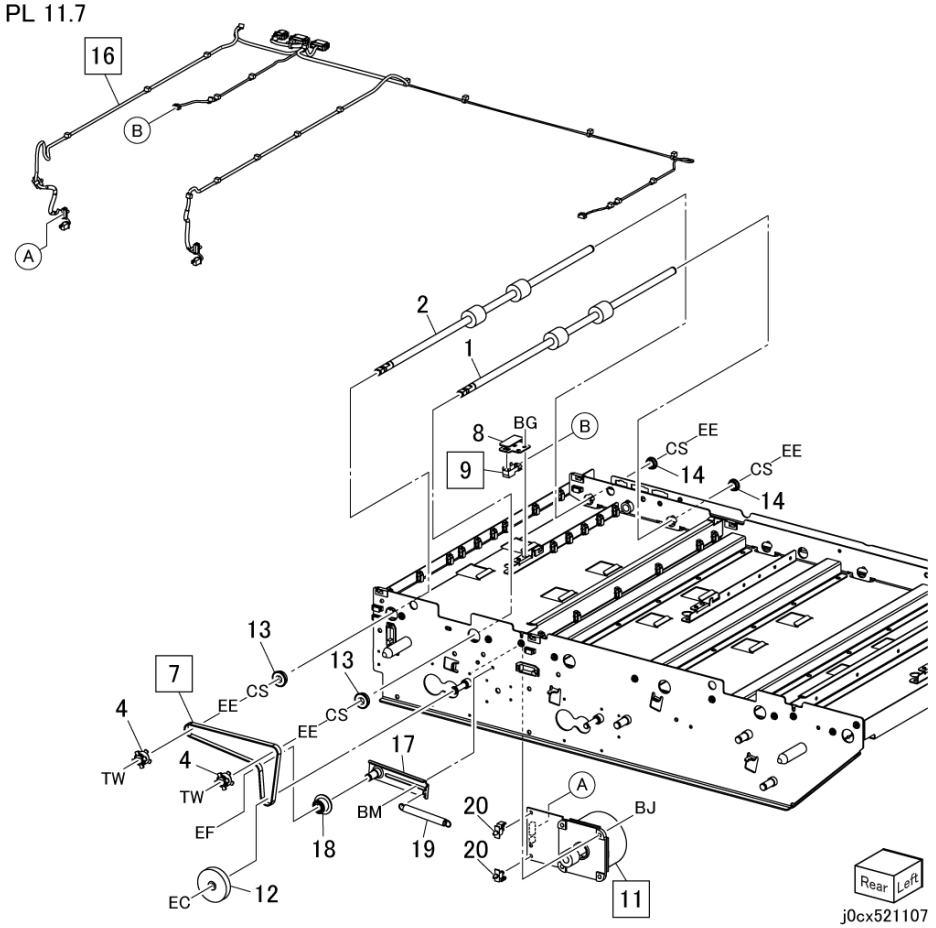
PL 11.6



【PL11.7】
H-Tra 2 Upper Transport Assembly (2 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K1185X/	BD	H-Tra Roll 2
2	0TD859K1185X/	BD	H-Tra Roll 2
3	-----	-----	
4	0TD020E4721X/	BF	Pulley
5	-----	-----	
6	-----	-----	
7	0TD423W38254/	AW	H-Tra 2 Belt (IN)
8	-----	-----	
9	0TD930W00212/	AS	Pre and registration sensors
10	-----	-----	
11	0TD127K6128X/	BV	(SCC) H-Tra 2 Out Motor
12	0TD020K1719X/	BG	Pulley/Gear (24T/Z44)
13	0TD413W08350/	AK	Bearing
14	0TD413W88650/	AL	Bearing
15	-----	-----	
16	0TD952K0884X/	BH	(SCC) Wire Harness (H-Tra 2)
17	-----	-----	
18	0TD499W17081/	AX	Idler Pulley
19	0TD809E8775X/	AP	Tension Spring
20	-----	-----	

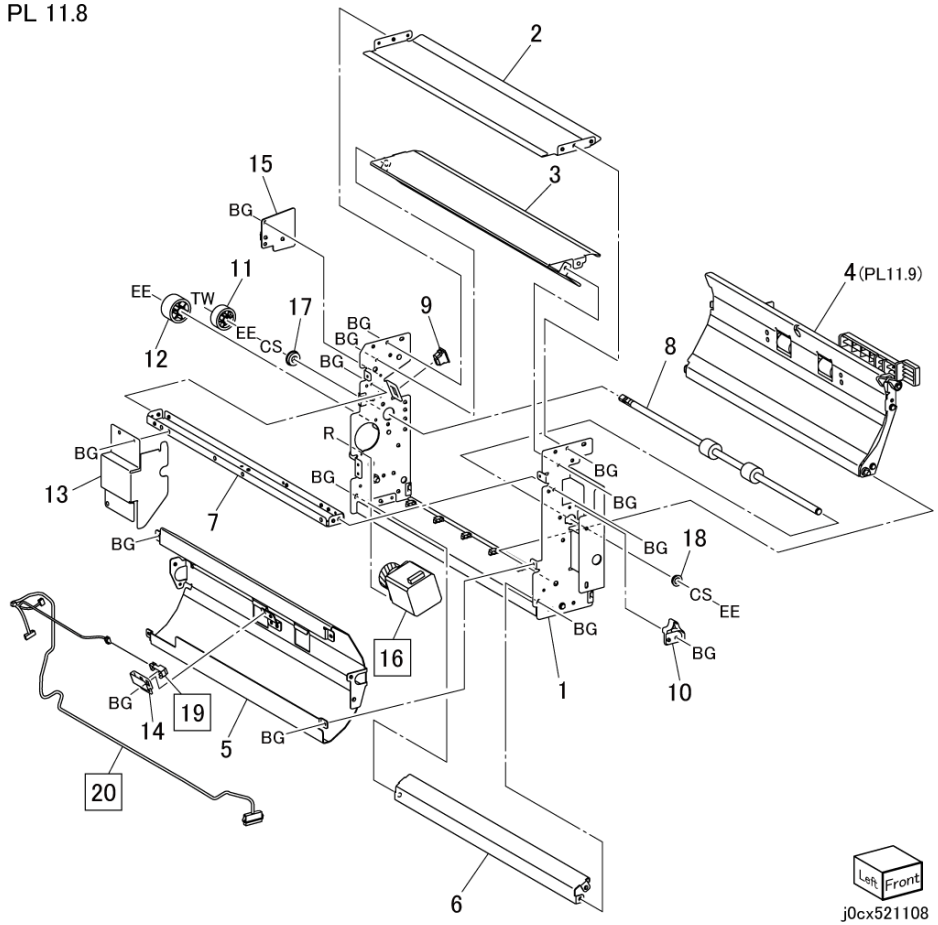
PL 11.7



【PL11.8】
J-Tra 1 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD054E4016X／	BE	J-Tra 1 Upper Chute 2
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD859K1082X／	BK	J-Tra Roll 1
9	0TD110E1573X／	BR	J-Tra 1 Chute Open Switch
10	0TD803E0235X／	AK	Latch
11	0TD807E5563X／	AP	Gear (Z34)
12	0TD807E5562X／	AP	Gear (Z31)
13	－－－－－	-----	
14	0TD868E3233X／	AK	Sensor Bracket
15	－－－－－	-----	
16	0TD127K7580X／	BQ	(SCC) J-Tra 1 Motor
17	0TD413W08350／	AK	Bearing
18	0TD413W88650／	AL	Bearing
19	0TD930W00212／	AS	Pre and registration sensors
20	0TD962K7121X／	AZ	(SCC) Wire Harness (J-Tra 1)

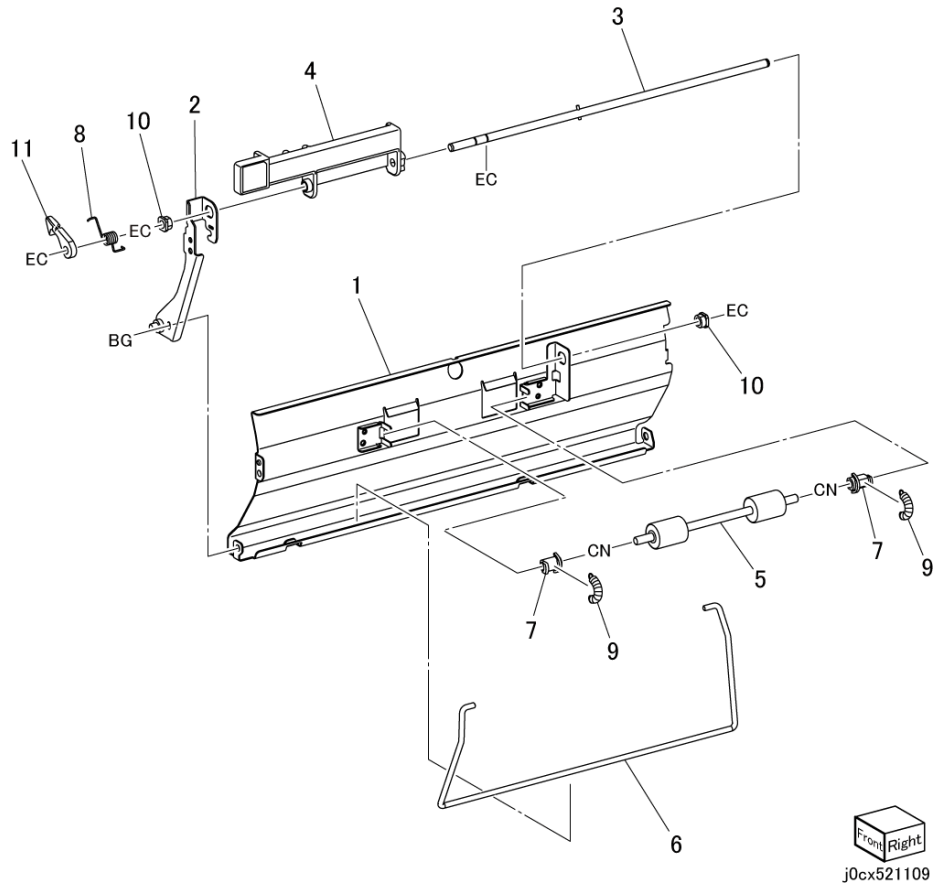
PL 11.8



【PL11.9】
J-Tra 1 Open Chute Assembly

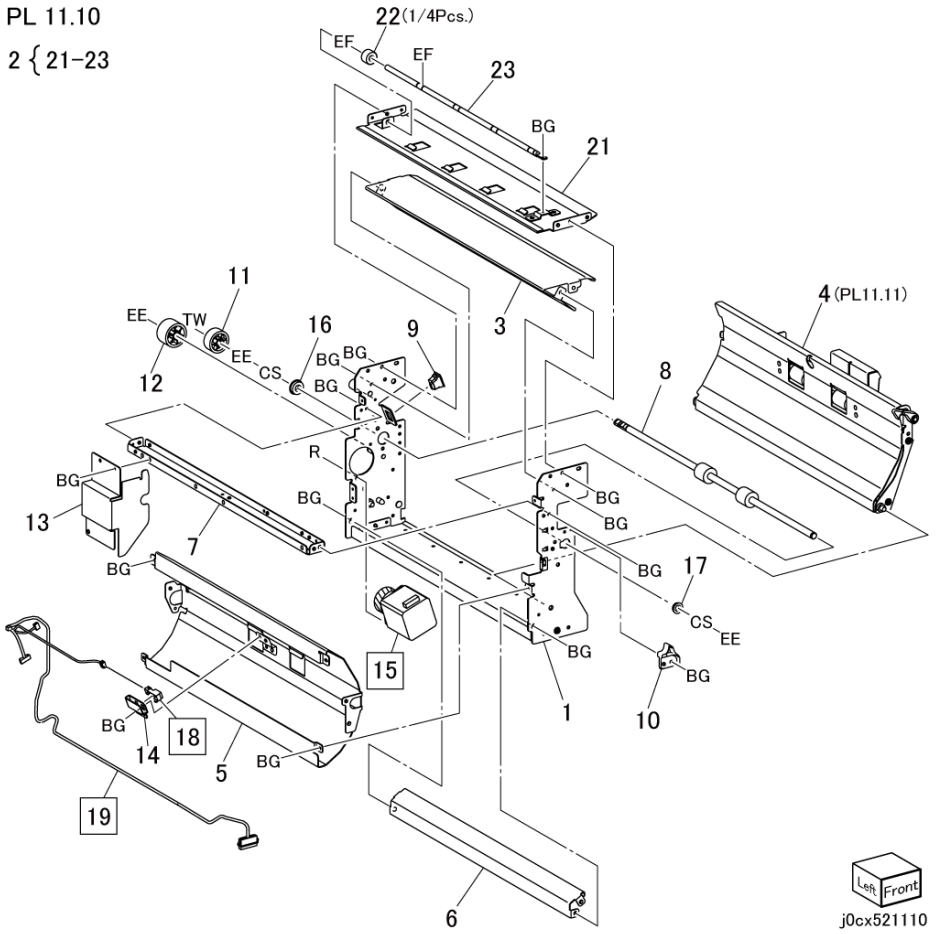
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD803E3493X／	AX	HANDLE-J1
5	0TD059K5556X／	AS	Pinch Roll
6	－－－－－	-----	
7	0TD013E2705X／	AQ	Bearing
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD019E7579X／	AK	Hook

PL 11.9



【PL11.10】
J-Tra 2 Assembly

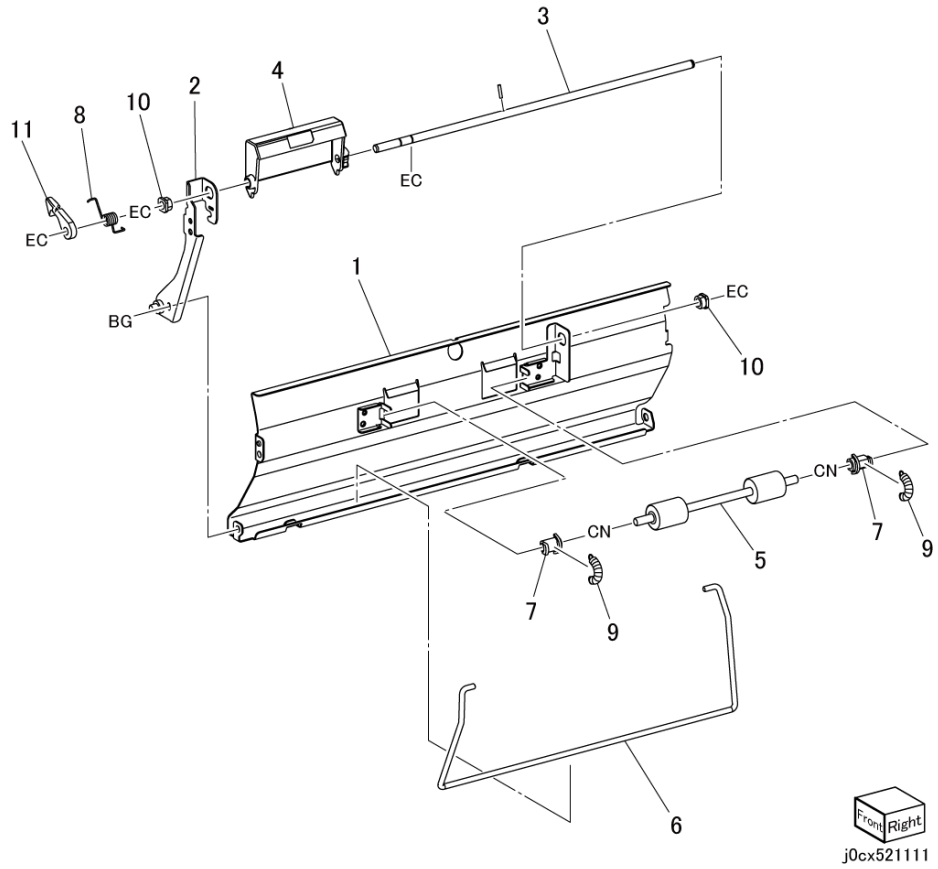
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD054K4418X／	BS	J-Tra 2 Upper Chute Assembly 1 (Item 21-23)
3	0TD054E4016X／	BE	J-Tra 1 Upper Chute 2
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD859K1082X／	BK	J-Tra Roll 1
9	0TD110E1573X／	BR	J-Tra 1 Chute Open Switch
10	0TD803E0235X／	AK	Latch
11	0TD807E5563X／	AP	Gear (Z34)
12	0TD807E5562X／	AP	Gear (Z31)
13	－－－－－	-----	
14	0TD868E3233X／	AK	Sensor Bracket
15	0TD127K7580X／	BQ	(SCC) J-Tra 1 Motor
16	0TD413W08350／	AK	Bearing
17	0TD413W88650／	AL	Bearing
18	0TD930W00212／	AS	Pre and registration sensors
19	0TD962K7122X／	AY	(SCC) Wire Harness (J-Tra 2)
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	
23	－－－－－	-----	



【PL11.11】
J-Tra 2 Open Chute Assembly

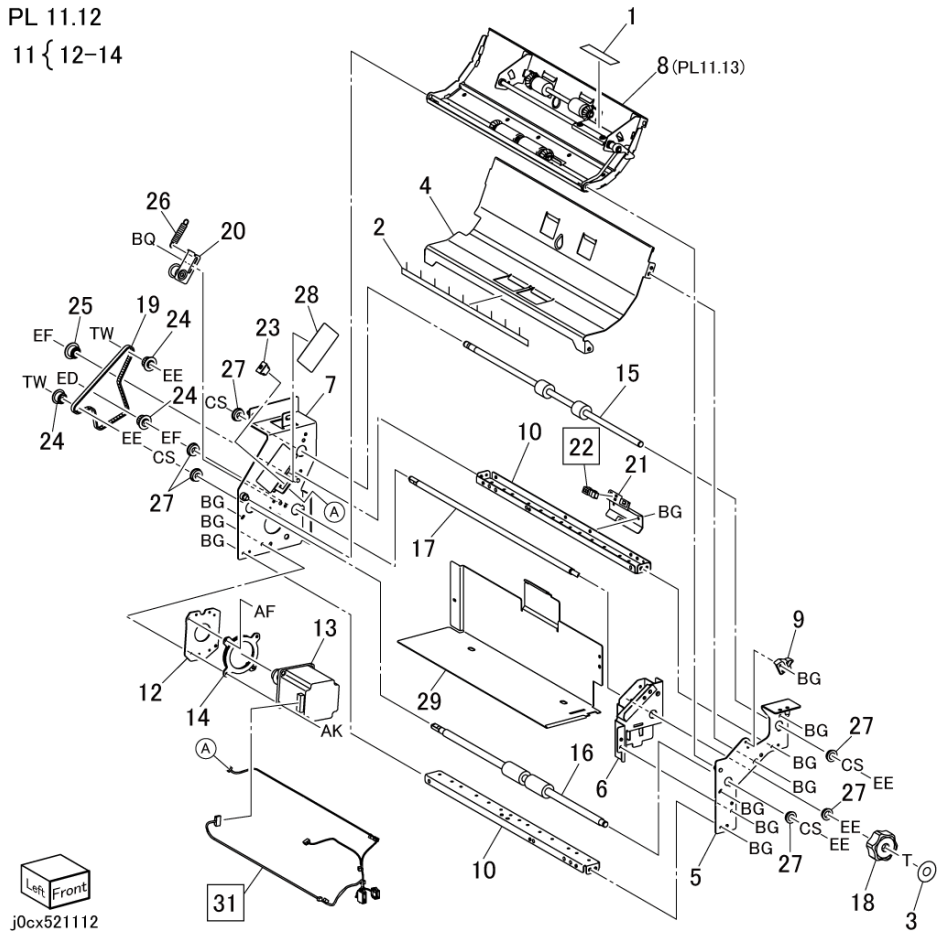
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD059K5556X／	AS	Pinch Roll
6	－－－－－	-----	
7	0TD013E2705X／	AQ	Bearing
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	0TD019E7579X／	AK	Hook

PL 11.11



【PL11.12】
I-Transport Assembly (Option)

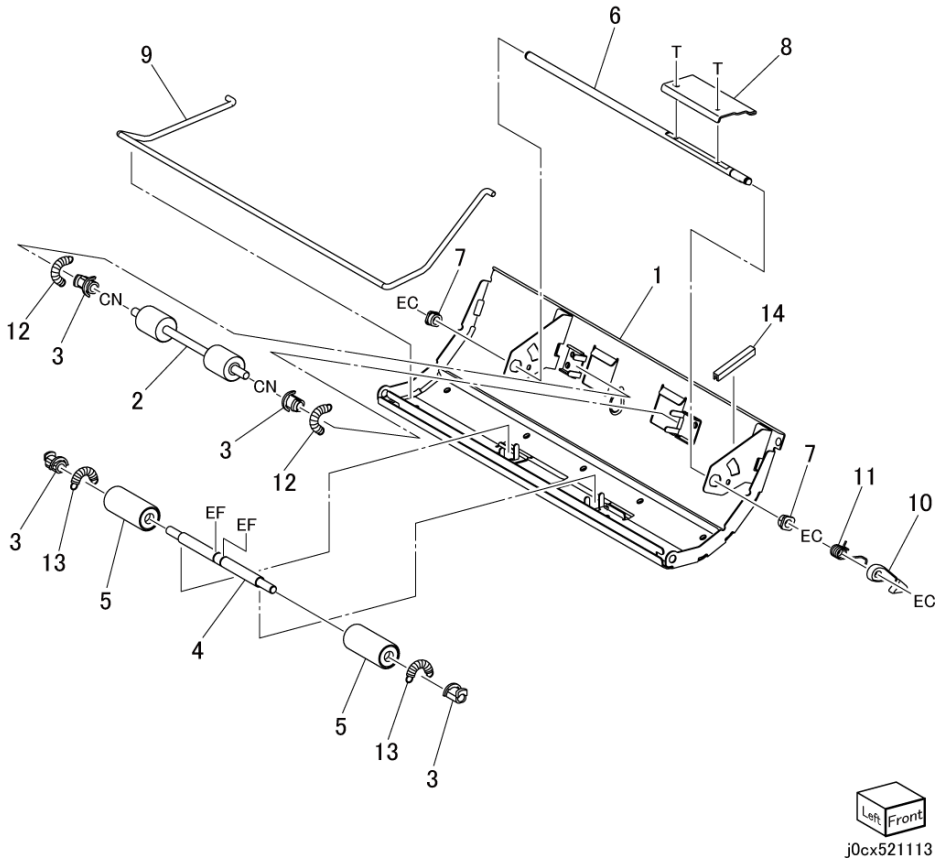
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD925W00011／	AT	Eliminator
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD059K6212X／	CA	I-Tra. Upper Transport Assembly
9	0TD803E0235X／	AK	Latch
10	－－－－－	-----	
11	0TD068K6442X／	BV	I-Tra. Motor Assembly (Item 12-14)
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD059K6144X／	AZ	I-Tra Roll 2
16	0TD059K6493X／	BR	I-Tra Roll 1
17	－－－－－	-----	
18	0TD003K2515X／	AZ	KNOB ASSY-REGI (SPEC) NB
19	0TD423W37554／	AS	I-Tra. Belt
20	－－－－－	-----	
21	－－－－－	-----	
22	0TD930W00212／	AS	Pre and registration sensors
23	0TD110E1573X／	BR	J-Tra 1 Chute Open Switch
24	0TD020E4721X／	BF	Pulley
25	0TD499W17081／	AX	Idler Pulley
26	0TD809E8776X／	AR	Tension Spring
27	0TD413W08350／	AK	Bearing
28	－－－－－	-----	
29	－－－－－	-----	
30	－－－－－	-----	
31	0TD962K7123X／	AZ	(SCC) Wire Harness



【PL11.13】
I-Tra. Upper Transport Assembly

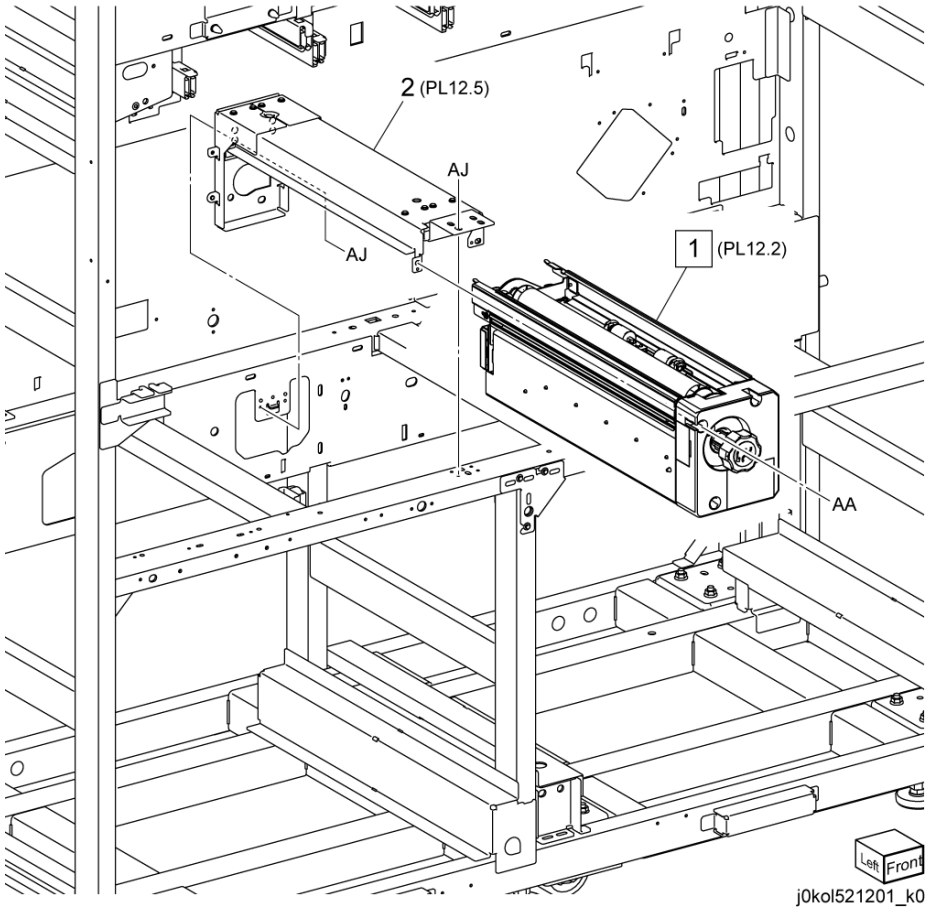
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD059K5556X／	AS	Pinch Roll
3	0TD013E2705X／	AQ	Bearing
4	0TD806E2382X／	AR	Shaft
5	0TD059K3799X／	AX	Roll
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD803E0260X／	BA	Handle
9	－－－－－	-----	
10	0TD019E7579X／	AK	Hook
11	－－－－－	-----	
12	0TD809E8791X／	AU	Pinch Spring
13	0TD809E8790X／	AQ	Pinch Spring
14	0TD019E7865X／	AV	Pad

PL 11.13



Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K4027X／	DX	ROLL ASSY-BURR NB
2	－－－－－	-----	

PL 12.1

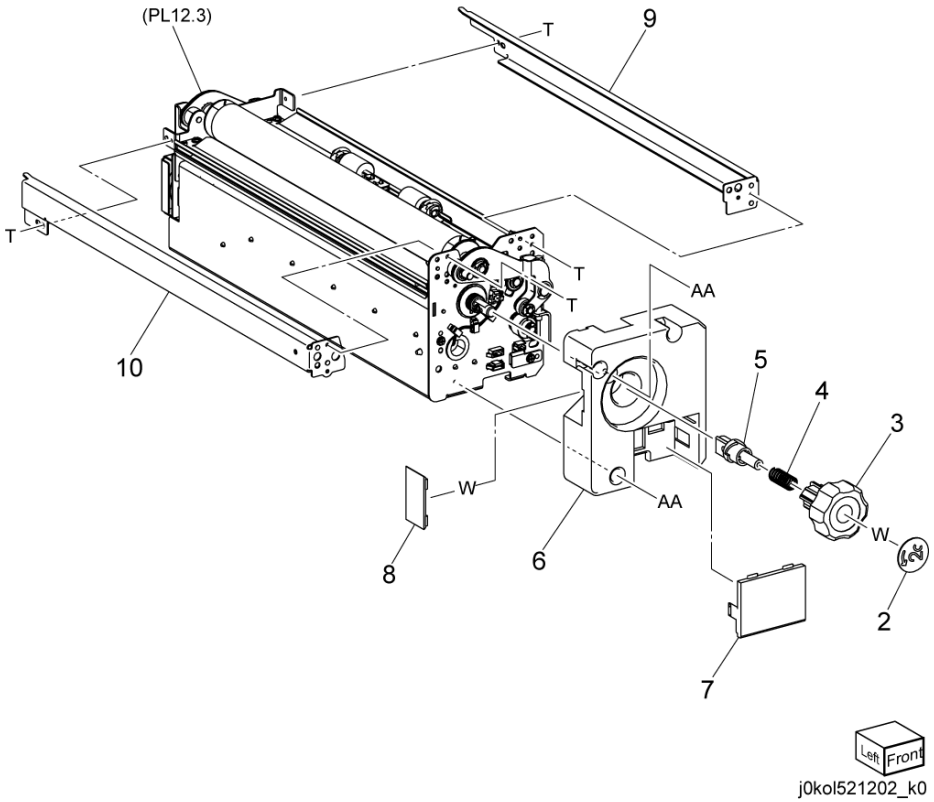


【PL12.2】
Baritori Roll Assembly (1 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	

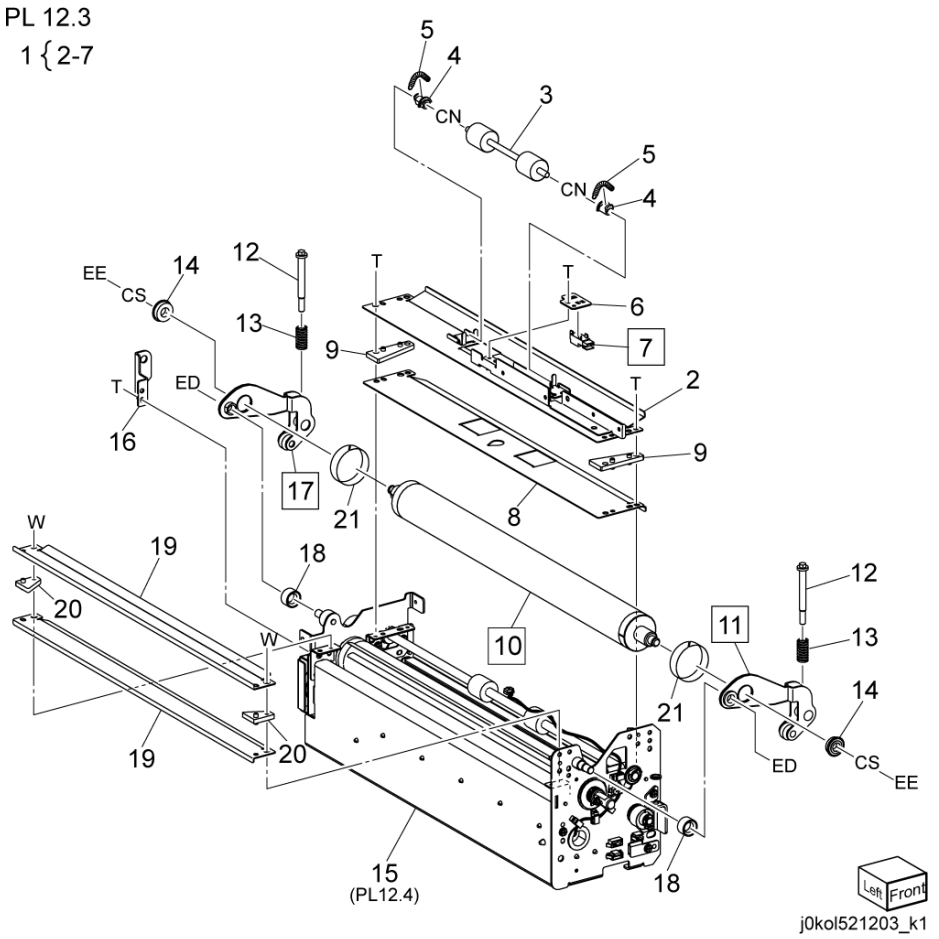
PL 12.2

1 { 2-5



【PL12.3】
Baritori Roll Assembly (2 of 3)

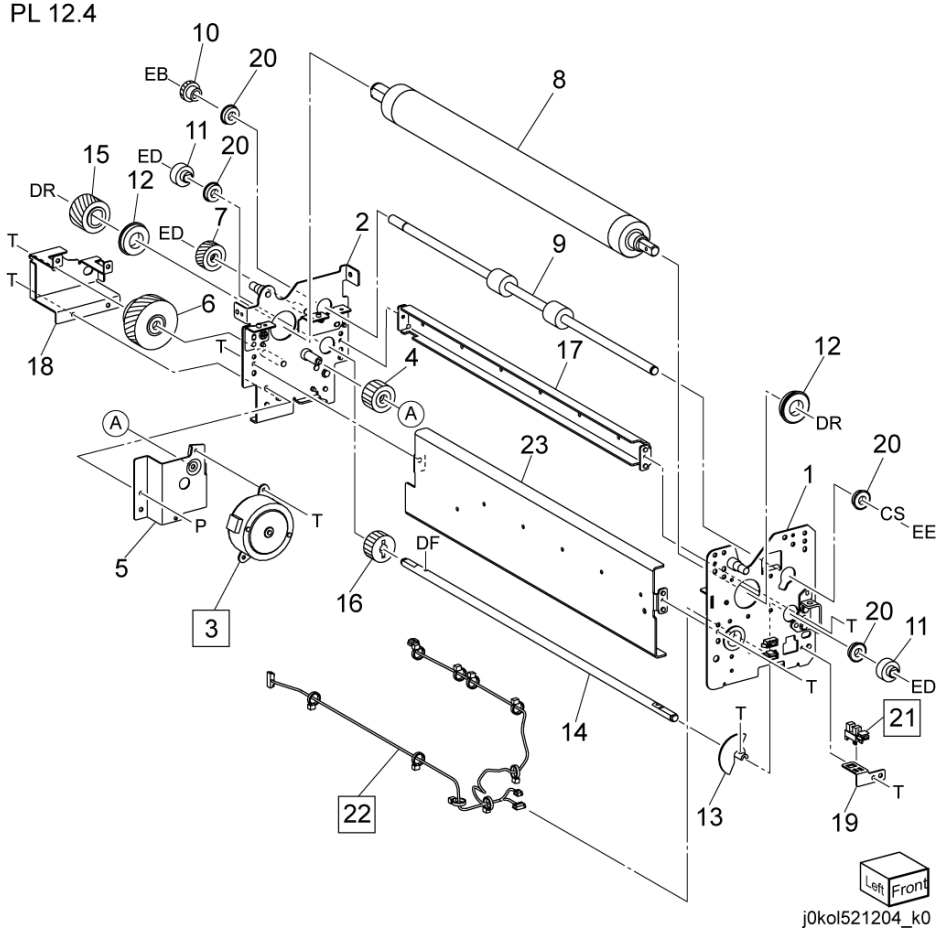
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K4065X／	BS	Upper Inlet Chute Assembly (Item 2-7)
2	－－－－－	-----	
3	0TD059K5556X／	AS	Pinch Roll
4	0TD013E2705X／	AQ	Bearing
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD930W00212／	AS	Pre and registration sensors
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD059K6304X／	CE	ROLL ASSY,UPPER
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	0TD413W08350／	AK	Bearing
15	－－－－－	-----	
16	－－－－－	-----	
17	0TD011K0338X／	BC	Rear Lever Assembly
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	0TD004E1900X／	AQ	Cushion Tape



【PL12.4】
Baritori Roll Assembly (3 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD127K6022X/	BP	(SCC) Burr Press Retract Motor
4	0TD007K1592X/	AY	Idler Gear (30)
5	-----	-----	
6	0TD007K1593X/	AZ	Idler Gear (55/34)
7	0TD007K1594X/	AY	Idler Gear (28)
8	0TD059K6301X/	CC	Burr Press Roll Assembly
9	0TD059K6303X/	BR	Burr Press T/A Roll Assembly
10	0TD807E2938X/	AP	T/A Gear
11	0TD008E9730X/	BC	Cam
12	0TD013E3590X/	AY	Bearing
13	0TD120E3218X/	AN	(SCC) Burr Press Retract Motor
14	-----	-----	
15	0TD807E2936X/	AP	Gear
16	0TD807E2937X/	AP	Drive Gear
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	0TD413W08350/	AK	Bearing
21	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
22	-----	-----	
23	-----	-----	

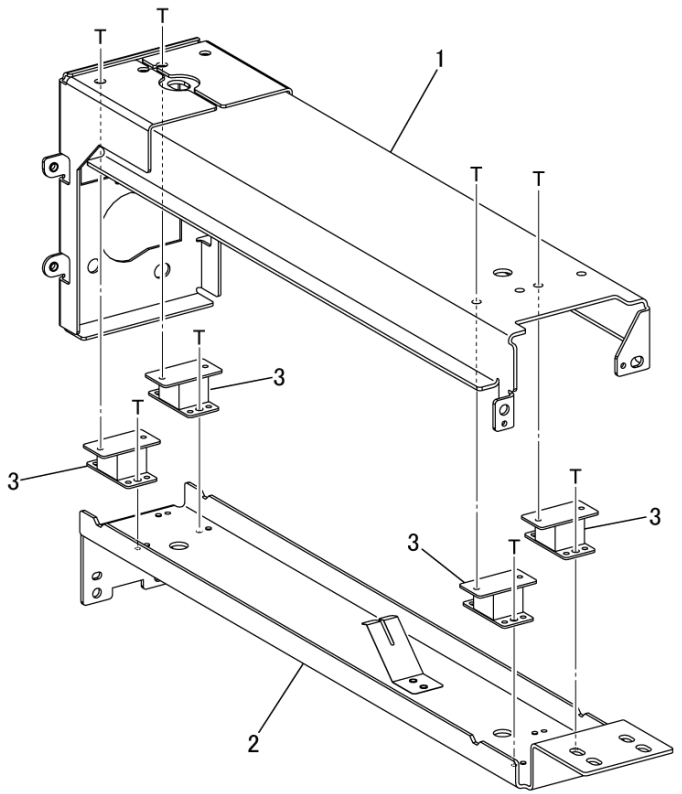
PL 12.4



【PL12.5】
Baritori Frame Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	

PL 12.5



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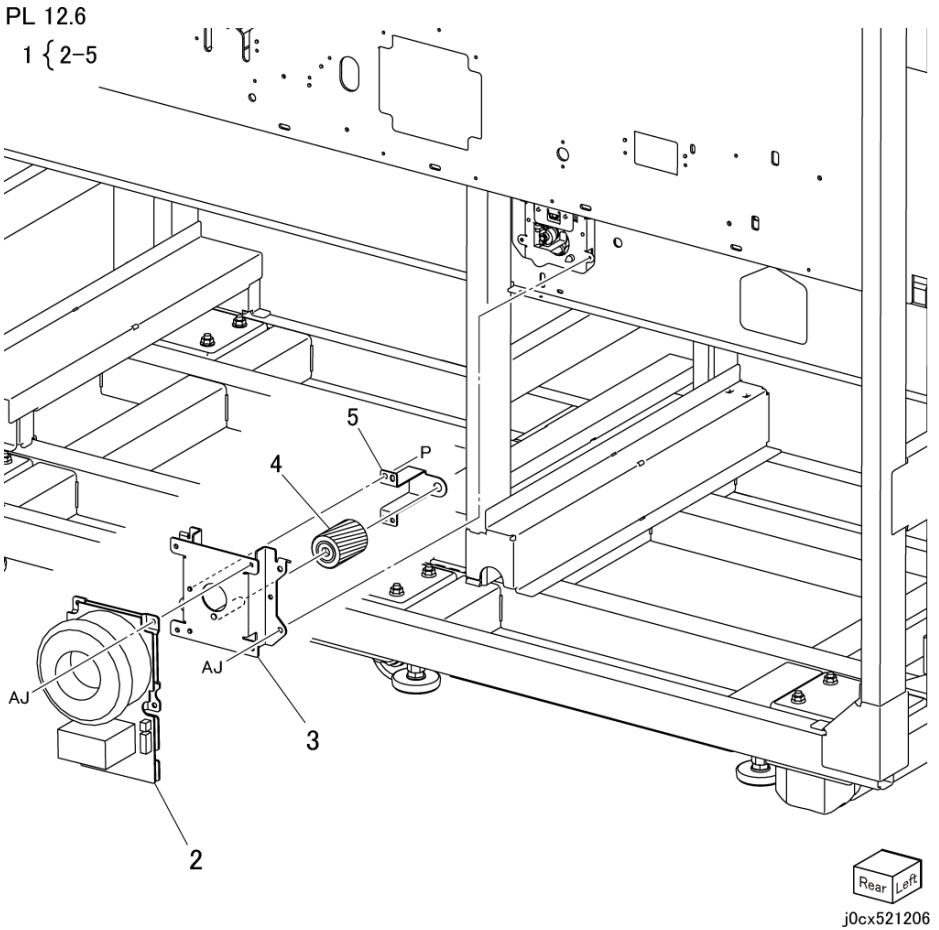
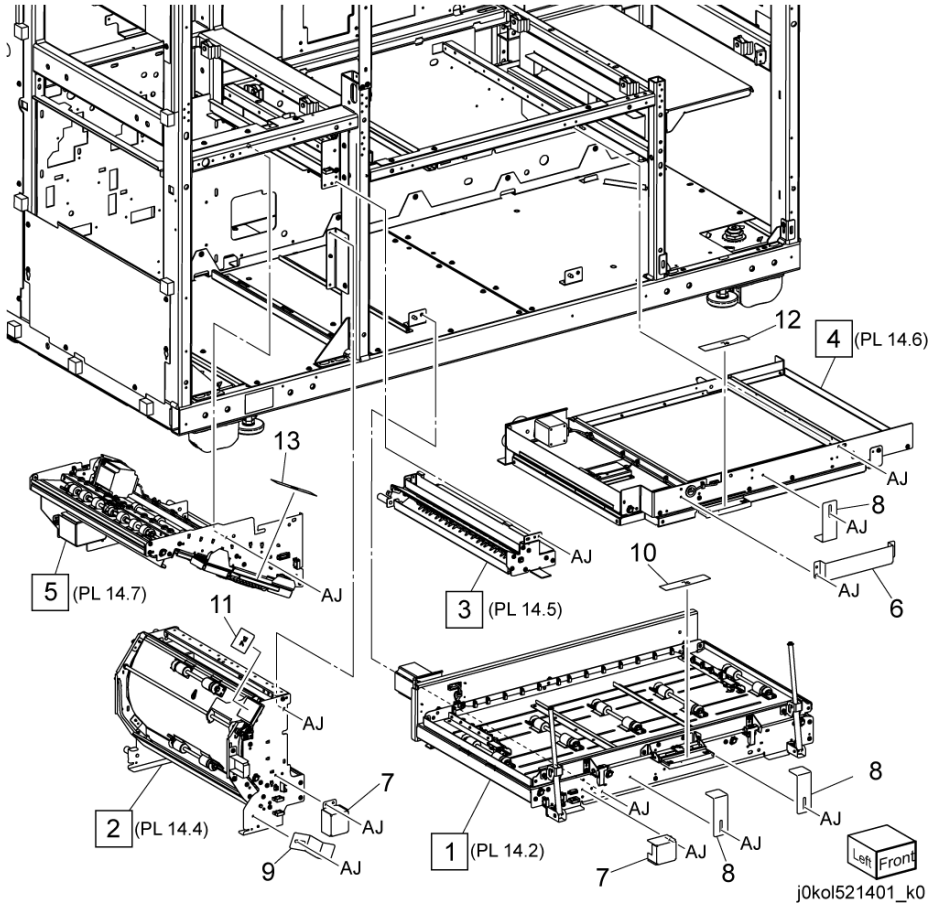
【PL12.6】
Burr Press Motor Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD127K6021X／	CA	Burr Press Motor Assembly (Item 2-5)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	



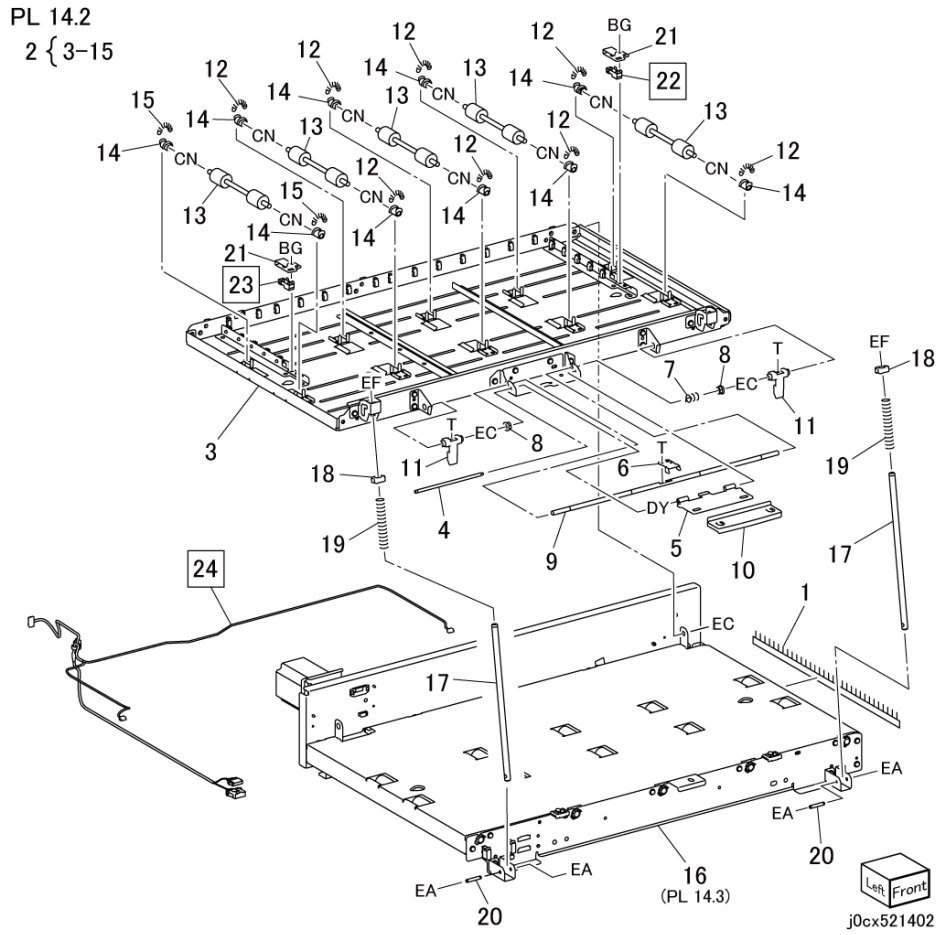
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K2857X／	DQ	TRANSPORT ASSY-D1 TOP NB
2	0TD859K2860X／	DC	D2 Transport Assembly (PL 14.4) (REP 14.1.2)
3	0TD054K4007X／	CE	Gate Chute Assembly
4	－－－－－	-----	
5	0TD859K2866X／	DP	TRANSPORT ASSY-DUP TOP NB
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	

PL 14.1



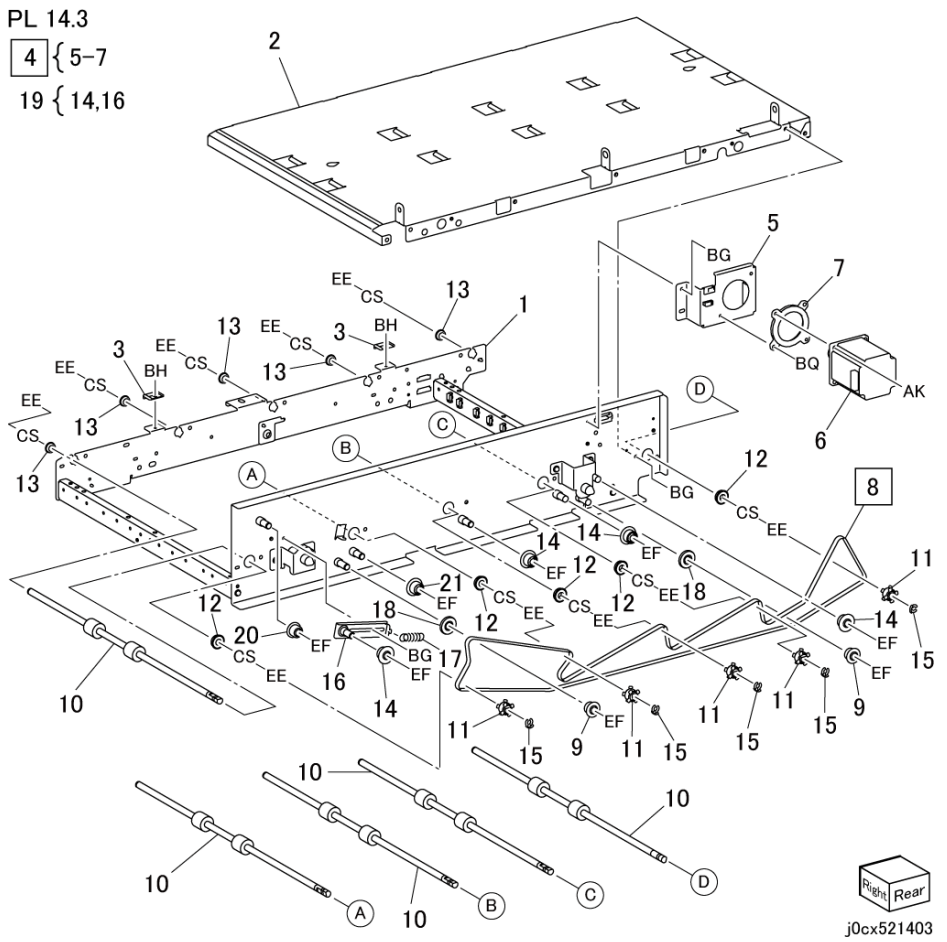
【PL14.2】
D1 Transport Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD105E1733X/	AP	Eliminator
2	-----	-----	
3	-----	-----	
4	0TD806E2864X/	AP	Lever Shaft
5	-----	-----	
6	0TD868E3376X/	AL	Stop Bracket
7	0TD809E8648X/	AK	Latch Spring
8	0TD413W11660/	AD	Sleeve Bearing
9	-----	-----	
10	0TD803E3341X/	AW	KNOB NB
11	0TD019E7575X/	AK	Latch
12	0TD809E9240X/	AH	Spring
13	0TD059K5556X/	AS	Pinch Roll
14	0TD013E2705X/	AQ	Bearing
15	0TD809E8788X/	AK	Pinch Spring (Out)
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	0TD809E8704X/	AS	Link Spring
20	-----	-----	
21	0TD868E2964X/	AH	Sensor Bracket
22	0TD930W00212/	AS	Pre and registration sensors
23	0TD930W00212/	AS	Pre and registration sensors
24	0TD962K7116X/	BA	(SCC) Wire Harness (D1)



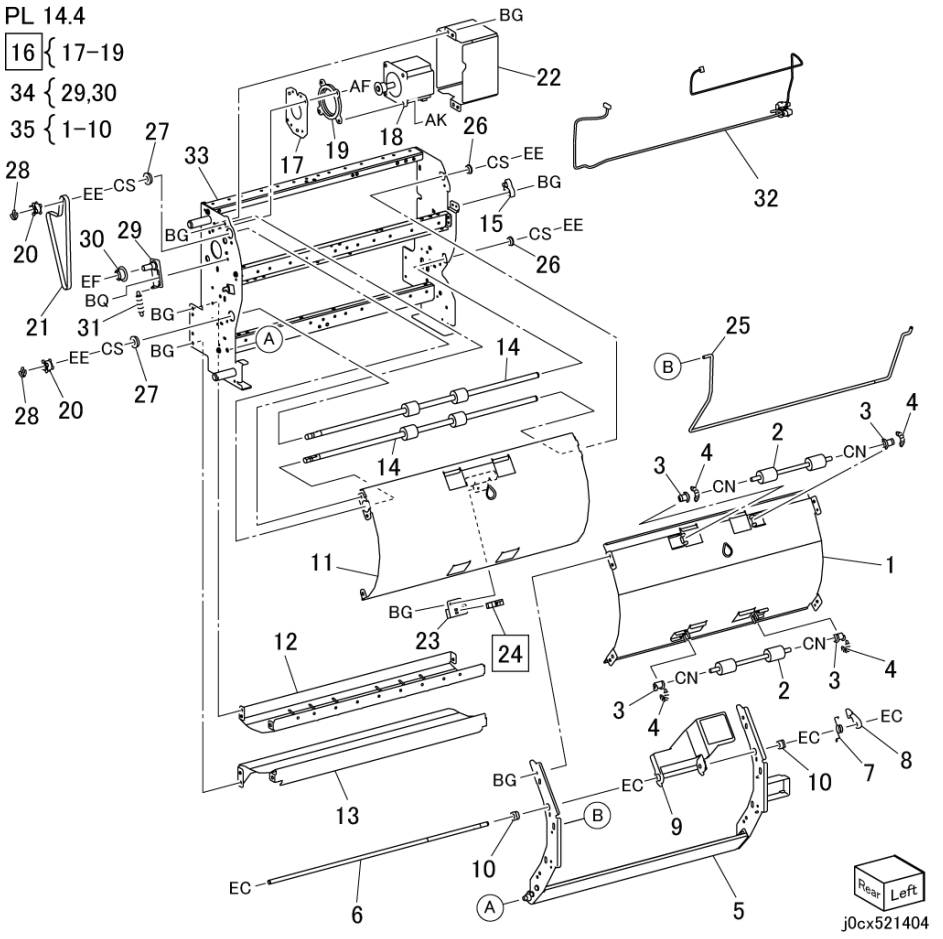
【PL14.3】
D1 Transport Assembly (2 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD803E0226X/	AG	Latch Hook Preg
4	0TD068K6868X/	BW	D-Tra Motor 1 Assembly (Item 5-7)
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	0TD023E2730X/	BA	D1-Transport Belt
9	0TD499W14624/	AX	Pulley
10	0TD859K1185X/	BD	H-Tra Roll 2
11	0TD020E4721X/	BF	Pulley
12	0TD413W88650/	AL	Bearing
13	0TD413W08350/	AK	Bearing
14	0TD499W17081/	AX	Idler Pulley
15	0TD019E9199X/	AF	KL-Clip
16	-----	-----	
17	0TD809E8777X/	AN	Spring
18	0TD005E2850X/	AG	Flange
19	-----	-----	
20	0TD020K1883X/	AY	Pulley
21	0TD020K1884X/	AY	Pulley



【PL14.4】
D2 Transport Assembly

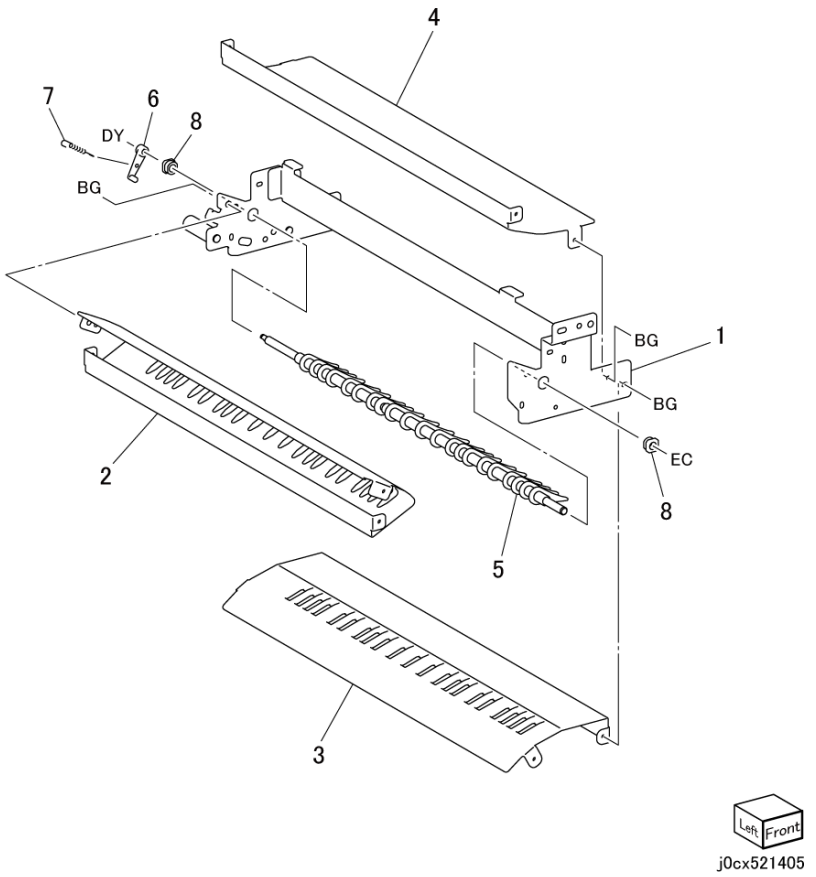
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD059K6818X／	BA	Pinch Roll
3	0TD013E2705X／	AQ	Bearing
4	0TD809E8782X／	AK	Pinch Spring
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD809E8705X／	AP	Latch Spring
8	0TD019E7579X／	AK	Hook
9	0TD803E3513X／	BA	HANDLE-D2 NB
10	0TD413W11660／	AD	Sleeve Bearing
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD803E0235X／	AK	Latch
16	0TD068K6377X／	BR	D-Tra Motor 2 Assembly (Item 17-19)
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	0TD020E4721X／	BF	Pulley
21	0TD423W37754／	AV	Belt
22	－－－－－	-----	
23	－－－－－	-----	
24	0TD930W00212／	AS	Pre and registration sensors
25	－－－－－	-----	
26	0TD413W88650／	AL	Bearing
27	0TD413W08350／	AK	Bearing
28	0TD019E9199X／	AF	KL-Clip
29	－－－－－	-----	
30	－－－－－	-----	
31	0TD809E8778X／	AP	Tension Spring
32	0TD962K7117X／	AY	(SCC) Wire Harness (D2)
33	－－－－－	-----	
34	0TD068K6428X／	AT	Tension Bracket Assembly (Item 29, 30)
35	－－－－－	-----	



【PL14.5】
Gate Chute Assembly

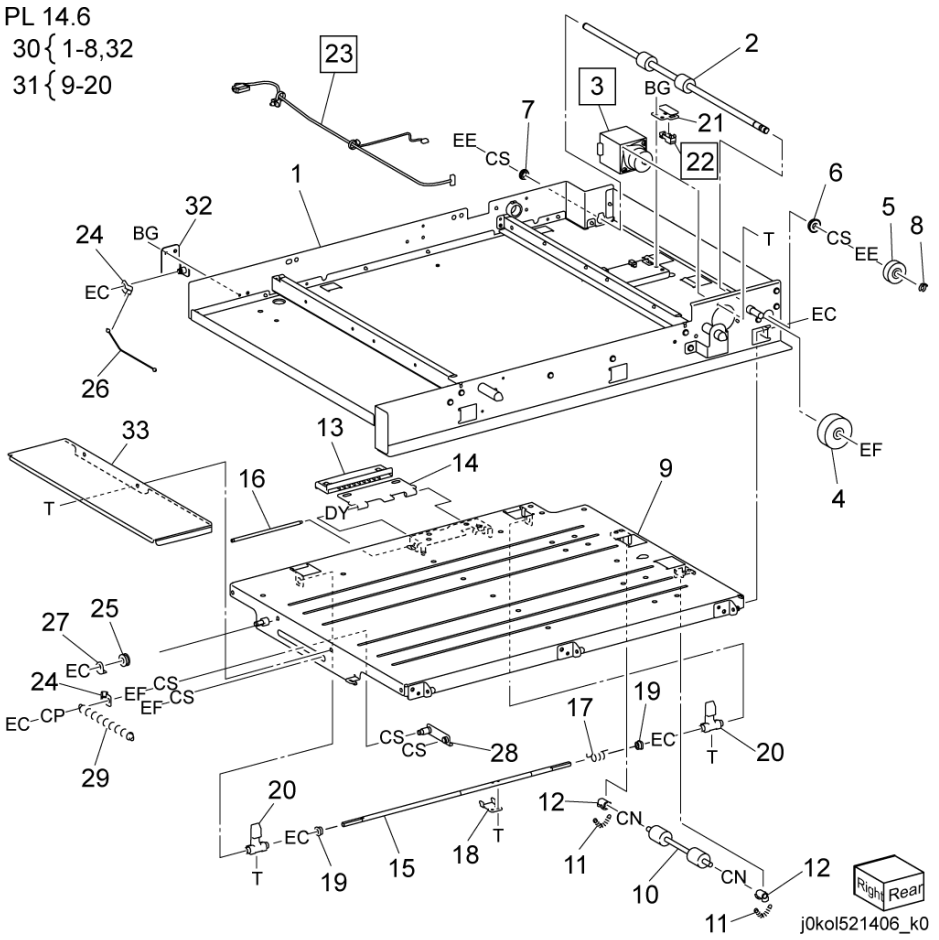
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD054E4013X/	BE	Inverter Gate Chute
3	0TD054E4014X/	BC	Gate Chute
4	-----	-----	
5	0TD050K6360X/	BM	Duplex Gate
6	0TD012E2001X/	AX	Link
7	0TD809E8694X/	AL	Gate Spring
8	0TD413W11660/	AD	Sleeve Bearing

PL 14.5



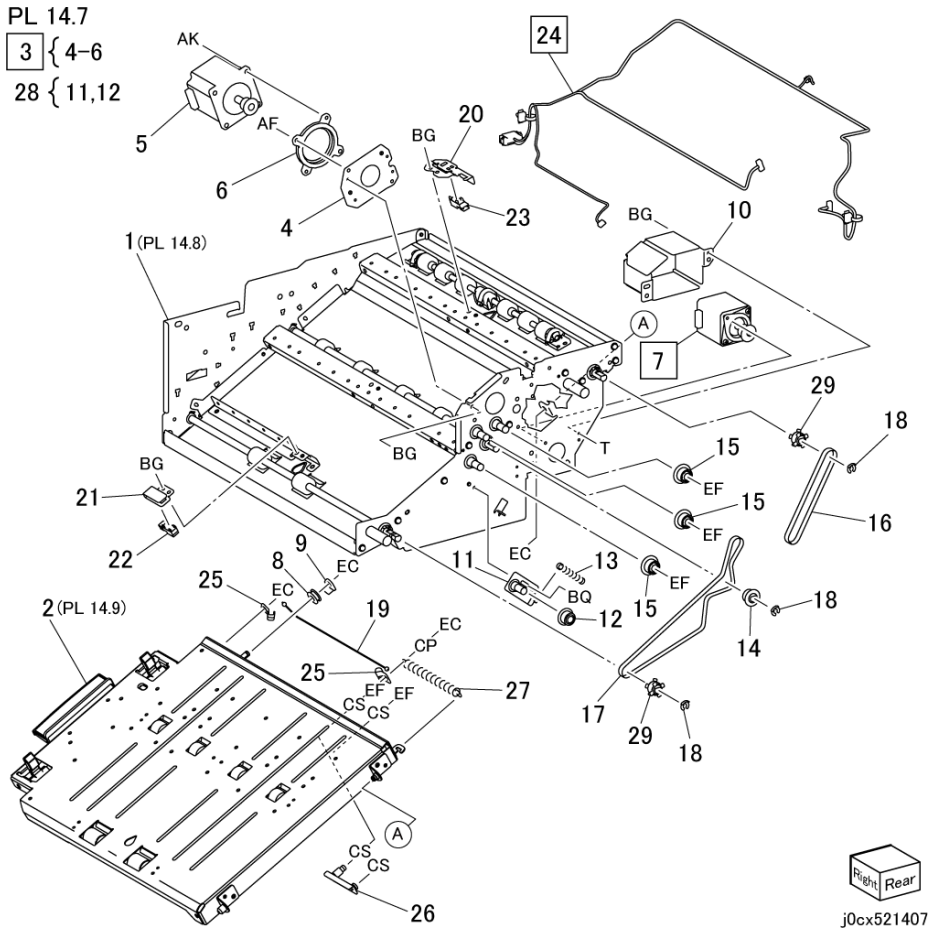
【PL14.6】
Duplex Inverter Transport Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD859K1185X/	BD	H-Tra Roll 2
3	0TD127K5927X/	BP	(SCC) Dup Invert Motor
4	0TD807E2681X/	AL	Idler Gear (Z49)
5	0TD807E2683X/	AH	Gear (Z34)
6	0TD413W08350/	AK	Bearing
7	0TD413W88650/	AL	Bearing
8	0TD019E9199X/	AF	KL-Clip
9	-----	-----	
10	0TD059K5556X/	AS	Pinch Roll
11	0TD809E8789X/	AK	Pinch Spring
12	0TD013E2705X/	AQ	Bearing
13	-----	-----	
14	-----	-----	
15	0TD806E2918X/	BA	Latch Shaft
16	0TD806E2864X/	AP	Lever Shaft
17	0TD809E8648X/	AK	Latch Spring
18	0TD868E3376X/	AL	Stop Bracket
19	0TD413W11660/	AD	Sleeve Bearing
20	0TD019E7575X/	AK	Latch
21	-----	-----	
22	0TD930W00212/	AS	Pre and registration sensors
23	0TD962K7115X/	AX	(SCC) Wire Harness
24	0TD868E4734X/	AQ	Cable Bracket
25	0TD020E4440X/	AW	PULLEY
26	-----	-----	
27	0TD032E2768X/	AF	GUIDE
28	0TD068K6851X/	AX	Guide Bracket
29	0TD809E9126X/	AR	Spring
30	-----	-----	
31	-----	-----	
32	-----	-----	
33	-----	-----	



【PL14.7】
Duplex Transport Assembly

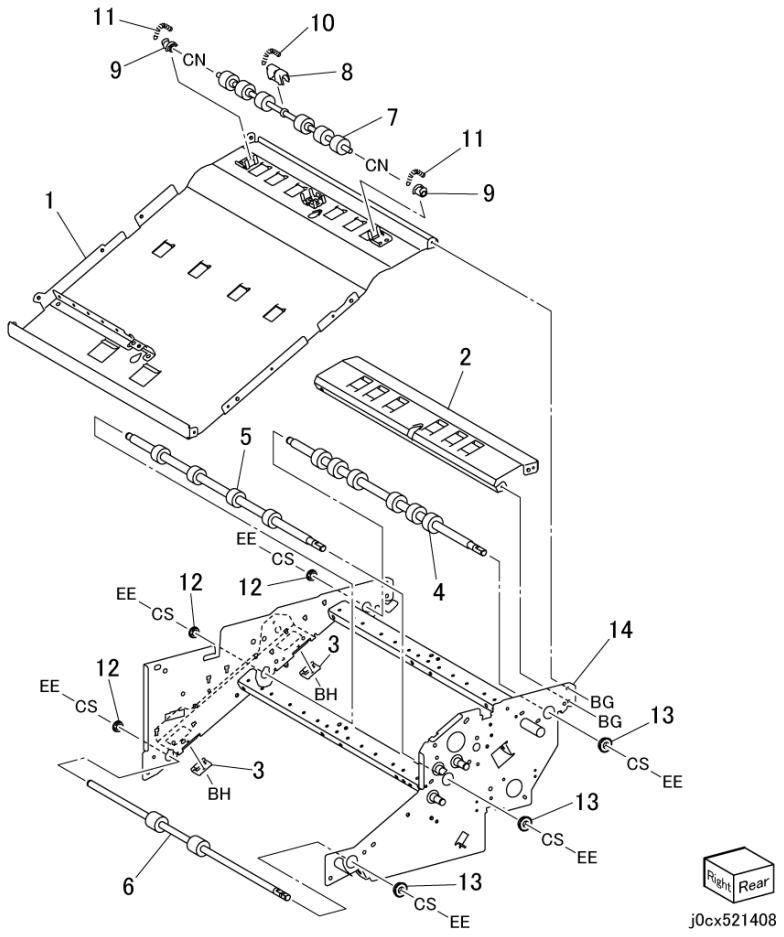
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K5911X/	CS	Duplex Up Chute Assembly
2	-----	-----	
3	0TD068K6377X/	BR	D-Tra Motor 2 Assembly (Item 17-19)
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD127K5964X/	BQ	(SCC) Dup Out Motor
8	0TD020E4440X/	AW	PULLEY
9	0TD032E2768X/	AF	GUIDE
10	-----	-----	
11	-----	-----	
12	0TD499W14624/	AX	Pulley
13	0TD809E8779X/	AN	Spring
14	0TD499W14224/	AK	Pulley
15	-----	-----	
16	0TD423W32654/	AT	Belt
17	0TD423W88954/	AV	Belt
18	0TD019E9199X/	AF	KL-Clip
19	0TD012E1760X/	AT	Cable
20	-----	-----	
21	0TD868E2964X/	AH	Sensor Bracket
22	0TD930W00212/	AS	Pre and registration sensors
23	0TD930W00212/	AS	Pre and registration sensors
24	0TD962K7114X/	BC	(SCC) Wire Harness
25	0TD868E4734X/	AQ	Cable Bracket
26	0TD068K6851X/	AX	Guide Bracket
27	0TD809E9125X/	AQ	Spring
28	0TD068K6427X/	AU	Tension Bracket Assembly (Item 11, 12)
29	0TD020E4721X/	BF	Pulley



【PL14.8】
Duplex Up Chute Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD054K4203X/	BN	Duplex Out Lower Chute
3	0TD803E0226X/	AG	Latch Hook Preg
4	0TD859K1086X/	BH	Dup Out Roll
5	0TD859K1190X/	BK	Dup Path Roll
6	0TD859K1185X/	BD	H-Tra Roll 2
7	0TD059K4720X/	BB	Pinch Roll
8	0TD849E8738X/	AL	Support Bearing
9	0TD013E2705X/	AQ	Bearing
10	0TD809E8800X/	AP	Dup Out Pinch Spring
11	0TD809E8794X/	AK	Pinch Spring
12	0TD413W88650/	AL	Bearing
13	0TD413W08350/	AK	Bearing
14	-----	-----	

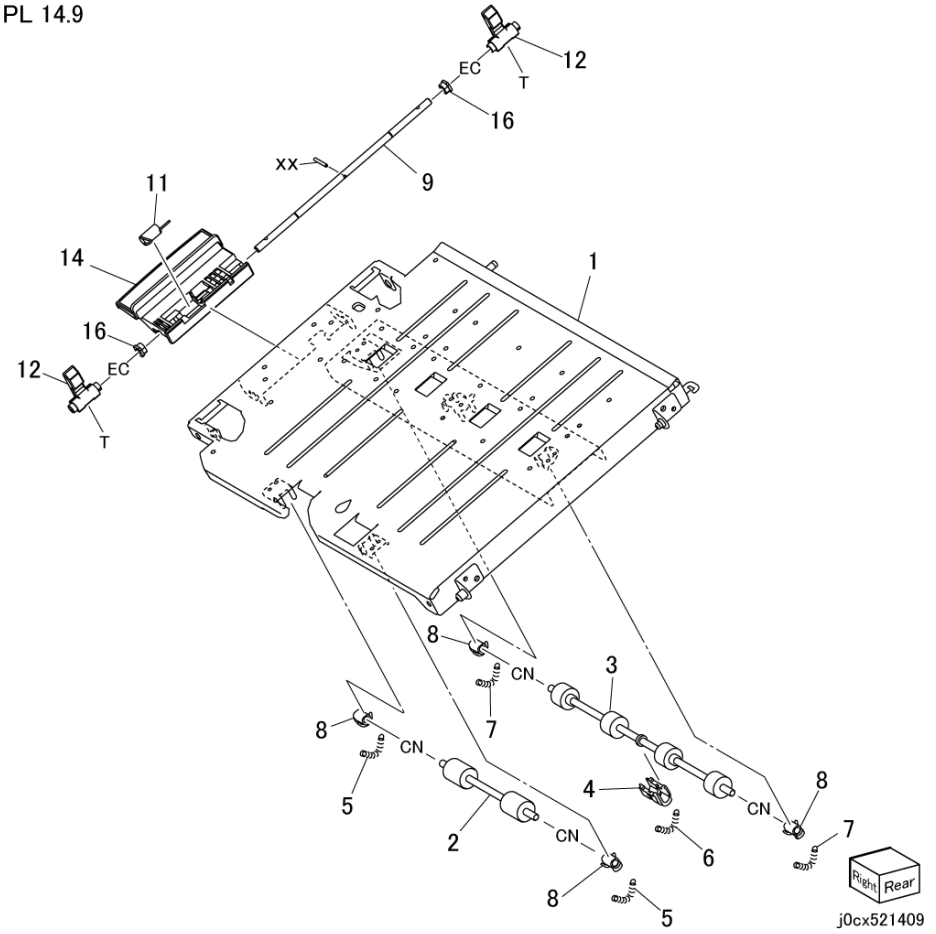
PL 14.8



【PL14.9】
Duplex Low Transport Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD059K5556X／	AS	Pinch Roll
3	0TD059K4719X／	BB	Pinch Roll Assembly
4	0TD849E8738X／	AL	Support Bearing
5	0TD809E8792X／	AK	Pinch Spring (K)
6	0TD809E8799X／	AP	Pinch Spring
7	0TD809E8793X／	AK	Pinch Spring (L)
8	0TD013E2705X／	AQ	Bearing
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD019E7575X／	AK	Latch
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	0TD413W11660／	AD	Sleeve Bearing

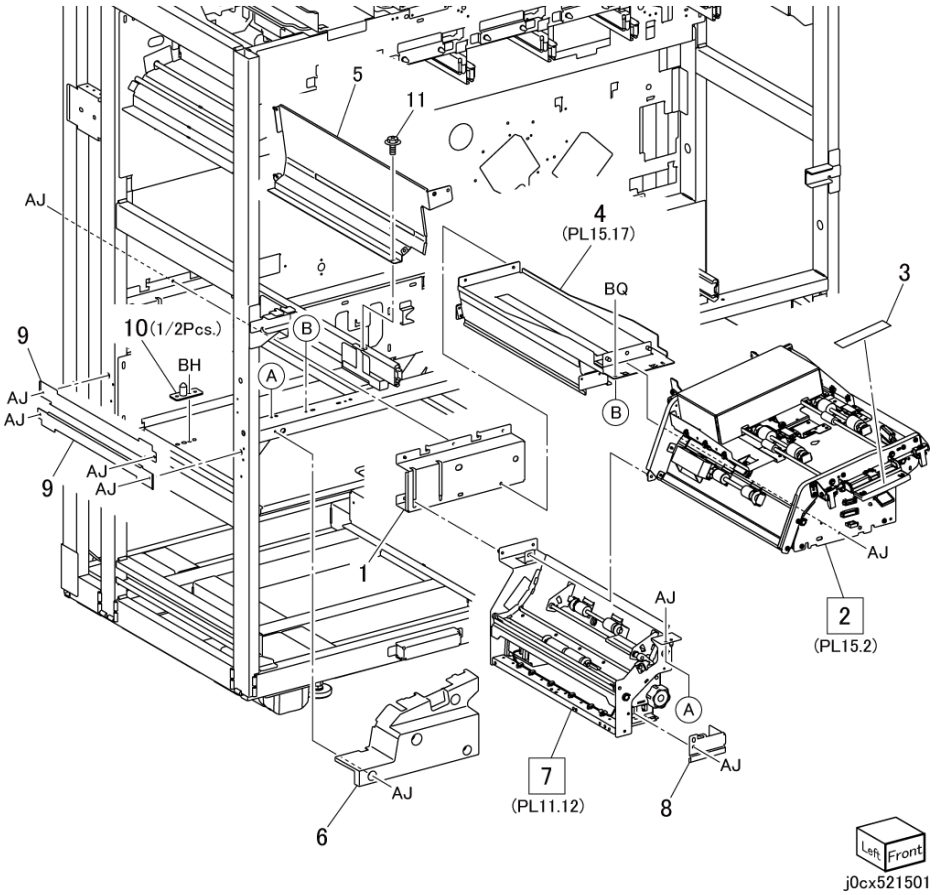
PL 14.9



【PL15.1】
Pre Regi. Assembly and I-Transport Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD801K3568X／	CA	Pre Regi. Rail Assembly
5	－－－－－	-----	
6	0TD822E8275X／	BK	COVER-PREG NB
7	0TD859K2873X／	CZ	TRANSPORT ASSY-I TOP NB
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD068K6987X／	BC	Bracket Assembly (Option)
11	－－－－－	-----	

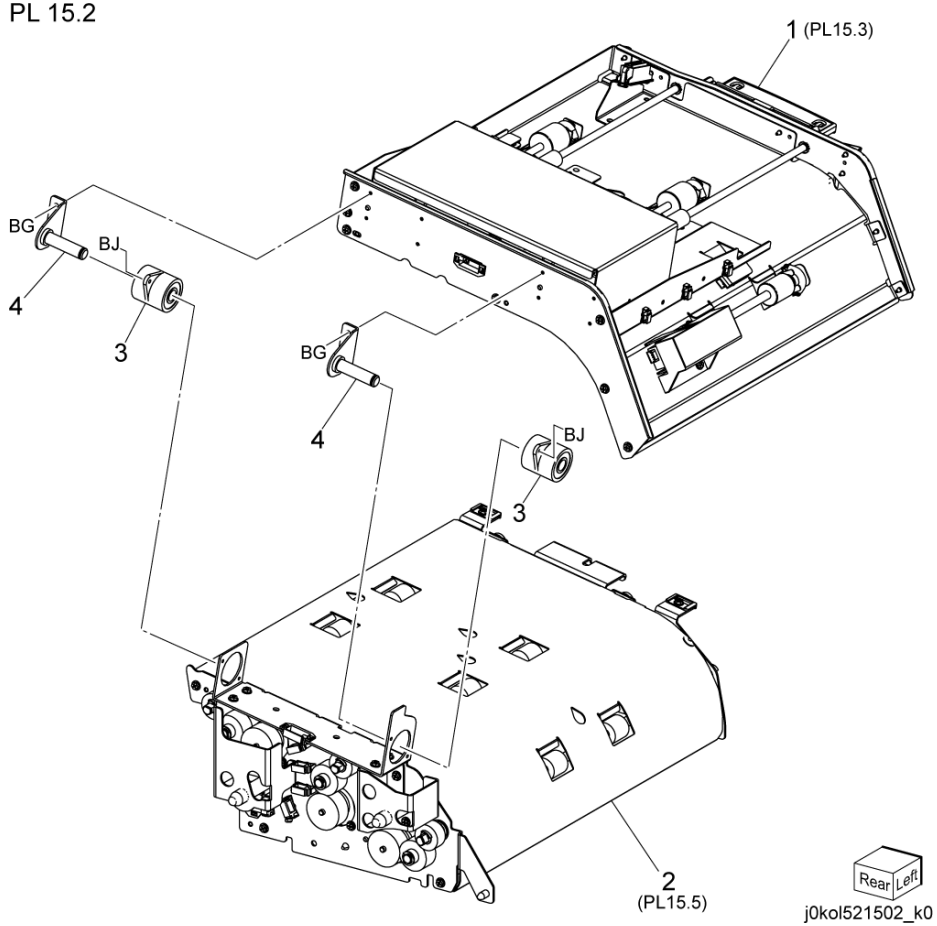
PL 15.1



【PL15.2】
Pre Regi. Upper/Lower Chute Assembly

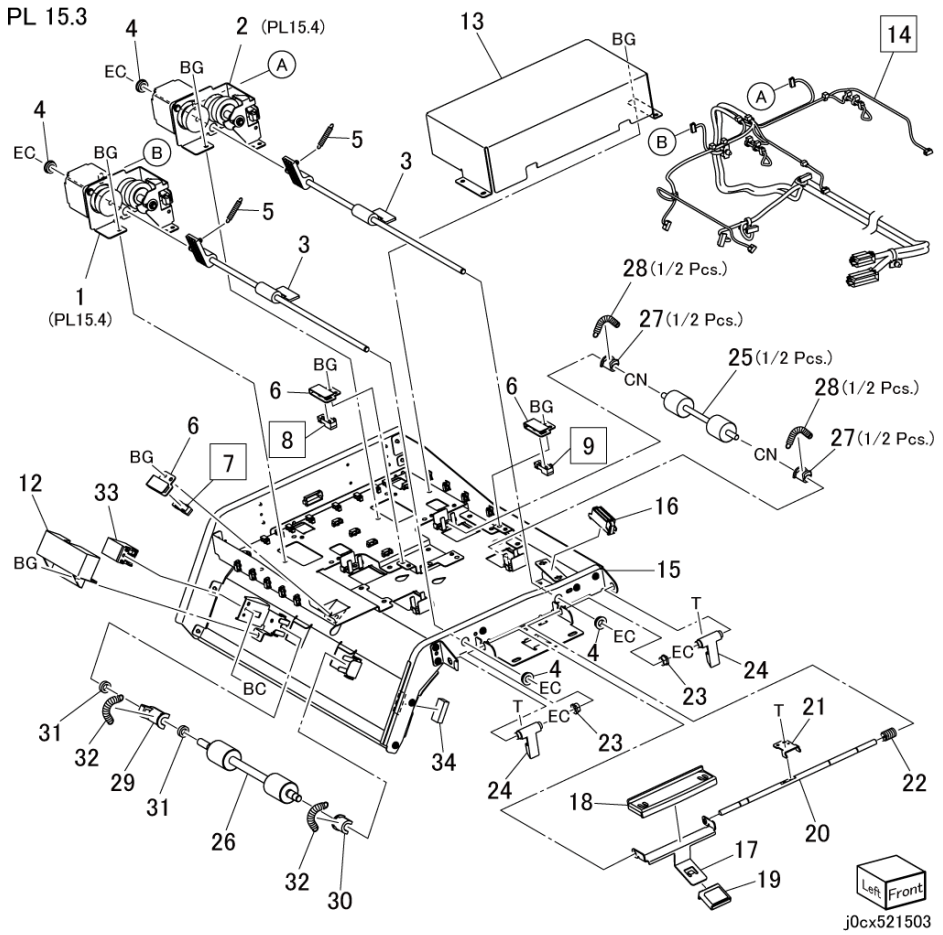
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD004K0287X/	BQ	Damper
4	0TD068K6354X/	BD	Damper Bracket

PL 15.2



【PL15.3】
Pre Regi. Upper Chute Assembly

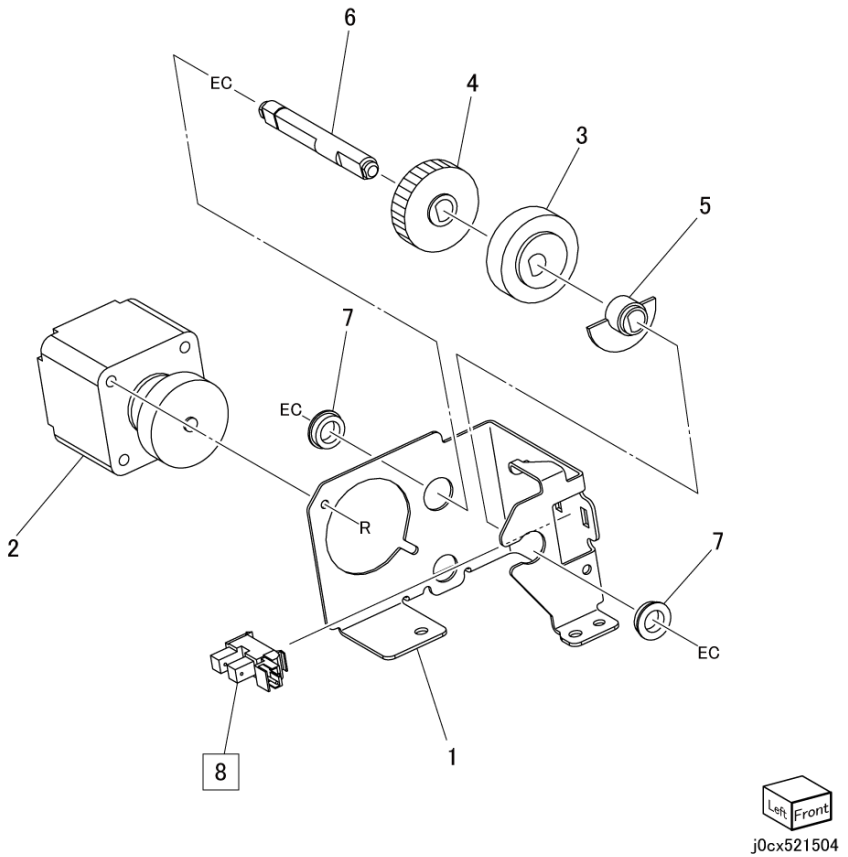
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD049K4223X/	BZ	Pre Regi. Roll 1 N/R Motor Assembly
2	0TD049K4223X/	BZ	Pre Regi. Roll 1 N/R Motor Assembly
3	0TD006K8804X/	BC	Pre Aligner N/R Shaft Assembly
4	0TD413W66250/	AL	Bearing
5	0TD009E3171X/	AG	Spring
6	-----	-----	
7	0TD930W00212/	AS	Pre and registration sensors
8	0TD930W00212/	AS	Pre and registration sensors
9	0TD930W00212/	AS	Pre and registration sensors
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	0TD952K3699X/	BN	(SCC) Wire Harness
15	-----	-----	
16	0TD121E2316X/	AR	Magnet
17	-----	-----	
18	0TD803E3341X/	AW	KNOB NB
19	0TD803E3495X/	BD	KNOB NB
20	-----	-----	
21	-----	-----	
22	0TD809E8648X/	AK	Latch Spring
23	-----	-----	
24	0TD019E7575X/	AK	Latch
25	0TD059K6143X/	BA	Pinch Roll
26	0TD059K6142X/	BG	Pinch Roll
27	0TD013E2705X/	AQ	Bearing
28	0TD899E1678X/	AL	Spring
29	0TD019E7151X/	AU	Sensor Holder
30	0TD019E4647X/	AN	Bearing Holder
31	0TD413W66150/	AK	Bearing
32	0TD809E8780X/	AK	Spring
33	0TD130K7258X/	BR	Multi Feed Sensor
34	-----	-----	



【PL15.4】
Pre Regi. Motor 1,2 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD413W88650／	AL	Bearing
8	0TD930W00112／	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor

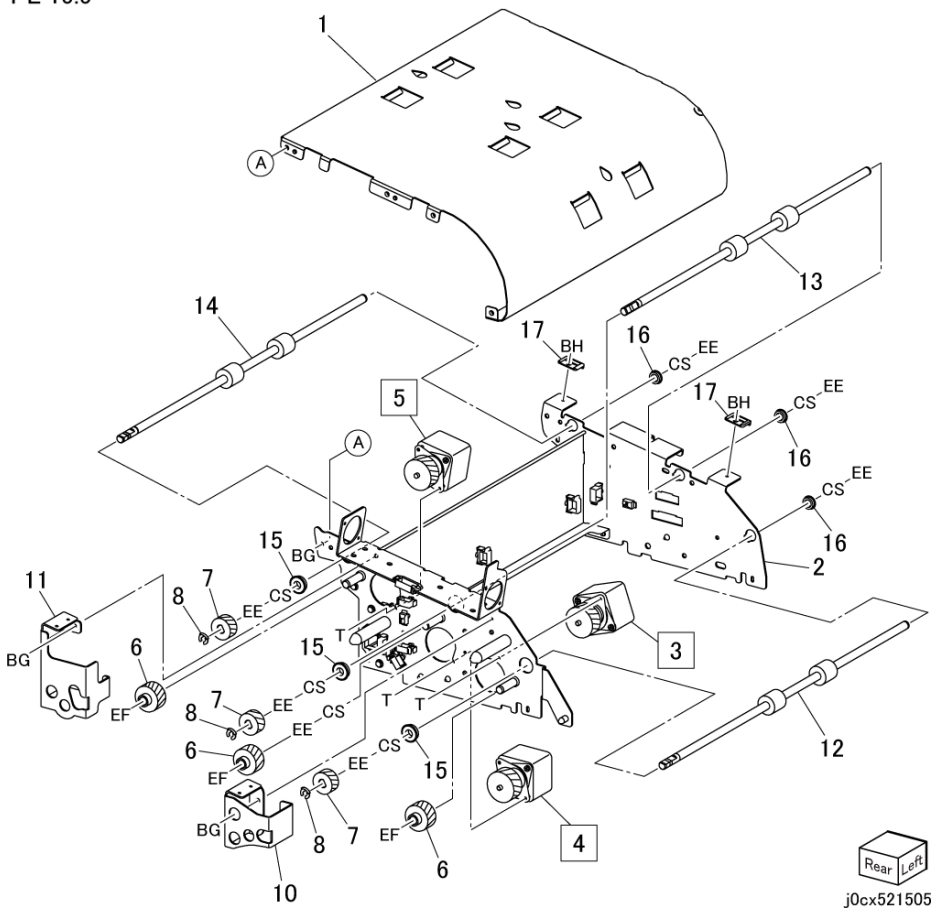
PL 15.4



【PL15.5】
Pre Regi. Lower Chute Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054E5999X／	BY	Pre Regi. Lower Chute
2	－－－－－	-----	
3	0TD127K6119X／	BN	(SCC) Transport Motor
4	0TD127K6119X／	BN	(SCC) Transport Motor
5	0TD127K6119X／	BN	(SCC) Transport Motor
6	0TD807E2717X／	AX	Gear (Z31)
7	0TD807E2712X／	AY	Gear (Z25)
8	0TD019E9199X／	AF	KL-Clip
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD413W08350／	AK	Bearing
16	0TD413W88650／	AL	Bearing
17	0TD803E0226X／	AG	Latch Hook Preg

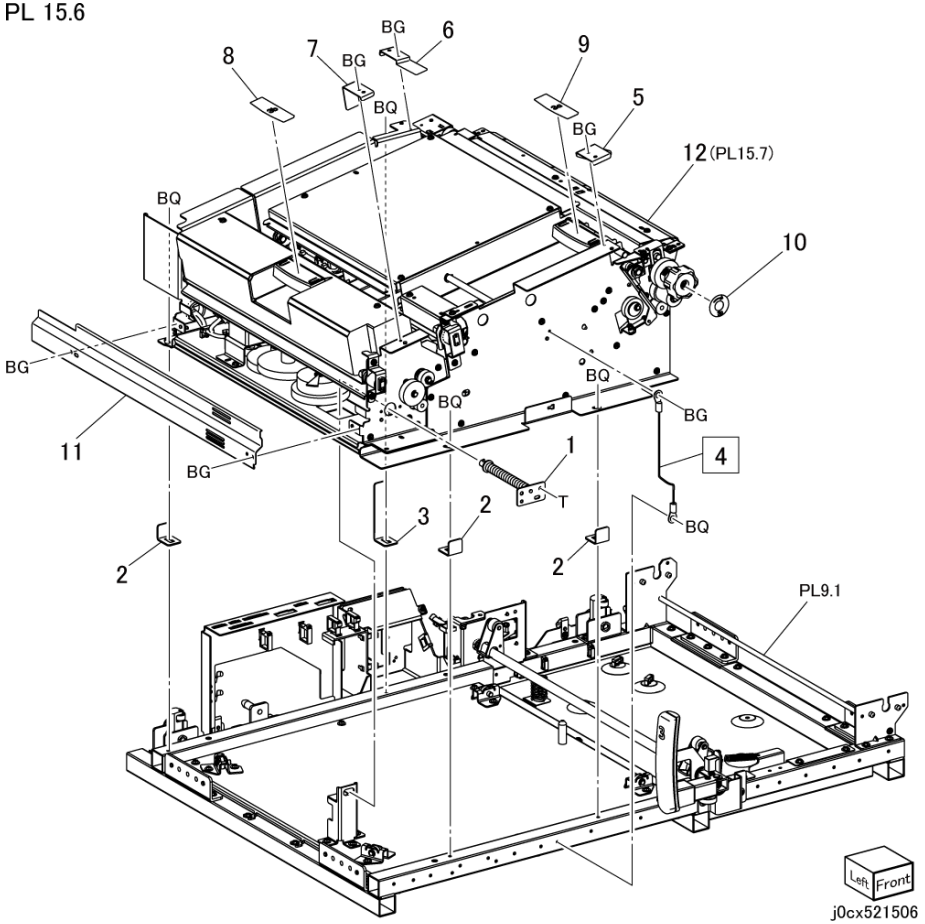
PL 15.5



【PL15.6】
Aligner Assembly and Pre Aligner Assembly

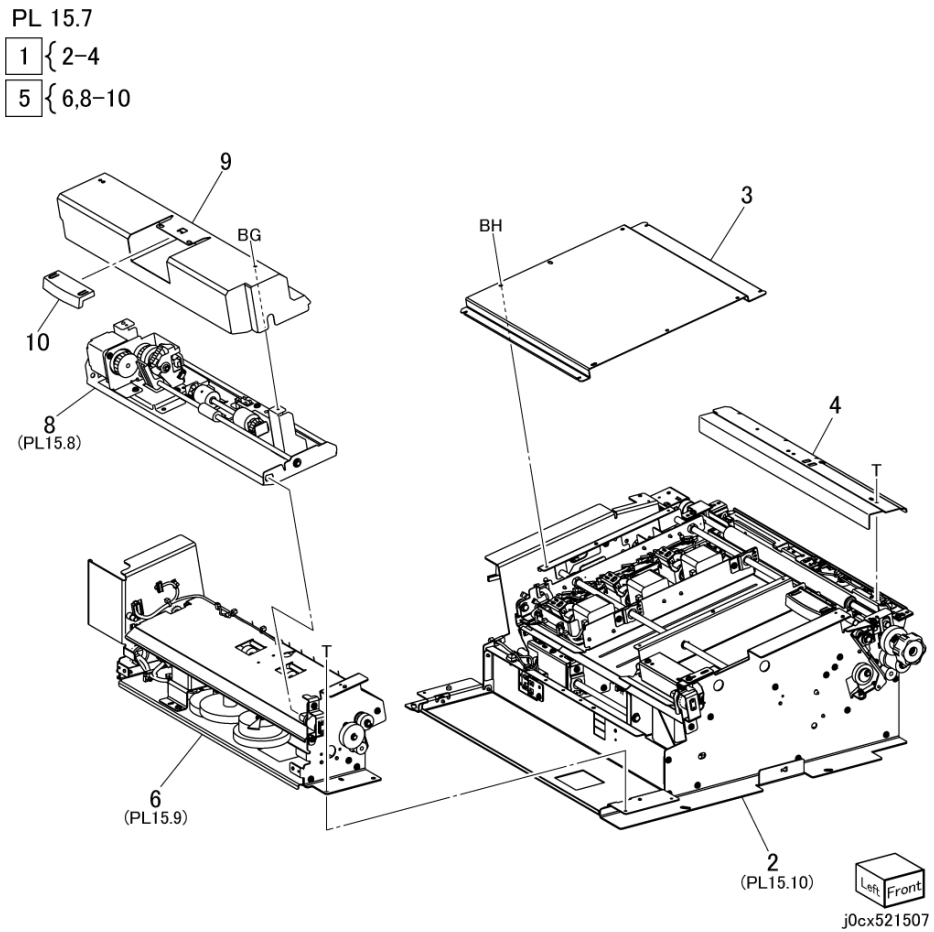
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD068K6345X／	BD	Bracket Assembly
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD117K4054X／	BH	(SCC) Grand Wire
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	

PL 15.6



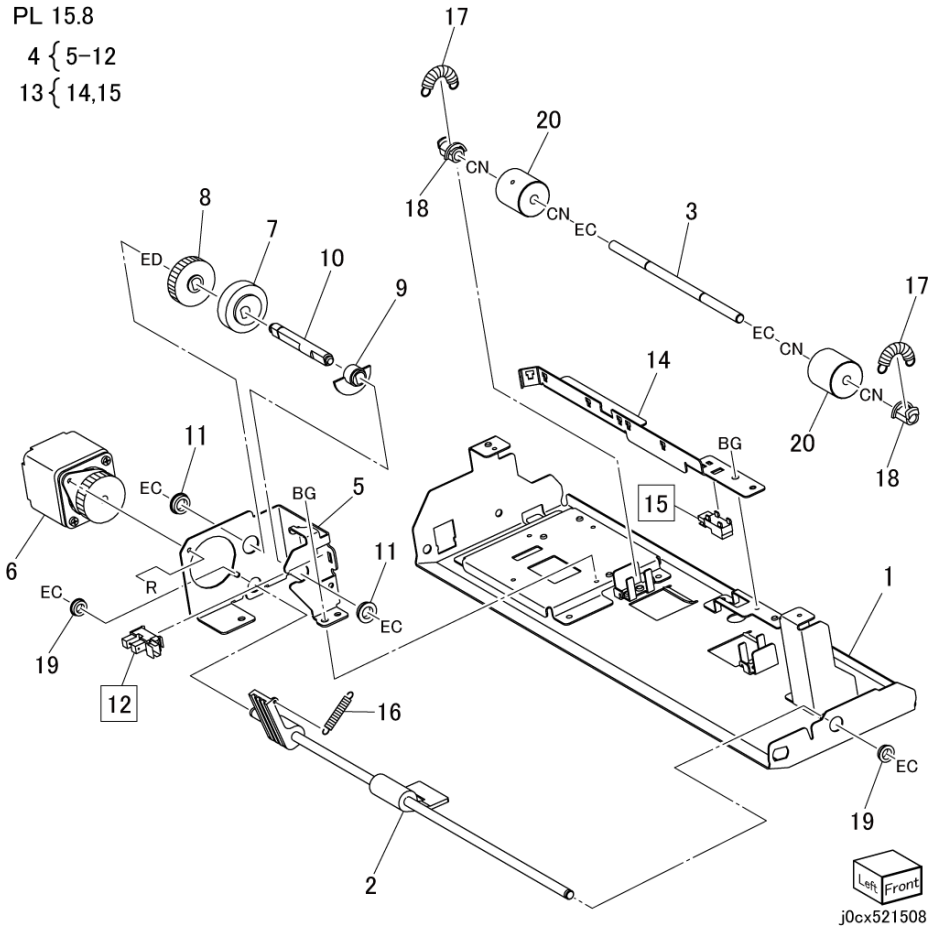
【PL15.7】
Pre Aligner Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K2829X／	GG	TRANSPORT ASSY-ALN REGI NB
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD859K2822X／	DS	Pre Aligner Assembly (Item 6, 8-10)
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD054K5704X／	CE	Pre Aligner Upper Chute Assembly
9	－－－－－	-----	
10	－－－－－	-----	



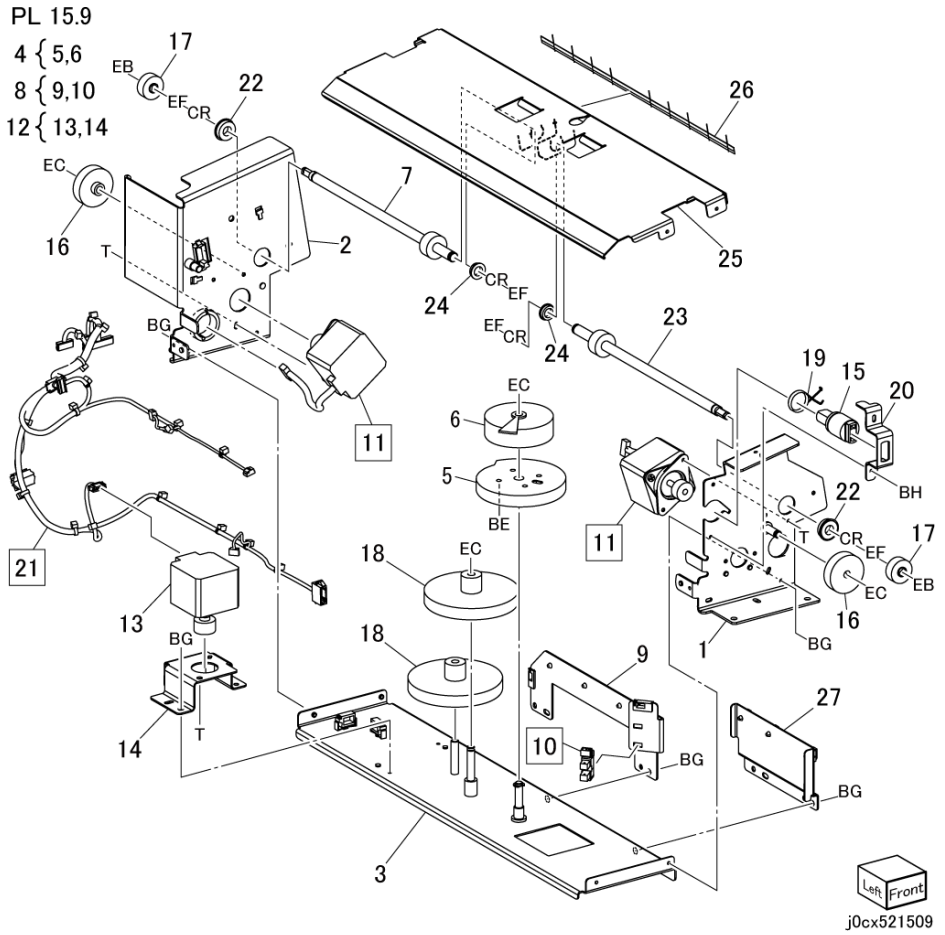
【PL15.8】
Pre Aligner Upper Chute Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD006K8804X/	BC	Pre Aligner N/R Shaft Assembly
3	0TD806E2856X/	AU	Shaft
4	0TD049K4223X/	BZ	Pre Regi. Roll 1 N/R Motor Assembly
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	0TD413W88650/	AL	Bearing
12	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
13	0TD068K6343X/	BK	Aligner Path Sensor Assembly 1 (Item 14, 15)
14	-----	-----	
15	0TD930W00212/	AS	Pre and registration sensors
16	0TD009E3171X/	AG	Spring
17	0TD809E2251X/	AN	Spring
18	0TD013E2705X/	AQ	Bearing
19	0TD413W66250/	AL	Bearing
20	0TD059E0174X/	AN	Pinch Roll 1



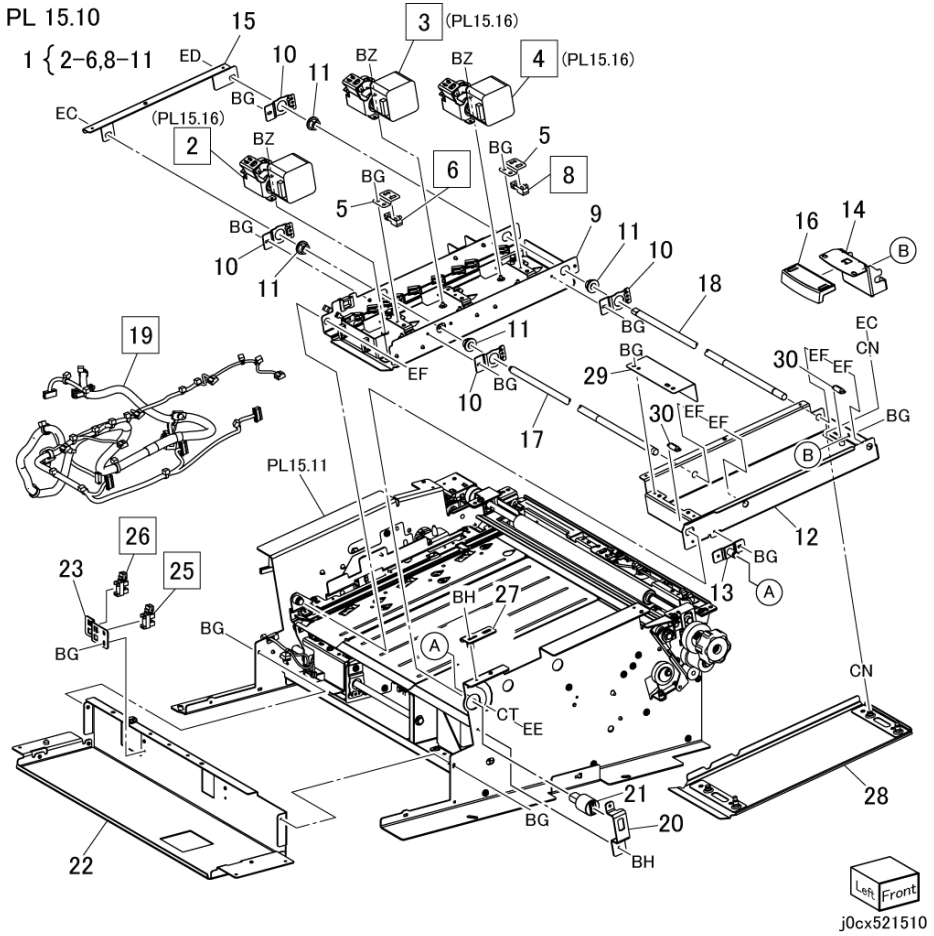
【PL15.9】
Pre Aligner Drive Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD008K9204X／	BK	Cam Assembly (Item 5, 6)
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD859K1084X／	BG	Pre Aligner Roll Rear Assembly
8	0TD068K6344X／	BA	Aligner Unit Home Sensor Assembly (Item 9, 10)
9	－－－－－	-----	
10	0TD930W00112／	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
11	0TD127K5189X／	BL	(SCC) Pre Aligner Drive Motor
12	0TD127K5979X／	BN	Aligner Unit Skew Motor Assembly (Item 13, 14)
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD004E1837X／	BF	Damper
16	0TD807E1887X／	AN	Gear (Z37)
17	0TD807E2055X／	AN	Gear (Z22)
18	0TD807E2703X／	AT	Gear (Z15/75)
19	0TD809E8745X／	AP	Spring
20	－－－－－	-----	
21	0TD952K0877X／	BG	(SCC) Wire Harness (Pre Aligner)
22	0TD413W08350／	AK	Bearing
23	0TD859K1083X／	BG	Pre Aligner Roll Front Assembly
24	－－－－－	-----	
25	－－－－－	-----	
26	0TD925W00011／	AT	Eliminator
27	－－－－－	-----	



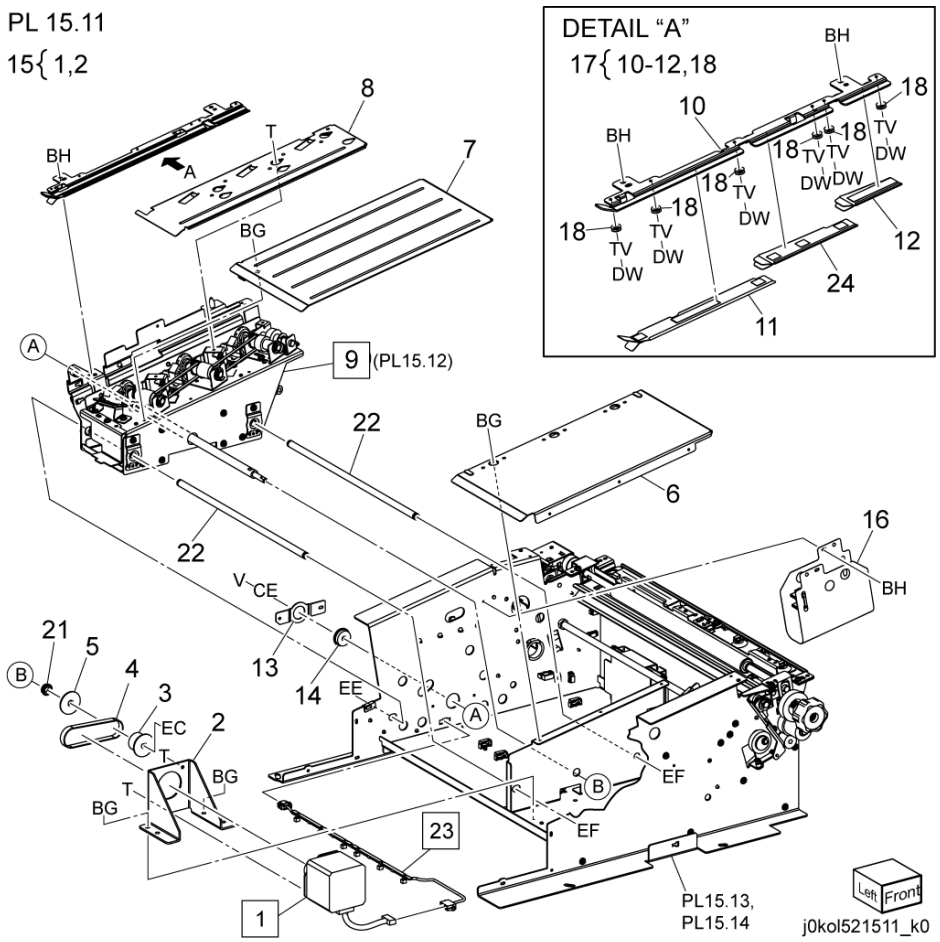
【PL15.10】
Aligner Upper Chute Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K5678X/	CR	Upper Rear Move Chute Assembly (Item 2-6, 8-11)
2	0TD059K6131X/	BW	Aligner Crossed N/R Motor 1 Assembly
3	0TD059K6131X/	BW	Aligner Crossed N/R Motor 1 Assembly
4	0TD059K6131X/	BW	Aligner Crossed N/R Motor 1 Assembly
5	-----	-----	
6	0TD930W00212/	AS	Pre and registration sensors
7	-----	-----	
8	0TD930W00212/	AS	Pre and registration sensors
9	-----	-----	
10	-----	-----	
11	0TD413W77559/	AG	Bearing
12	-----	-----	
13	0TD068K6339X/	AZ	Stud Assembly
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	0TD806E2853X/	BA	Shaft 1
18	0TD806E2854X/	BA	Shaft 2
19	0TD952K0876X/	BQ	(SCC) Wire Harness (Aligner)
20	-----	-----	
21	0TD004E1848X/	BG	Damper
22	-----	-----	
23	-----	-----	
24	-----	-----	
25	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
26	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
27	-----	-----	
28	-----	-----	
29	-----	-----	
30	-----	-----	



【PL15.11】
Aligner Lower Chute Assembly

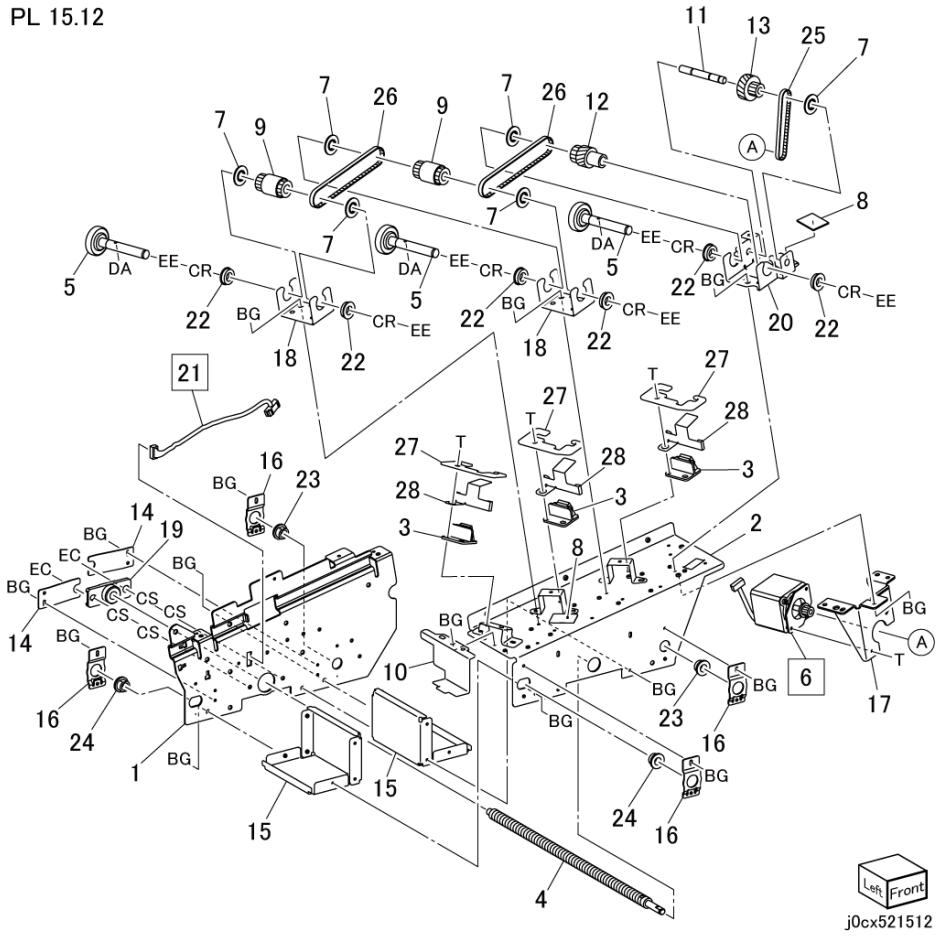
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD127K5943X/	BM	(SCC) Aligner Shift Motor
2	-----	-----	
3	0TD020E4358X/	AQ	Pulley (19)
4	0TD423W45354/	AR	Belt
5	0TD005E8965X/	AL	Collar
6	0TD054K3972X/	BP	Aligner Lower Front Chute
7	0TD054E3997X/	BN	Aligner Lower Middle Chute
8	0TD054K3979X/	BY	Aligner Lower Rear Chute
9	0TD801K6822X/	CW	Aligner Move Frame Assembly (with Item 17)
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	0TD413W06650/	AU	Bearing
15	-----	-----	
16	-----	-----	
17	0TD038K2503X/	CD	Guide Assembly (Item 10-12, 18, 24)
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	0TD413W66250/	AL	Bearing
22	0TD806E2862X/	AW	Shaft
23	0TD962K7269X/	AS	(SCC) Wire Harness (Shift Motor)
24	-----	-----	



【PL15.12】
Aligner Move Frame Assembly

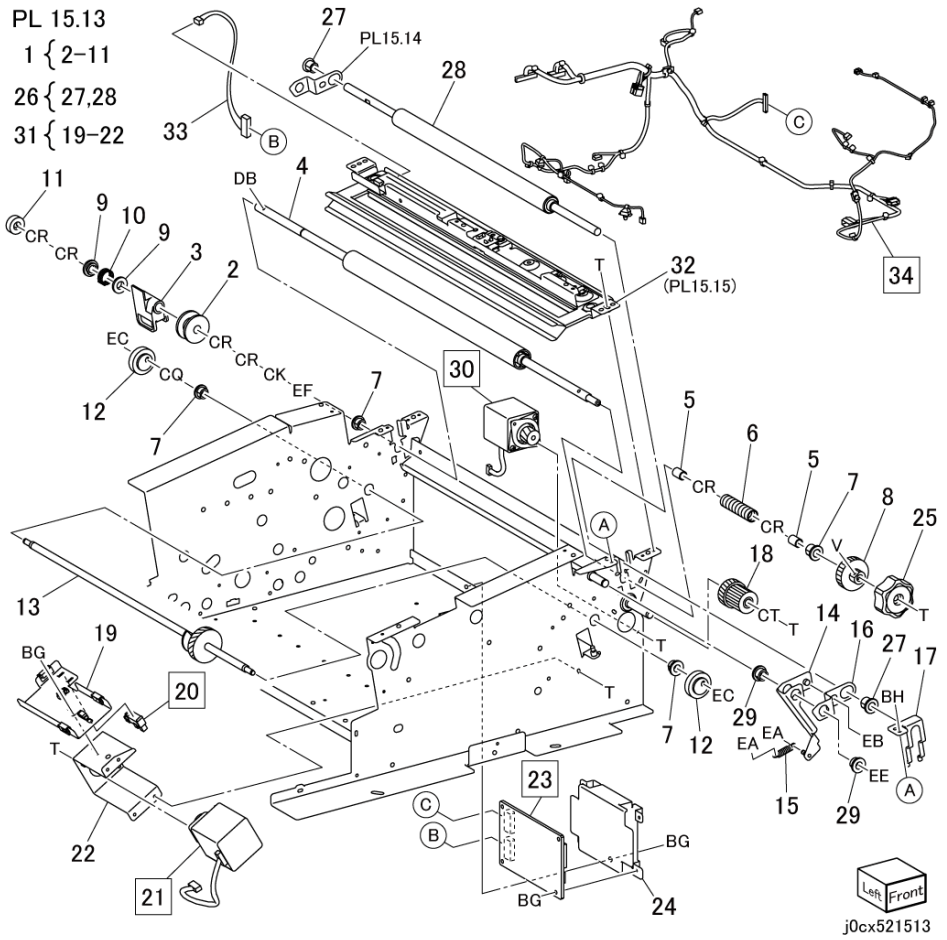
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD015K5334X/	AP	BRACKET ASSY-PAD
4	0TD026K8188X/	BS	Shift Screw (with Item 19)
5	0TD059K6134X/	BA	ROLL ASSY-CROSSED
6	0TD127K5946X/	BN	(SCC) Aligner Drive Motor
7	0TD005E2774X/	AN	Collar
8	0TD019E4787X/	AF	Pad
9	0TD020E4661X/	AN	Pulley
10	0TD120E3175X/	AU	Actuator
11	0TD806E2860X/	AU	Shaft
12	0TD807E2707X/	AS	Gear
13	0TD807E2708X/	AQ	Gear
14	0TD809E9271X/	AP	Spring Plate
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	0TD962K7270X/	AP	(SCC) Wire Harness (Drive Motor)
22	0TD413W08650/	AN	Ball Bearing
23	0TD413W47559/	AG	Bearing
24	0TD413W77559/	AG	Bearing
25	0TD423W08054/	AS	Belt
26	0TD423W10854/	AT	Belt
27	-----	-----	
28	0TD809E9252X/	BB	Plate Spring

PL 15.12



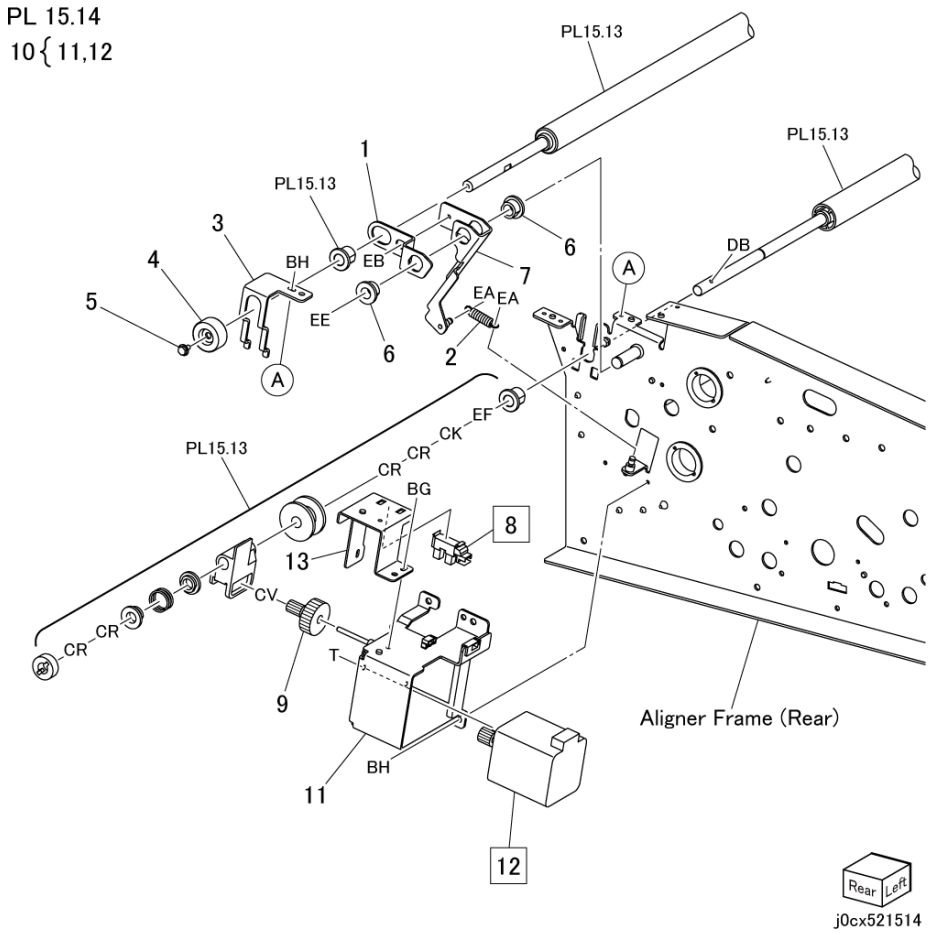
【PL15.13】
Aligner Transport Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD059K6140X/	CE	ROLLER ASSY-REGI DRIVE
2	0TD032E3265X/	AK	Guide
3	-----	-----	
4	0TD059K6272X/	BV	REGISTRATION ROLL
5	0TD013E2046X/	AK	Bearing
6	0TD809E8641X/	AN	Spring
7	0TD013E1603X/	AR	Bearing
8	0TD807E1074X/	AN	Gear (Z45)
9	0TD413W77359/	AF	Bearing
10	0TD809E7456X/	AG	Spring
11	0TD003E5805X/	AK	Roll Stopper
12	0TD008K9194X/	AZ	Lift Cam
13	0TD006K8805X/	BC	Shaft
14	-----	-----	
15	0TD809E8642X/	AL	Spring
16	-----	-----	
17	-----	-----	
18	0TD007K1559X/	BA	Gear (28/32)
19	-----	-----	
20	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
21	0TD127K5303X/	BM	(SCC) Regi N/R Motor
22	-----	-----	
23	0TD961K2221X/	BZ	PWB ASSY-CS,DF,EF-C3
24	-----	-----	
25	-----	-----	
26	0TD059K6141X/	BS	ROLLER ASSY-REGI PINCH
27	0TD013E1603X/	AR	Bearing
28	0TD059K6659X/	BQ	Reg PINCH ROLL
29	0TD413W77559/	AG	Bearing
30	0TD127K7912X/	BT	(SCC) Regi Motor
31	0TD068K6780X/	BR	Regi. N/R Motor Assembly (Item 19-22)
32	-----	-----	
33	-----	-----	
34	0TD952K0875X/	BR	(SCC) Wire Harness (Regi.)



【PL15.14】
Aligner Transport Assembly (2 of 2)

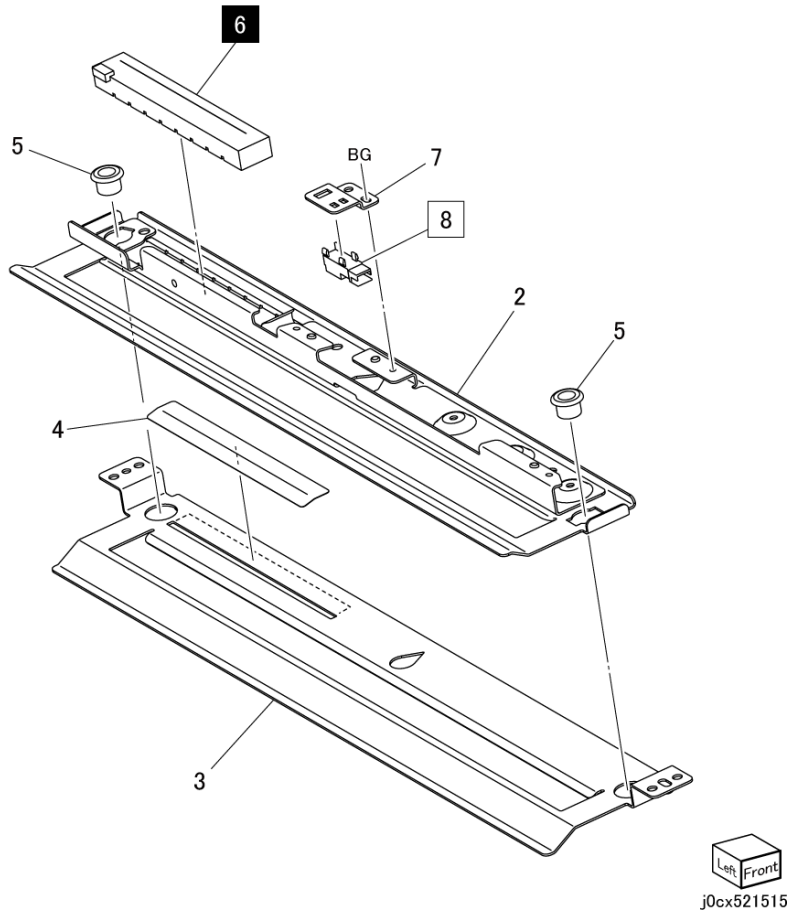
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD809E8642X／	AL	Spring
3	－－－－－	-----	
4	0TD032E1230X／	AY	Pinch Guide
5	0TD826E2331X／	AD	Screw
6	0TD413W77559／	AG	Bearing
7	－－－－－	-----	
8	0TD930W00112／	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
9	0TD807E1901X／	AP	GEAR-Z15 47 M0.5
10	0TD049K4629X／	BT	Regi. Side Shift Motor Assembly (Item 11, 12)
11	－－－－－	-----	
12	0TD127K7916X／	BN	(SCC) Regi Side Shift Motor
13	－－－－－	-----	



【PL15.15】
Regi. Chute Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K3977X／	CA	Regi. Chute Assembly (Item 2-5)
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD130E9491X／	BT	Side Regi Line Sensor (CIS)
7	－－－－－	-----	
8	0TD930W00212／	AS	Pre and registration sensors

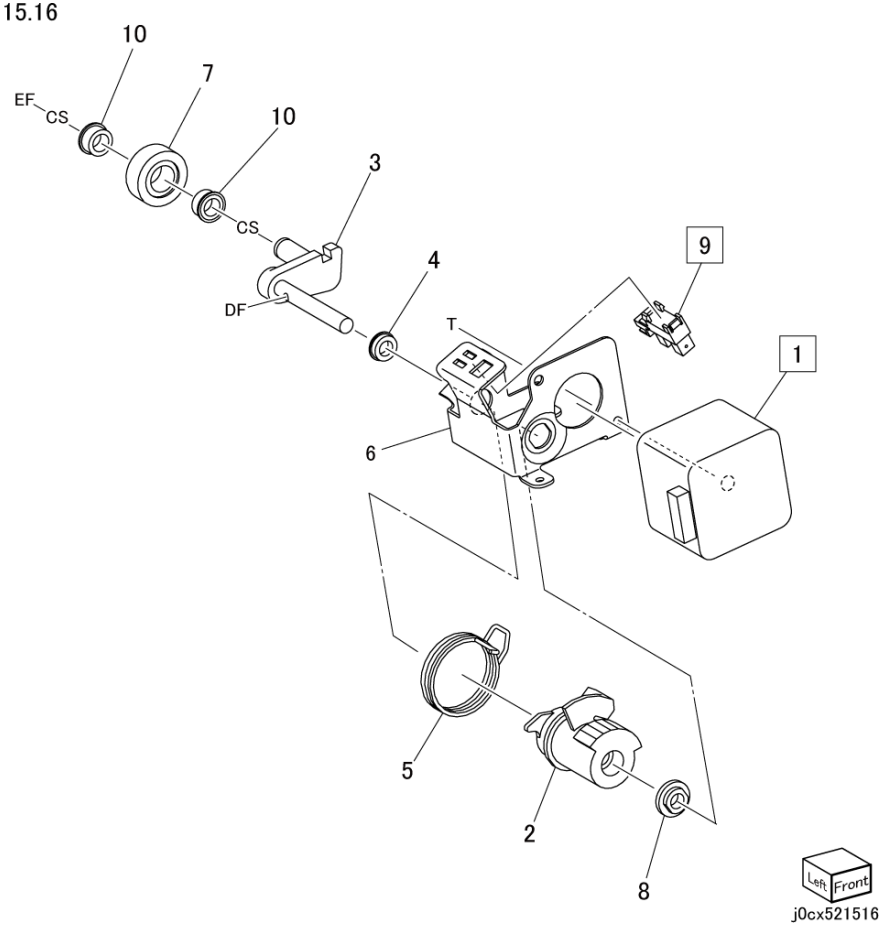
PL 15.15
1 { 2-5



【PL15.16】
Aligner Crossed N/R Motor 1/2/3 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD127K6042X/	BL	(SCC) Aligner Crossed N/R Motor 1/2/3
2	-----	-----	
3	-----	-----	
4	0TD413W66250/	AL	Bearing
5	-----	-----	
6	-----	-----	
7	0TD059E0720X/	AZ	Pinch Roll
8	0TD413W75659/	AF	Bearing
9	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
10	0TD413W88650/	AL	Bearing

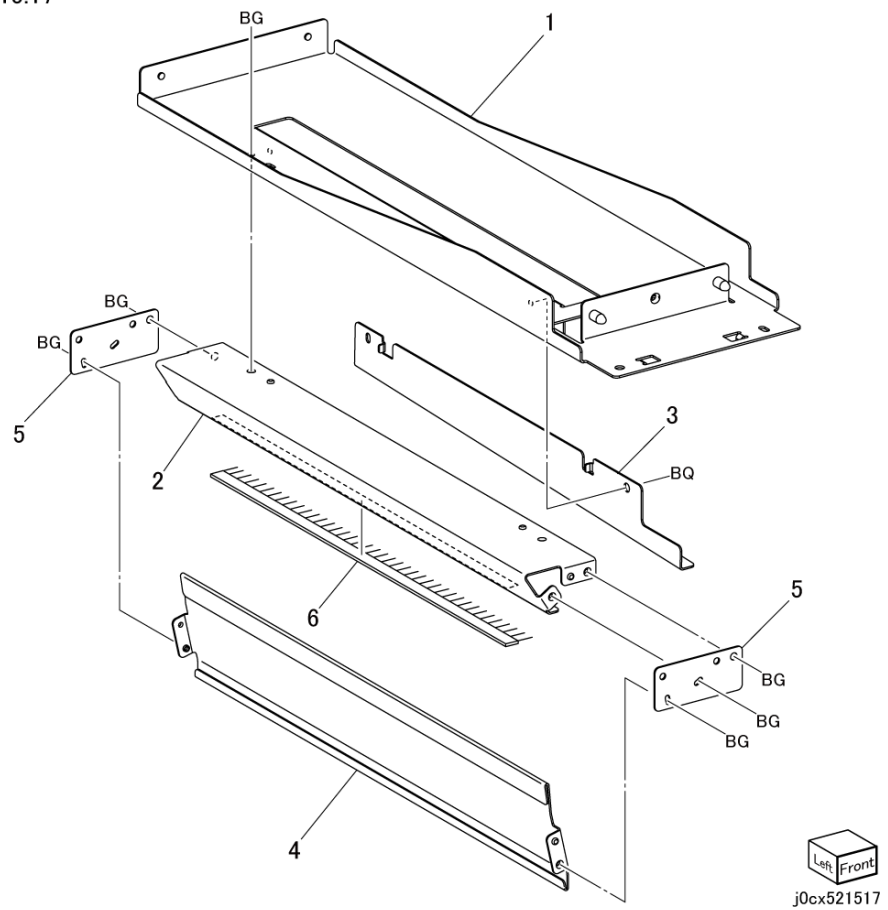
PL 15.16



【PL15.17】
Pre Regi. Rail Assembly

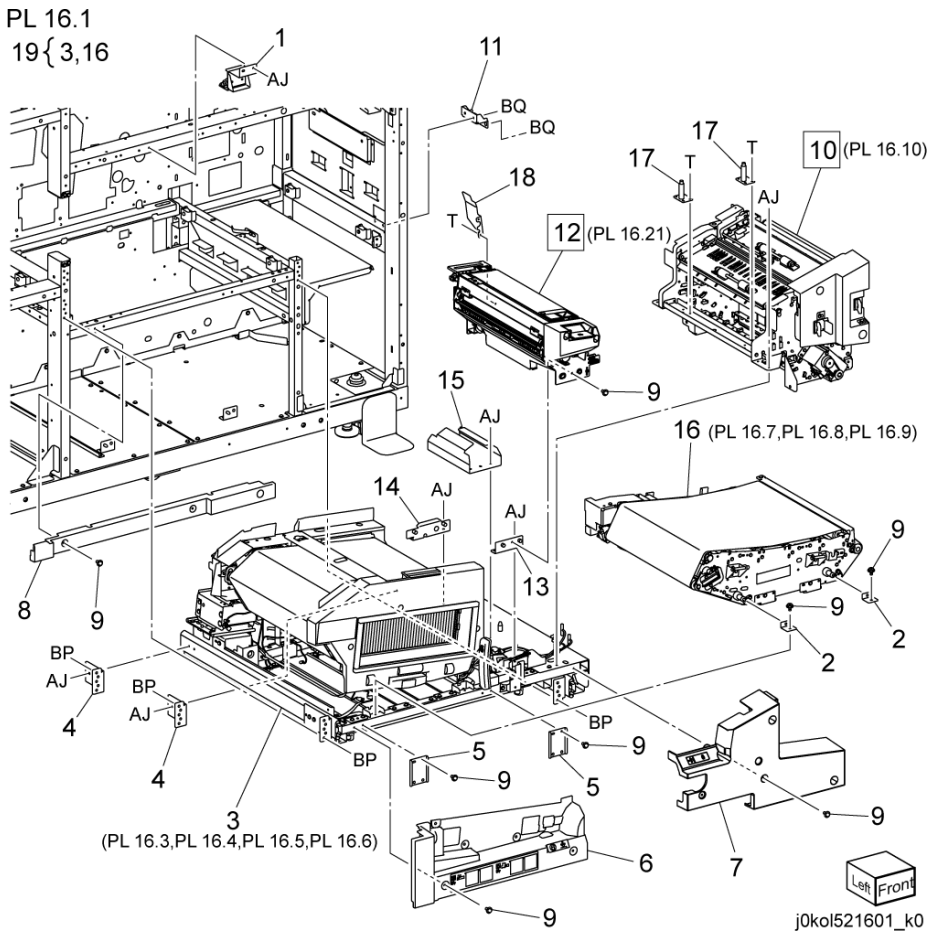
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD105E1733X／	AP	Eliminator

PL 15.17



【PL16.1】
Exit Drawer Unit

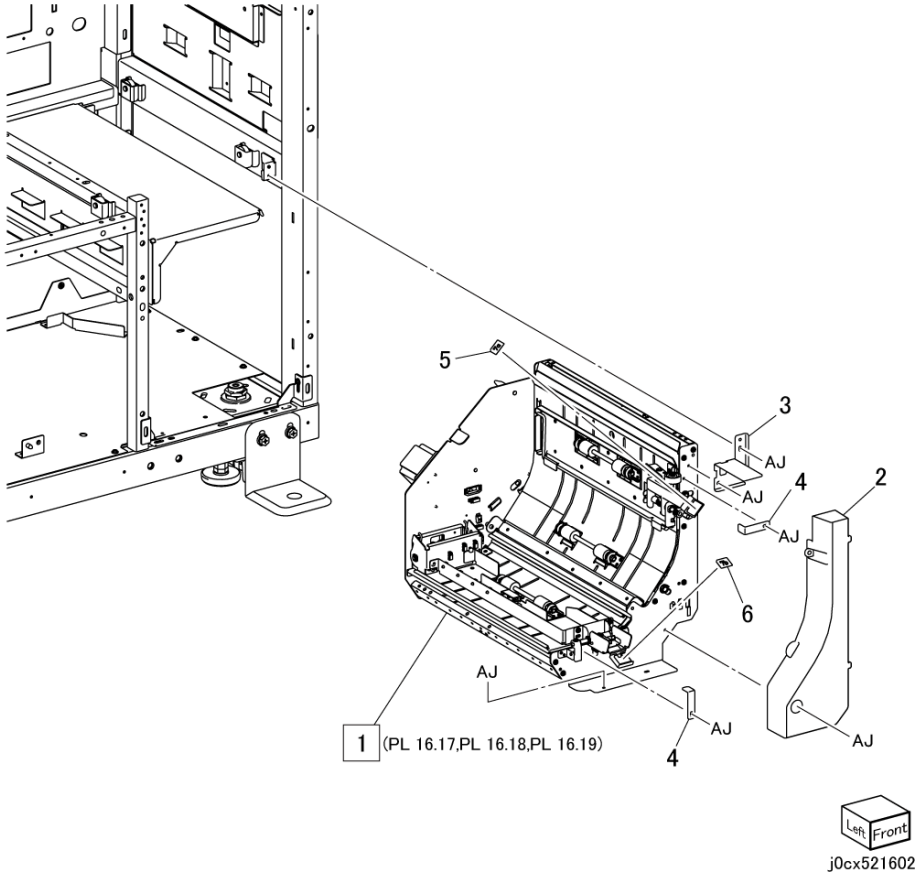
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD003K8732X/	BQ	Stopper Assembly
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD948K5168X/	BU	COVER ASSY-INNER LH C2 NB
7	0TD948K5169X/	BS	COVER INNER RH EXIT ASSY C2
8	0TD822E8251X/	BL	COVERINNER FRAME NB
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD859K4028X/	EF	TRANSPORT ASSY-DECURLER NB
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	0TD815K0658X/	AX	Guard Plate (Option)
18	-----	-----	
19	0TD607K2828X/	HQ	KIT-COOLING NB



【PL16.2】
Inverter 2 Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	

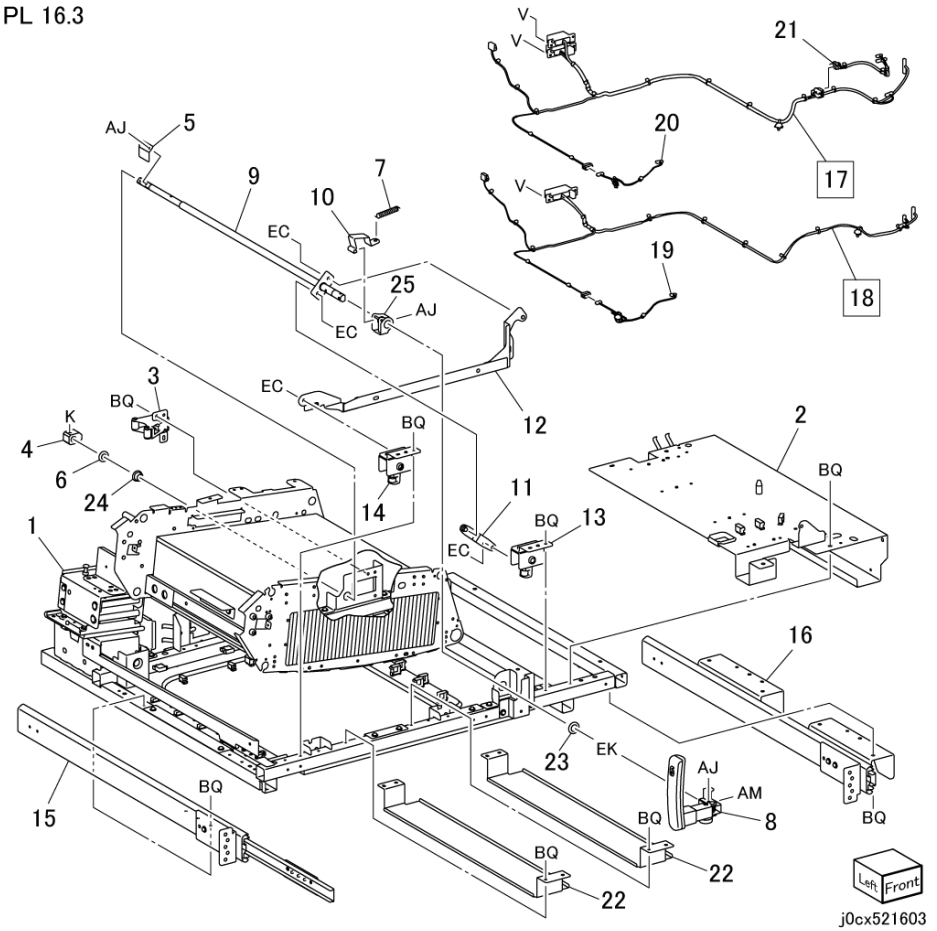
PL 16.2



【PL16.3】
Exit Drawer Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD068K6588X/	BF	Stopper Bracket Assembly (Item 2-7)
4	0TD008E9237X/	AS	Cam Block
5	0TD815E5040X/	AL	Plate Switch
6	0TD413W79159/	AG	Bearing
7	0TD809E8867X/	AN	Spring
8	0TD003K2568X/	BX	HUNDLE ASSY EXIT-DRW C2 NB
9	0TD006K8880X/	BK	Shaft Assembly
10	0TD868E4696X/	AW	Spring Bracket
11	0TD815K0148X/	AY	Left Link Assembly
12	0TD815K0147X/	BN	Right Link Assembly
13	-----	-----	
14	-----	-----	
15	0TD801K4279X/	BX	Left Rail Assembly
16	0TD801K4280X/	BZ	Right Rail Assembly
17	0TD962K7099X/	BP	(SCC) Wire Harness
18	0TD962K7997X/	BH	(SCC) Wire Harness (SM)
19	0TD962K8501X/	AV	Wire Harness
20	0TD962K8502X/	AR	Wire Harness
21	0TD962K8503X/	AS	Wire Harness
22	-----	-----	
23	0TD013E8861X/	AK	Bearing
24	0TD413W79359/	AF	Bearing
25	-----	-----	

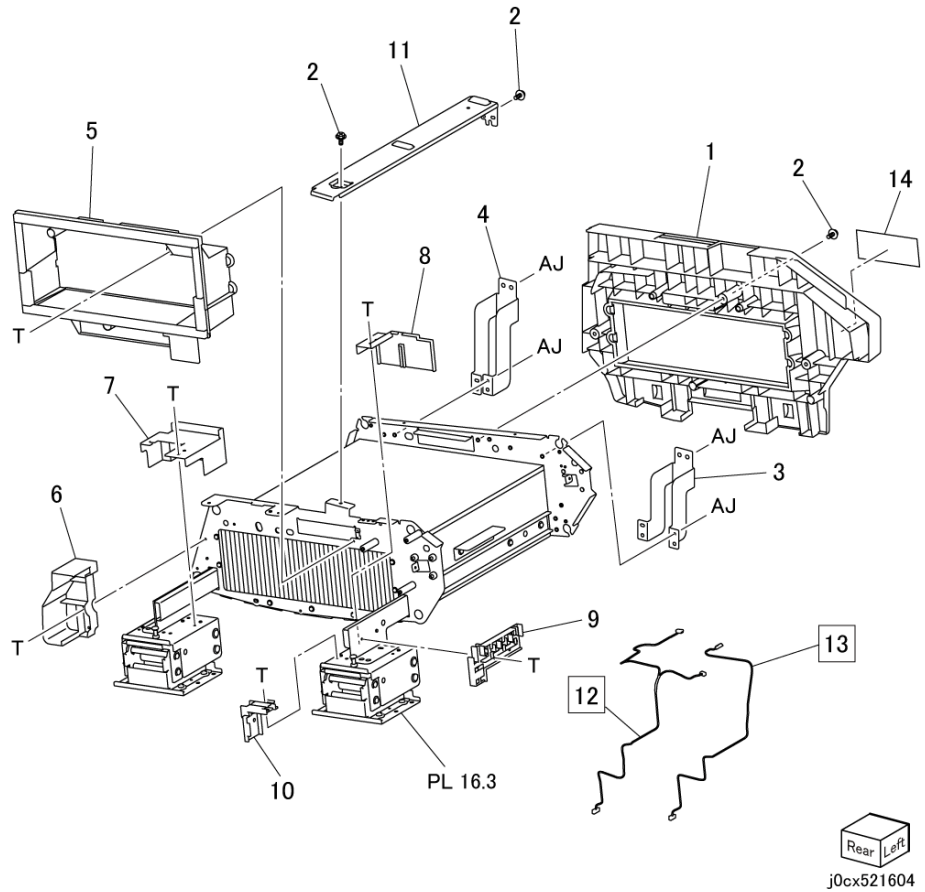
PL 16.3



【PL16.4】
CLG Upper Assembly (1 of 3)

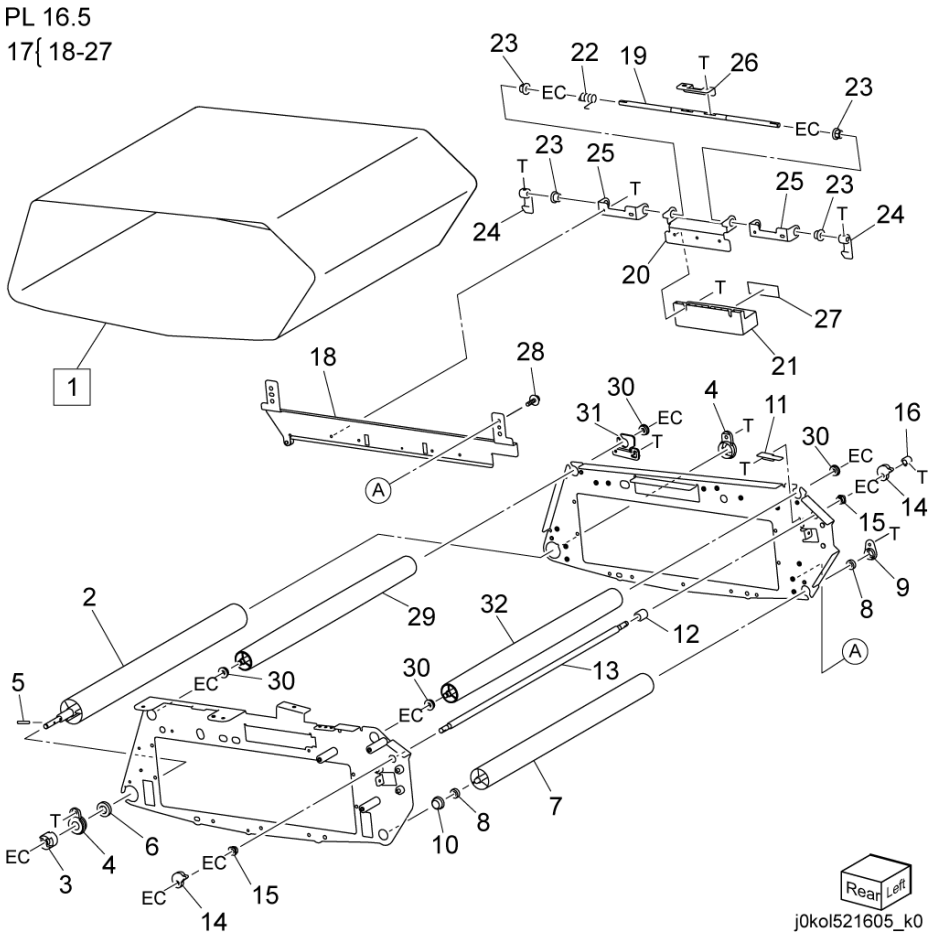
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD962K7287X／	AZ	(SCC) Wire Harness
13	0TD962K7998X／	AZ	(SCC) Wire Harness
14	－－－－－	-----	

PL 16.4



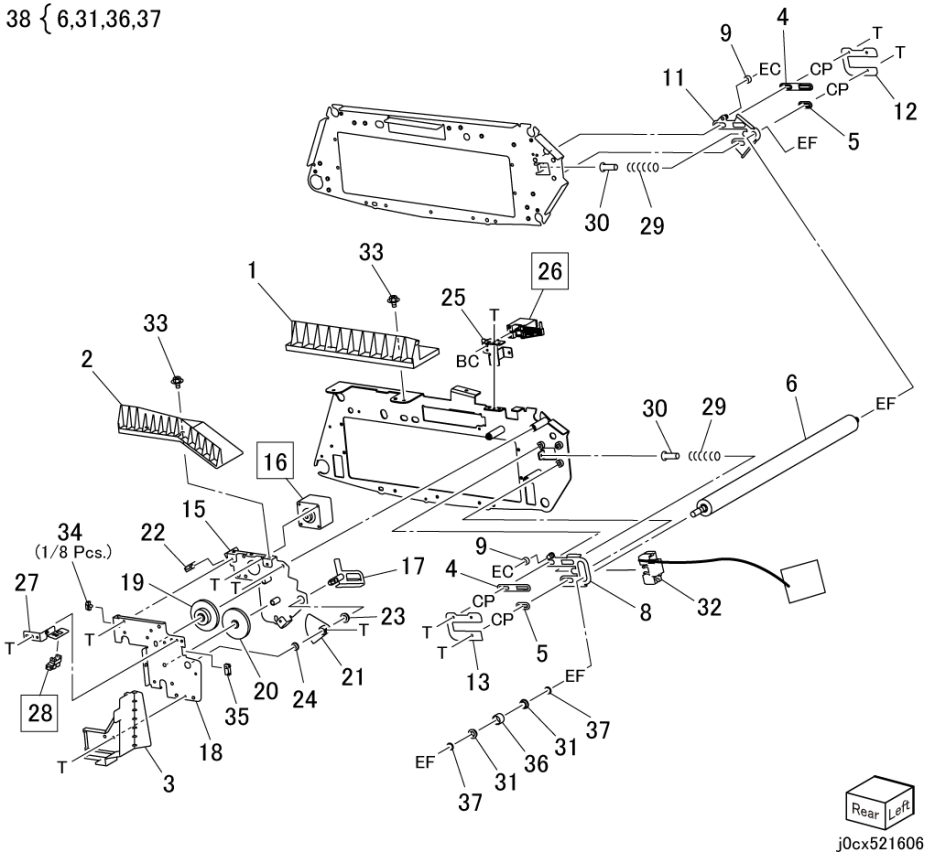
【PL16.5】
CLG Upper Assembly (2 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD064E9226X/	BV	BELT-COOLING
2	0TD059K7193X/	BS	ROLL ASSY-DRIVE BRG
3	0TD005E4031X/	BA	Coupling
4	0TD005E1849X/	AP	Collar
5	0TD029E5463X/	AX	Pin
6	0TD413W95150/	AR	Ball Bearing
7	0TD059K6268X/	BN	Idler Roll
8	0TD413W90350/	BA	Bearing Ball
9	0TD005E1846X/	AP	Collar Sensor
10	0TD005E1845X/	AP	Collar Out
11	-----	-----	
12	0TD803E0302X/	AZ	Stopper
13	0TD806E2950X/	BA	Tension Shaft
14	0TD008E9729X/	AX	Retract Cam
15	0TD413W11660/	AD	Sleeve Bearing
16	0TD021E1350X/	AS	Cap
17	0TD003K2557X/	BV	LATCH ASSY-UPPER NB
18	-----	-----	
19	-----	-----	
20	-----	-----	
21	0TD803E3521X/	BB	KNOB-LATCH PG
22	-----	-----	
23	0TD413W75959/	AG	Bearing
24	0TD803E0636X/	AL	Latch
25	-----	-----	
26	-----	-----	
27	-----	-----	
28	-----	-----	
29	0TD859K0701X/	BM	Idler Roll
30	0TD013E4641X/	AR	Ball Bearing
31	-----	-----	
32	0TD859K1453X/	BK	Idler Roll (with 159V)



【PL16.6】
CLG Upper Assembly (3 of 3)

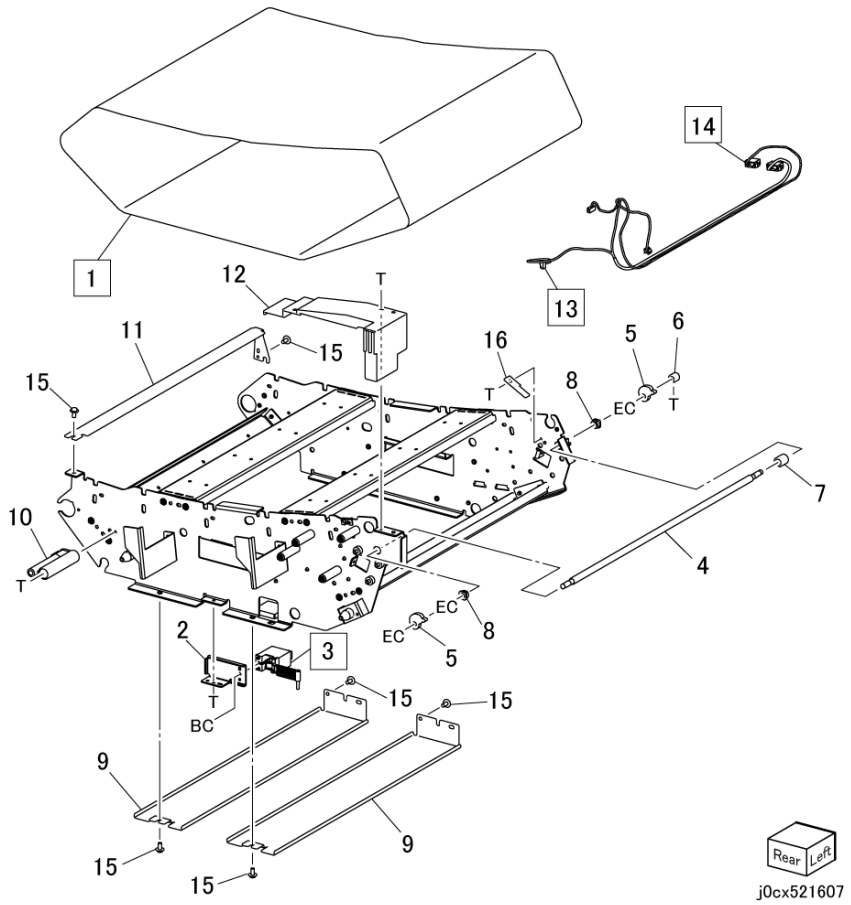
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD014E6444X／	AX	Spacer (L)
5	0TD014E6445X／	AX	Spacer (S)
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD032E3659X／	AZ	Front Slider Guide
13	0TD032E3659X／	AZ	Front Slider Guide
14	0TD007K1813X／	BV	Cooling Upper Walk Motor Assembly (Item 15-24)
15	－－－－－	-----	
16	0TD127K2922X／	BG	(SCC) Cooling Upper Walk Motor
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	0TD913W13171／	AD	Connector
23	0TD413W88650／	AL	Bearing
24	0TD413W66250／	AL	Bearing
25	－－－－－	-----	
26	0TD130K7883X／	BT	(SCC) Cooling Upper Belt Position Sensor
27	－－－－－	-----	
28	0TD930W00112／	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
29	0TD899E1718X／	AY	Spring
30	0TD029E4715X／	AZ	Pin
31	0TD413W88650／	AL	Bearing
32	－－－－－	-----	
33	－－－－－	-----	
34	－－－－－	-----	
35	－－－－－	-----	
36	－－－－－	-----	
37	－－－－－	-----	
38	0TD059K7238X／	BX	ROLL ASSY-STEERING



【PL16.7】
CLG Lower Assembly (1 of 3)

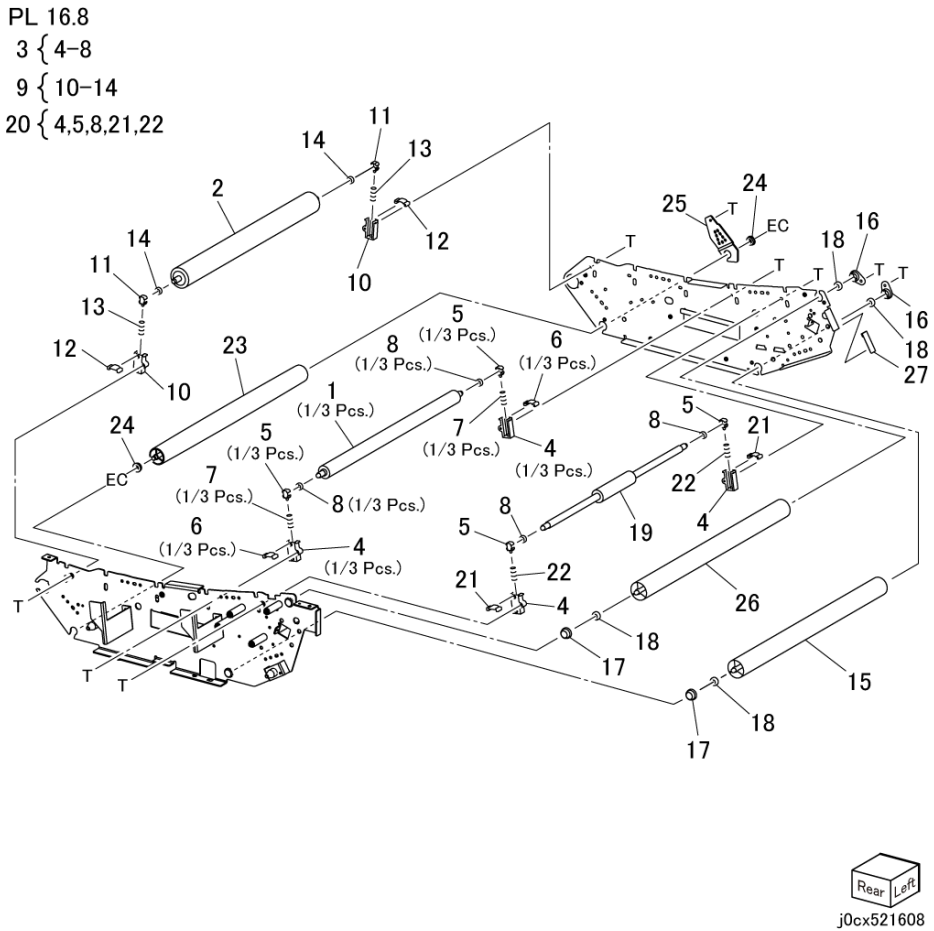
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD064E9226X/	BV	BELT-COOLING
2	-----	-----	
3	0TD130K8935X/	BT	(SCC) Cooling Lower Belt Position Sensor
4	0TD806E2950X/	BA	Tension Shaft
5	0TD008E9729X/	AX	Retract Cam
6	0TD021E1350X/	AS	Cap
7	0TD803E0302X/	AZ	Stopper
8	0TD413W11660/	AD	Sleeve Bearing
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	0TD962K7286X/	AZ	(SCC) Wire Harness
14	0TD962K7999X/	AZ	(SCC) Wire Harness
15	-----	-----	
16	-----	-----	

PL 16.7



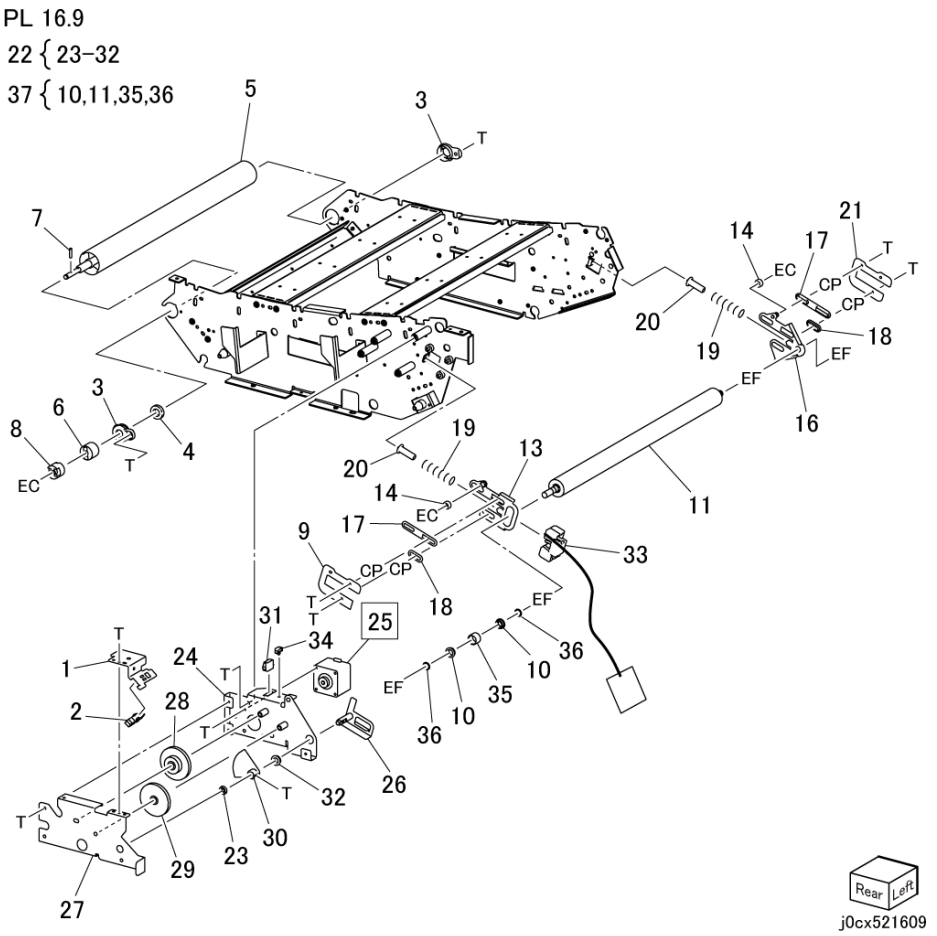
【PL16.8】
CLG Lower Assembly (2 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD059K6269X/	BG	ROLL ASSY-BACKUP D20
2	0TD059K6270X/	BP	ROLL ASSY-BACKUP D32
3	0TD019K1069X/	BE	HOLDER ASSY-BACKUP D20
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD019K1189X/	BE	Holder Assembly (D32) (Item 10-14)
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	0TD059K6268X/	BN	Idler Roll
16	0TD005E1846X/	AP	Collar Sensor
17	0TD005E1845X/	AP	Collar Out
18	0TD413W93250/	AU	Ball Bearing
19	0TD059K7109X/	BG	ROLL ASSY-BACKUP D20S
20	0TD019K1830X/	BB	Holder Assembly (D20S) (with 159V) (Item 4, 5, 8, 21, 22)
21	-----	-----	
22	-----	-----	
23	0TD859K0701X/	BM	Idler Roll
24	0TD013E4641X/	AR	Ball Bearing
25	-----	-----	
26	0TD859K1452X/	BM	Idler Roll (with 159V)
27	0TD118E2446X/	BA	Film (with 159V)



【PL16.9】
CLG Lower Assembly (3 of 3)

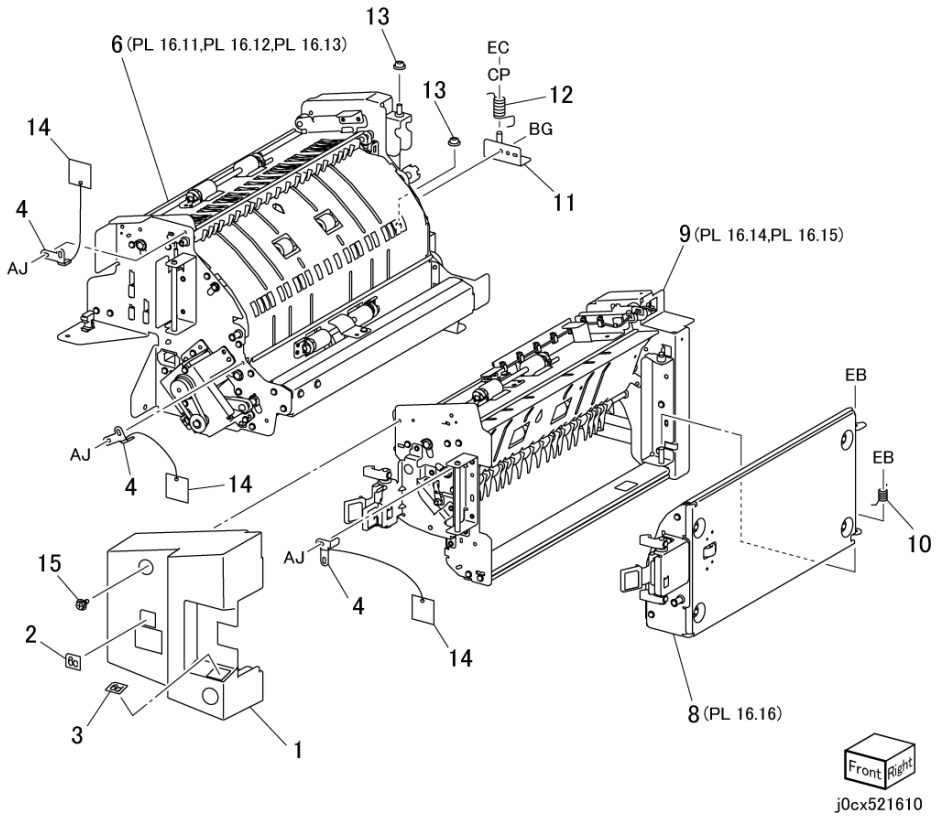
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
3	0TD005E1849X/	AP	Collar
4	0TD413W95150/	AR	Ball Bearing
5	0TD059K7193X/	BS	ROLL ASSY-DRIVE BRG
6	0TD127E8591X/	BA	Torque Limiter
7	0TD029E4714X/	BA	Pin
8	0TD005E4031X/	BA	Coupling
9	0TD032E3659X/	AZ	Front Slider Guide
10	0TD413W88650/	AL	Bearing
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	0TD014E6444X/	AX	Spacer (L)
18	0TD014E6445X/	AX	Spacer (S)
19	0TD899E2157X/	AY	Spring (with 159V)
20	0TD029E4715X/	AZ	Pin
21	0TD032E3659X/	AZ	Front Slider Guide
22	0TD007K1790X/	BV	CLG Lower Walk Motor Assembly (Item 23-32)
23	0TD413W66250/	AL	Bearing
24	-----	-----	
25	0TD127K2922X/	BG	(SCC) Cooling Upper Walk Motor
26	-----	-----	
27	-----	-----	
28	-----	-----	
29	-----	-----	
30	-----	-----	
31	0TD913W13171/	AD	Connector
32	0TD413W88650/	AL	Bearing
33	-----	-----	
34	-----	-----	
35	-----	-----	
36	-----	-----	
37	0TD059K7238X/	BX	ROLL ASSY-STEERING



【PL16.10】
Inverter 1 (1 of 7)

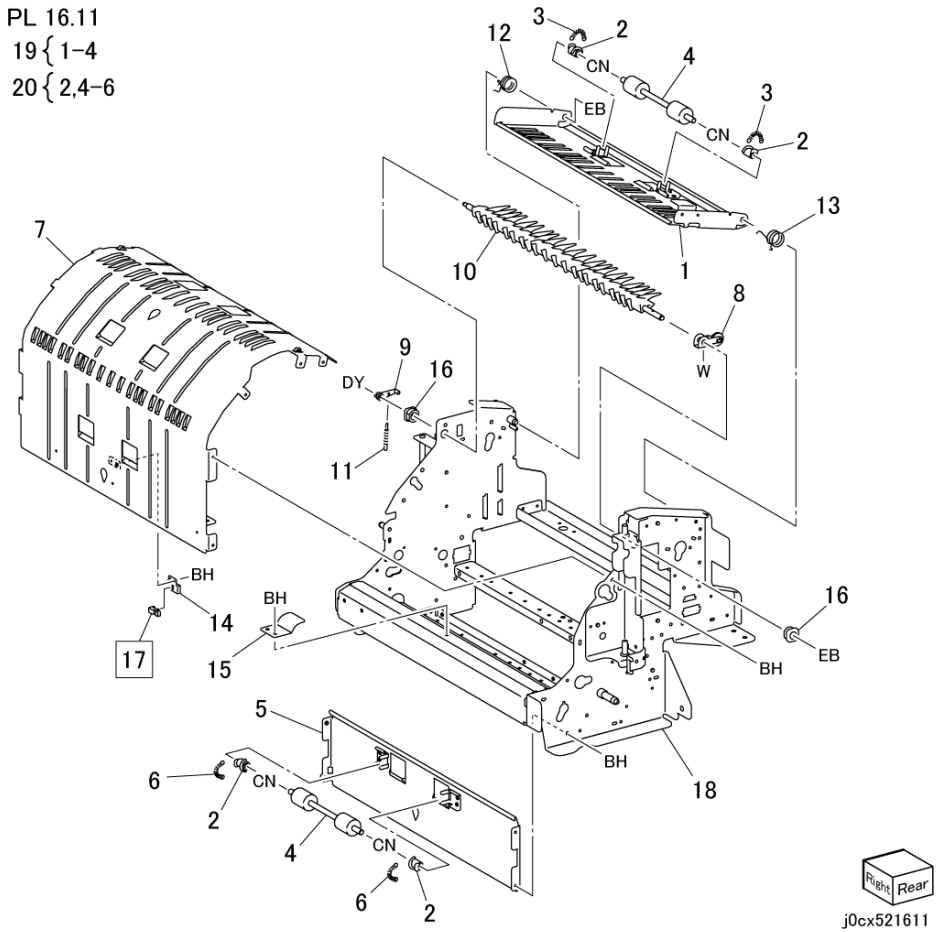
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD859K2869X／	EQ	TRANSPORT ASSY-INV1 NB
6	0TD859K1070X／	DM	Inverter Fix Transport Assembly
7	0TD859K2870X／	DM	TRANSPORT ASSY-INV SWING NB
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD809E8617X／	AP	Spring
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	

PL 16.10
5 { 6–13
7 { 8–10



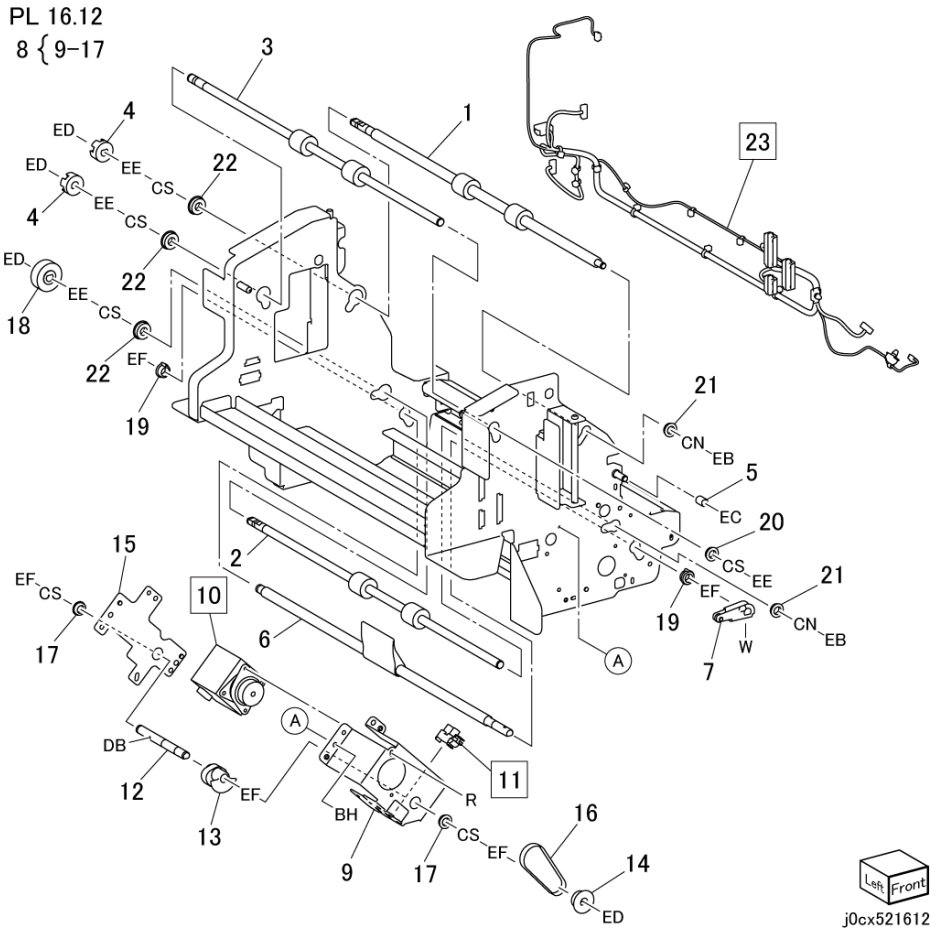
【PL16.11】
Inverter 1 (2 of 7)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD013E2705X/	AQ	Bearing
3	0TD809E8611X/	AL	Pinch Spring
4	0TD059K6818X/	BA	Pinch Roll
5	-----	-----	
6	0TD809E8612X/	AL	Pinch Spring
7	-----	-----	
8	0TD011K0322X/	BA	Cam Gate Lever Assembly
9	0TD012E2001X/	AX	Link
10	0TD050K6352X/	BH	Inverter In Gate
11	0TD809E5503X/	AL	Spring
12	0TD809E8753X/	AP	Spring (Front)
13	0TD809E8754X/	AP	Spring (Rear)
14	0TD868E2964X/	AH	Sensor Bracket
15	-----	-----	
16	0TD413W11660/	AD	Sleeve Bearing
17	0TD930W00212/	AS	Pre and registration sensors
18	-----	-----	
19	0TD054K3943X/	BT	Entrance Chute Assembly (Item 1-4)
20	0TD054K3945X/	BQ	Inverter Chute Assembly (Item 2, 4-6)



【PL16.12】
Inverter 1 (3 of 7)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K1060X/	BL	Invert In Roll
2	-----	-----	
3	0TD859K1185X/	BD	H-Tra Roll 2
4	0TD005E2434X/	AN	Coupling
5	0TD005E2796X/	AN	Collar
6	0TD006K8796X/	BC	Shaft
7	0TD011K0327X/	BB	Cam Lever
8	0TD068K6306X/	BV	Invert N/R Motor Assembly (Item 9-17)
9	-----	-----	
10	0TD127K5247X/	BL	(SCC) Invert N/R Motor
11	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	0TD423W45354/	AR	Belt
17	0TD413W88650/	AL	Bearing
18	0TD807E2683X/	AH	Gear (Z34)
19	0TD413W18860/	AK	Bearing
20	0TD413W66250/	AL	Bearing
21	0TD413W88650/	AL	Bearing
22	0TD413W91450/	AZ	Ball Bearing
23	0TD962K7258X/	BD	(SCC) Wire Harness

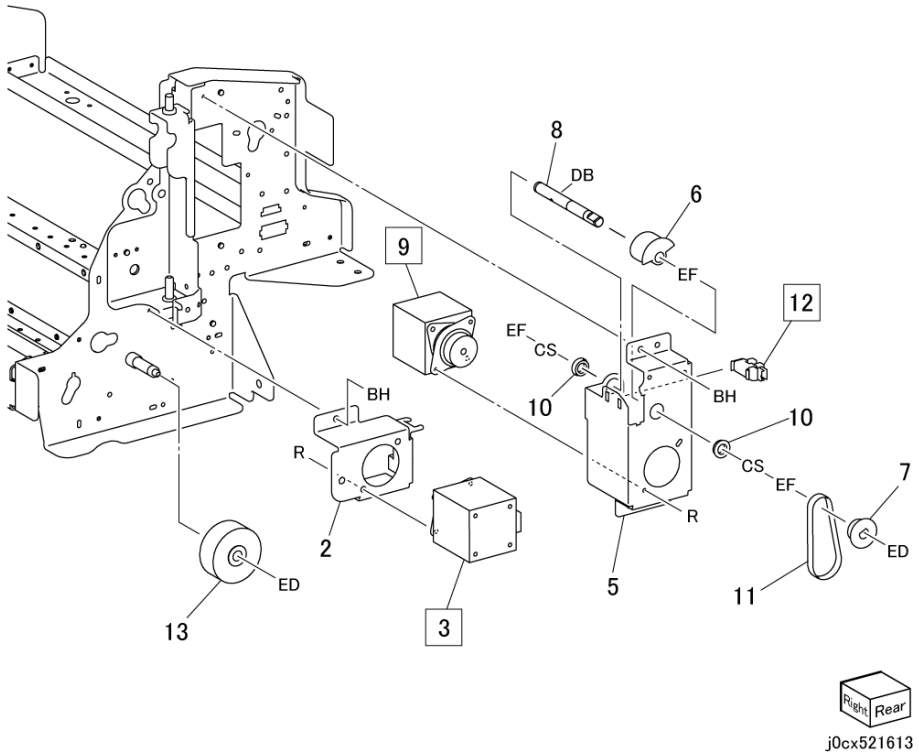


Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD068K6304X/	BR	Invert Motor Assembly (Item 2, 3)
2	-----	-----	
3	0TD127K5927X/	BP	(SCC) Dup Invert Motor
4	0TD068K6307X/	BT	Invert Gate Motor Assembly (Item 5-12)
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD127K5247X/	BL	(SCC) Invert N/R Motor
10	0TD413W88650/	AL	Bearing
11	0TD423W45354/	AR	Belt
12	0TD930W00112/	AL	(SCC) Front/Rear 2nd Nip Adjustable Cam Home Sensor
13	0TD807E2681X/	AL	Idler Gear (Z49)

PL 16.13

1 { 2,3

4 { 5-12



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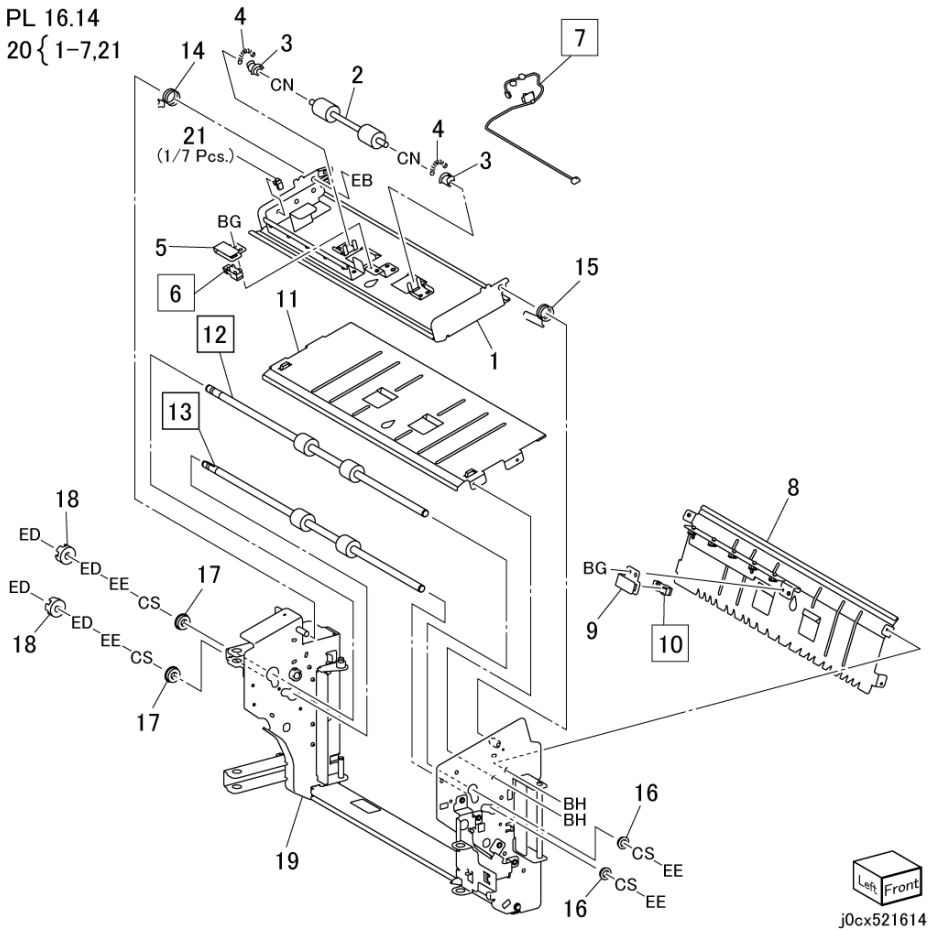
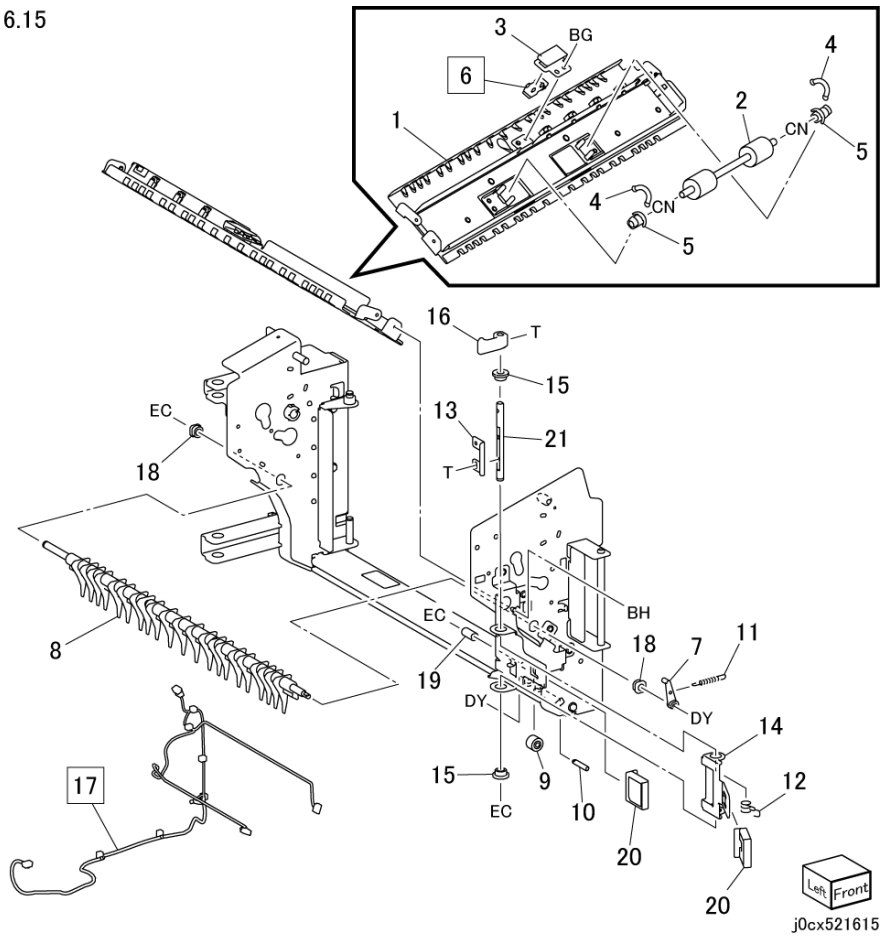
【PL16.14】
Inverter 1 (5 of 7)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD059K6818X/	BA	Pinch Roll
3	0TD013E2705X/	AQ	Bearing
4	0TD809E8623X/	AL	Pinch Spring
5	0TD868E2964X/	AH	Sensor Bracket
6	0TD930W00212/	AS	Pre and registration sensors
7	0TD962K7262X/	AP	(SCC) Wire Harness
8	-----	-----	
9	0TD868E2964X/	AH	Sensor Bracket
10	0TD930W00212/	AS	Pre and registration sensors
11	-----	-----	
12	0TD859K1185X/	BD	H-Tra Roll 2
13	-----	-----	
14	0TD809E8753X/	AP	Spring (Front)
15	0TD809E8754X/	AP	Spring (Rear)
16	0TD413W88650/	AL	Bearing
17	0TD413W91450/	AZ	Ball Bearing
18	0TD005E2434X/	AN	Coupling
19	-----	-----	
20	0TD054K3950X/	BW	Upper Chute Assembly (Item 1-7, 21)
21	0TD920W01209/	AD	Clamp



Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD059K6818X/	BA	Pinch Roll
3	0TD868E2964X/	AH	Sensor Bracket
4	0TD809E8615X/	AK	Pinch Spring
5	0TD013E2705X/	AQ	Bearing
6	0TD930W00212/	AS	Pre and registration sensors
7	0TD012E2001X/	AX	Link
8	0TD050K6353X/	BH	Inverter Gate
9	0TD059E9939X/	AK	Roller
10	-----	-----	
11	0TD809E5503X/	AL	Spring
12	0TD809E8613X/	AL	Latch Spring
13	0TD815E5210X/	AV	Latch Plate
14	-----	-----	
15	-----	-----	
16	0TD003E4857X/	AG	Latch
17	0TD962K7260X/	BA	(SCC) Wire Harness
18	0TD413W11660/	AD	Sleeve Bearing
19	0TD005E2796X/	AN	Collar
20	0TD803E3495X/	BD	KNOB NB
21	-----	-----	

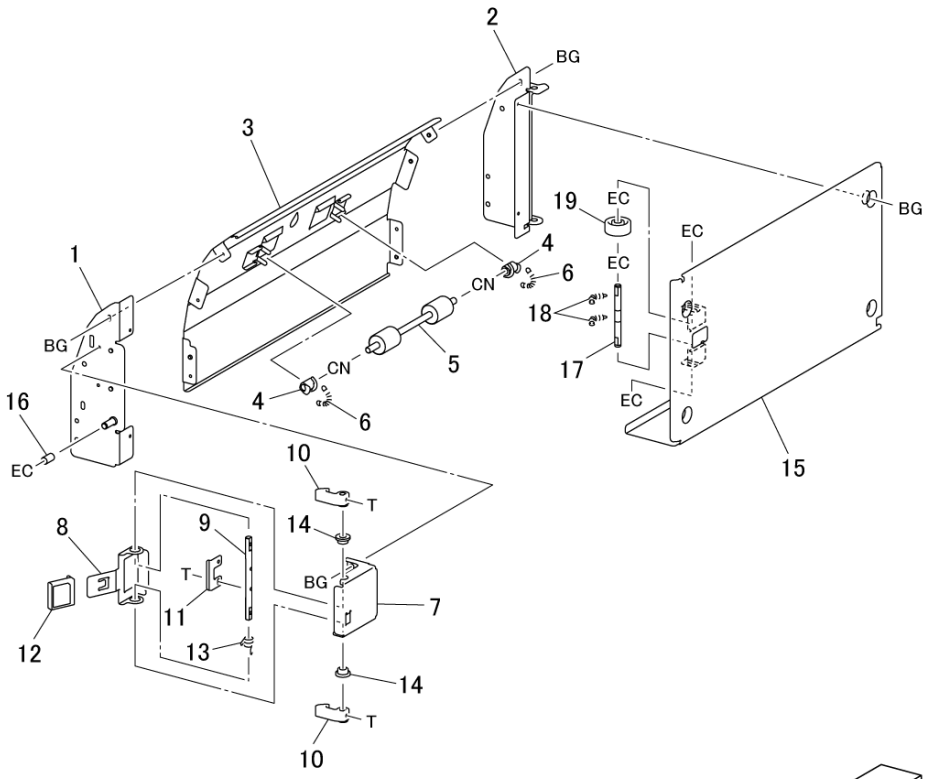
PL 16.15



【PL16.16】
Inverter 1 (7 of 7)

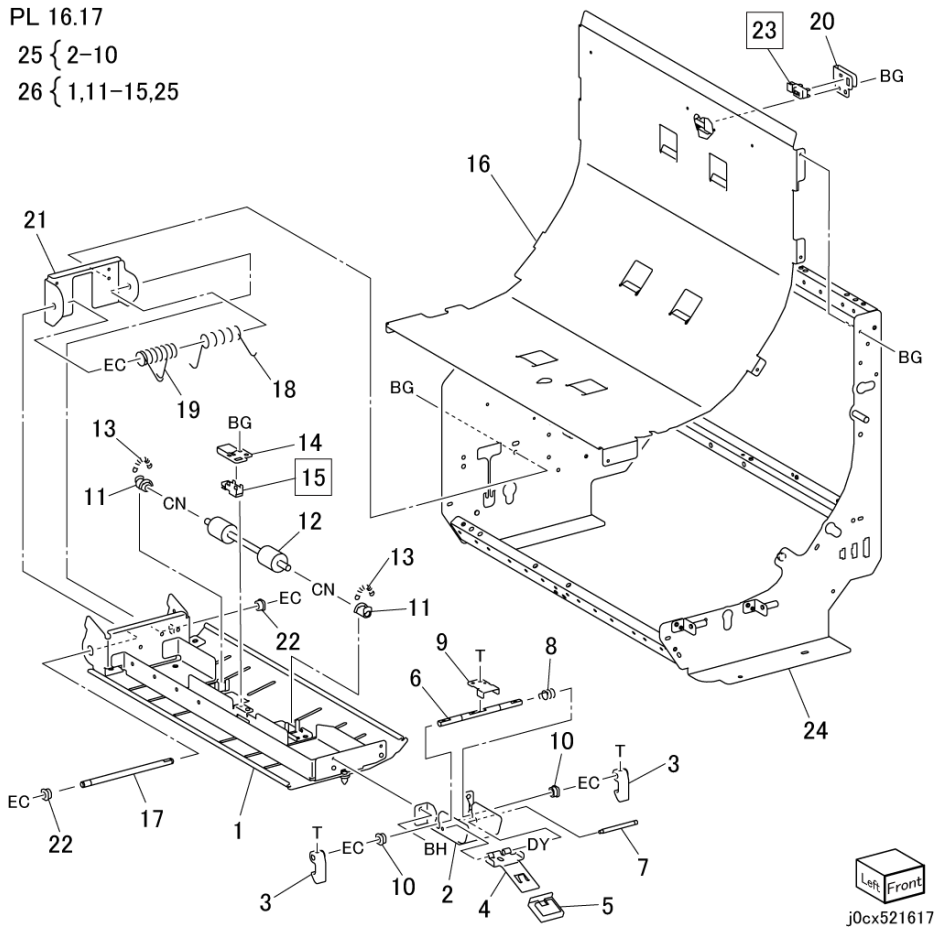
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	-----	-----	
4	0TD013E2705X/	AQ	Bearing
5	0TD059K6818X/	BA	Pinch Roll
6	0TD809E8616X/	AL	Pinch Spring
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	0TD003E4857X/	AG	Latch
11	-----	-----	
12	0TD803E3495X/	BD	KNOB NB
13	0TD809E8613X/	AL	Latch Spring
14	-----	-----	
15	-----	-----	
16	0TD005E2796X/	AN	Collar
17	-----	-----	
18	0TD809E9070X/	AL	Spring
19	0TD422W27001/	AF	Core
20	0TD003K2553X/	BQ	LATCH Lever ASSY-OUT SWING NB

PL 16.16
20 { 7-14



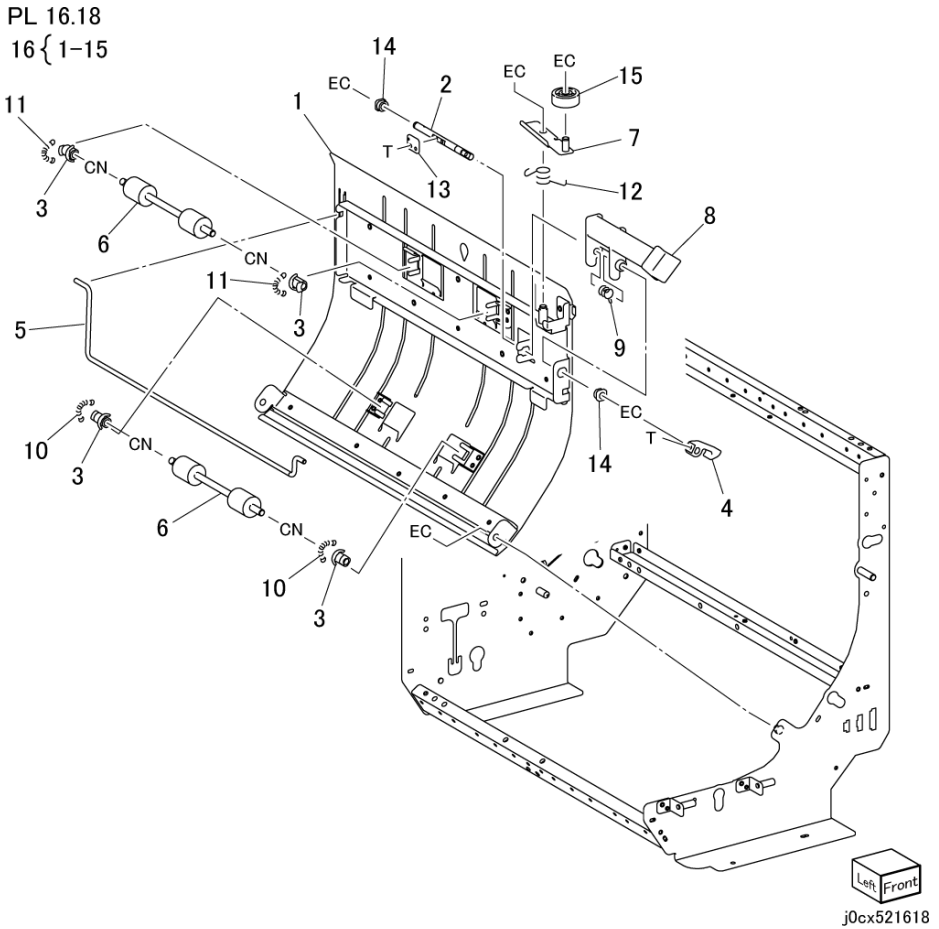
【PL16.17】
Inverter 2 (1 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD003E4857X／	AG	Latch
4	－－－－－	-----	
5	0TD803E3495X／	BD	KNOB NB
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD809E5510X／	AR	Latch Spring
9	－－－－－	-----	
10	0TD413W11660／	AD	Sleeve Bearing
11	0TD013E2705X／	AQ	Bearing
12	0TD059K5556X／	AS	Pinch Roll
13	0TD809E8620X／	AL	Pinch Spring
14	0TD868E2964X／	AH	Sensor Bracket
15	0TD930W00212／	AS	Pre and registration sensors
16	－－－－－	-----	
17	－－－－－	-----	
18	0TD809E8746X／	AV	Hinge Spring (Right)
19	0TD809E8747X／	AV	Hinge Spring (Left)
20	0TD868E2964X／	AH	Sensor Bracket
21	－－－－－	-----	
22	0TD413W11660／	AD	Sleeve Bearing
23	0TD930W00212／	AS	Pre and registration sensors
24	－－－－－	-----	
25	0TD003K2554X／	BS	LATCH Lever ASSY-PATH2 NB
26	－－－－－	-----	



【PL16.18】
Inverter 2 (2 of 3)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD054K3959X/	BZ	Path 1 Chute
2	-----	-----	
3	0TD013E2705X/	AQ	Bearing
4	0TD003E4857X/	AG	Latch
5	-----	-----	
6	0TD059K5556X/	AS	Pinch Roll
7	0TD068K6867X/	AY	Roller Bracket
8	0TD803E3496X/	BF	KNOB NB
9	0TD809E5510X/	AR	Latch Spring
10	0TD809E8616X/	AL	Pinch Spring
11	0TD809E8620X/	AL	Pinch Spring
12	0TD809E9088X/	AQ	Spring
13	-----	-----	
14	0TD413W11660/	AD	Sleeve Bearing
15	0TD422W27001/	AF	Core
16	-----	-----	

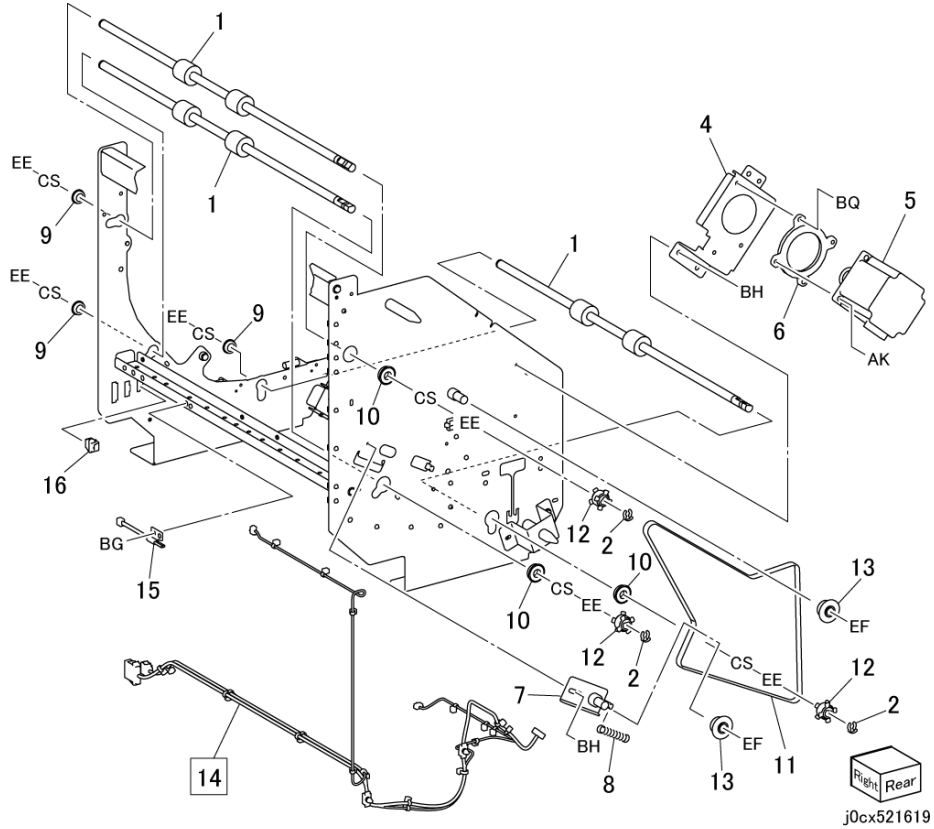


【PL16.19】
Inverter 2 (3 of 3)

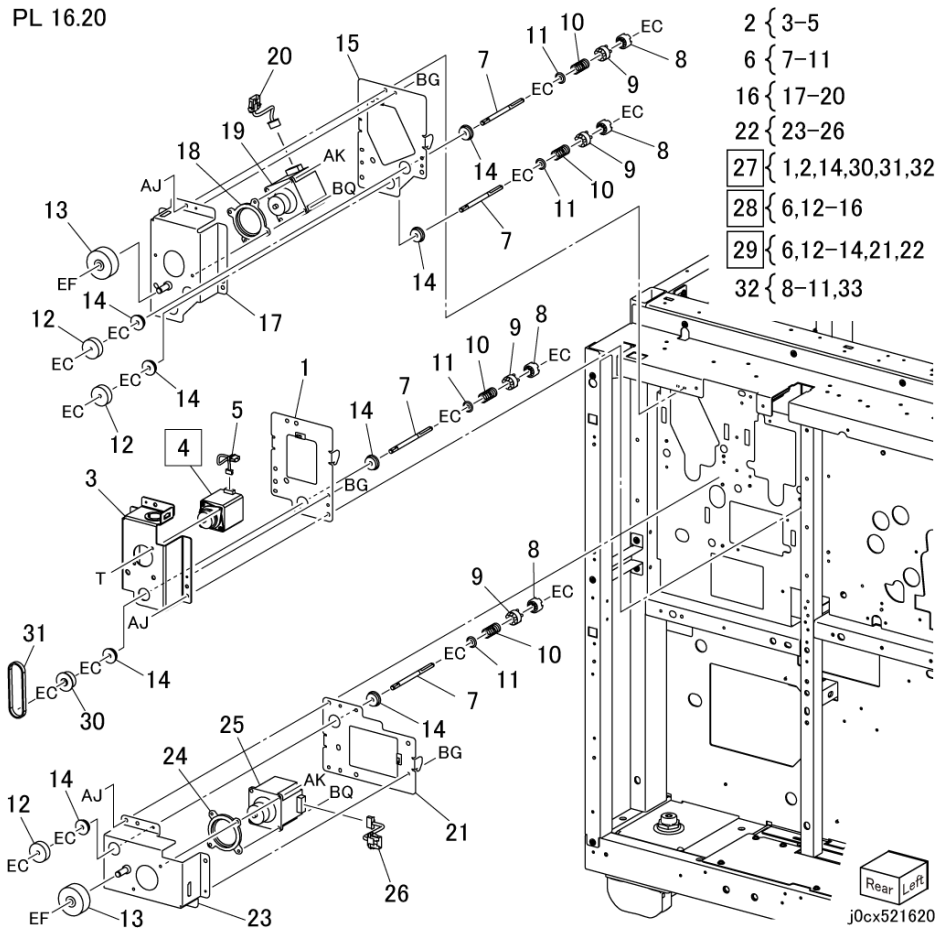
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K1185X/	BD	H-Tra Roll 2
2	0TD019E9199X/	AF	KL-Clip
3	0TD068K6360X/	BU	H-Tra 1 Motor 1 Assembly (Item 2-4)
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD068K6316X/	AZ	Tension Bracket
8	0TD809E8619X/	AP	Spring
9	0TD413W88650/	AL	Bearing
10	0TD413W91450/	AZ	Ball Bearing
11	0TD423W89954/	AW	Belt
12	0TD020E4721X/	BF	Pulley
13	0TD499W17081/	AX	Idler Pulley
14	0TD962K7259X/	BA	(SCC) Wire Harness
15	0TD130K7717X/	BC	OUT ENV Sensor
16	-----	-----	

PL 16.19

3 {4-6

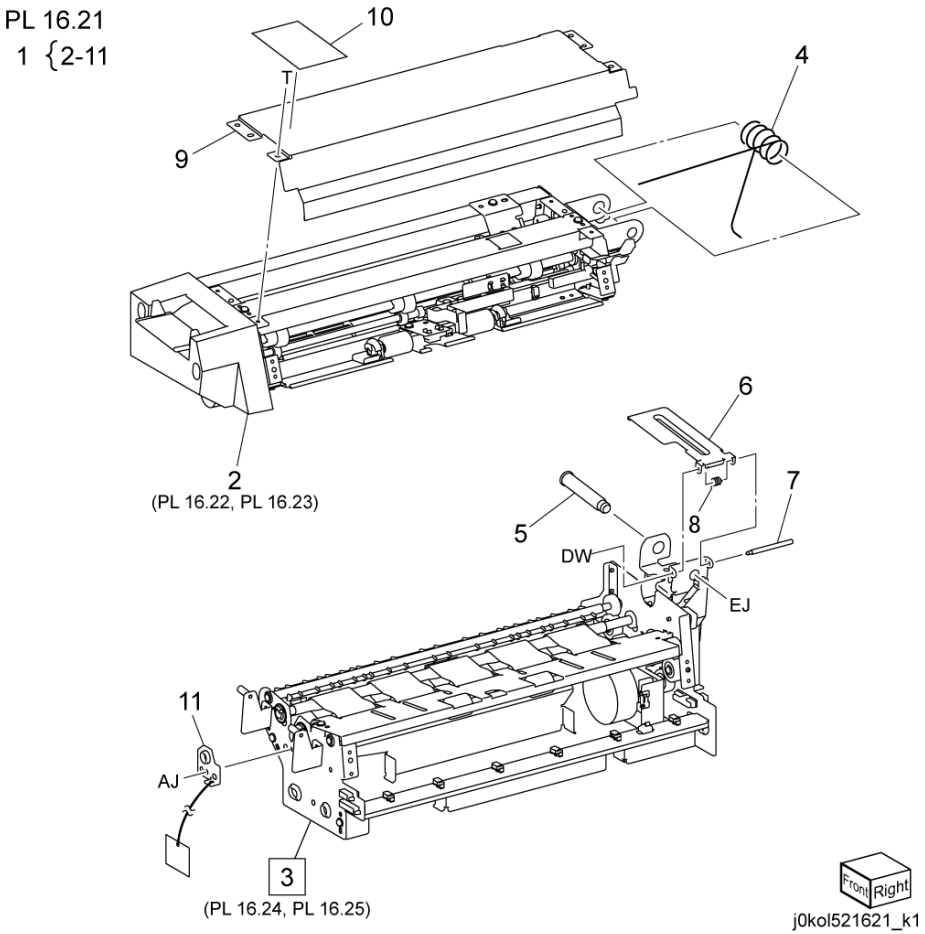


Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD068K6522X／	BU	Invert Entrance Motor Assembly (Item 3-5)
3	－－－－－	-----	
4	0TD127K6408X／	BQ	(SCC) Invert Entrance Motor
5	－－－－－	-----	
6	0TD006K8795X／	BH	Coupling Shaft Assembly (Item 7-11)
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD809E4200X／	AL	Spring
11	0TD120E2788X／	AX	Retainer
12	0TD807E2680X／	AG	Gear (Z32)
13	0TD807E2681X／	AL	Idler Gear (Z49)
14	0TD413W06650／	AU	Bearing
15	－－－－－	-----	
16	0TD068K6520X／	BZ	Invert Upper Motor Assembly (Item 17-20)
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	0TD068K6521X／	BZ	Invert In Motor Assembly (Item 23-26)
23	－－－－－	-----	
24	－－－－－	-----	
25	－－－－－	-----	
26	－－－－－	-----	
27	0TD068K6301X／	CB	Invert Entrance Motor Unit (Item 1, 2, 14, 30, 31, 32)
28	0TD068K6297X／	CF	Invert Upper Motor Unit (Item 6, 12-16)
29	0TD068K6299X／	CC	Invert In Motor Unit (Item 6, 12-14, 21, 22)
30	－－－－－	-----	
31	－－－－－	-----	
32	－－－－－	-----	
33	－－－－－	-----	



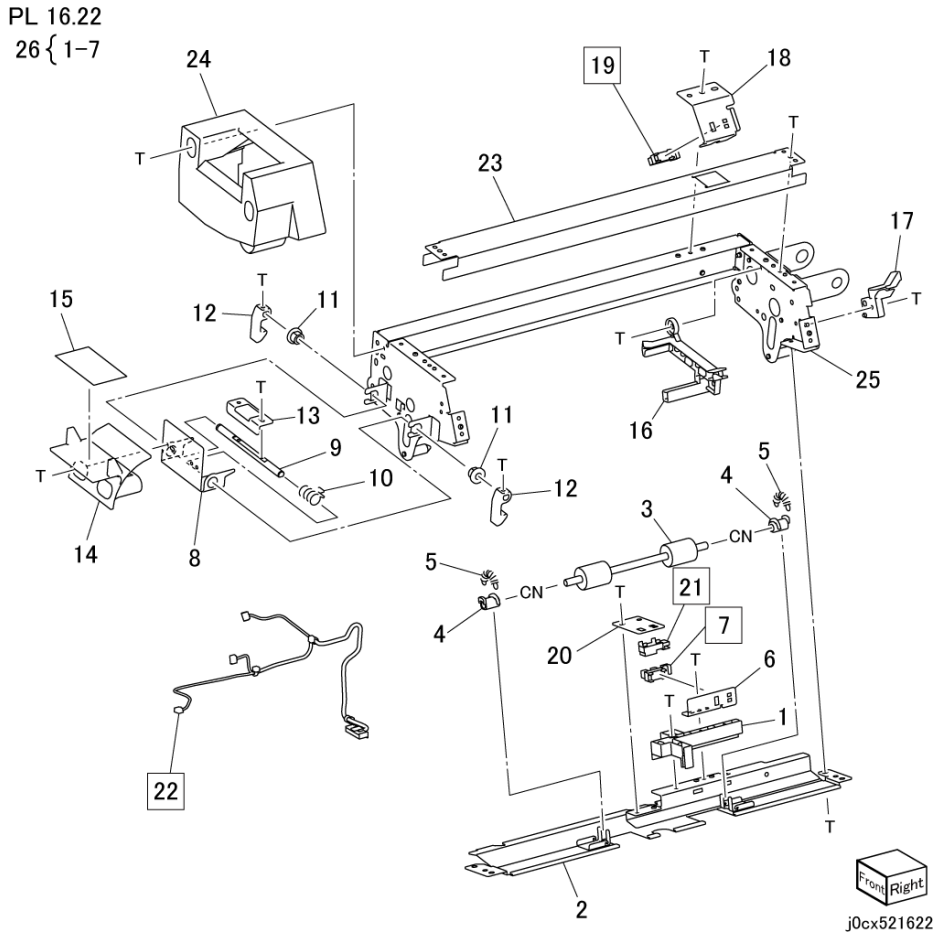
【PL16.21】
Decurler Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD859K4029X／	CX	Upper Decurler Transport Assembly
3	0TD859K1765X／	CV	TRANSPORT ASSY-LOWER DCR
4	0TD809E8710X／	BF	Decurler Spring
5	0TD803E0395X／	AT	Hinge
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD809E8142X／	AL	Spring
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	



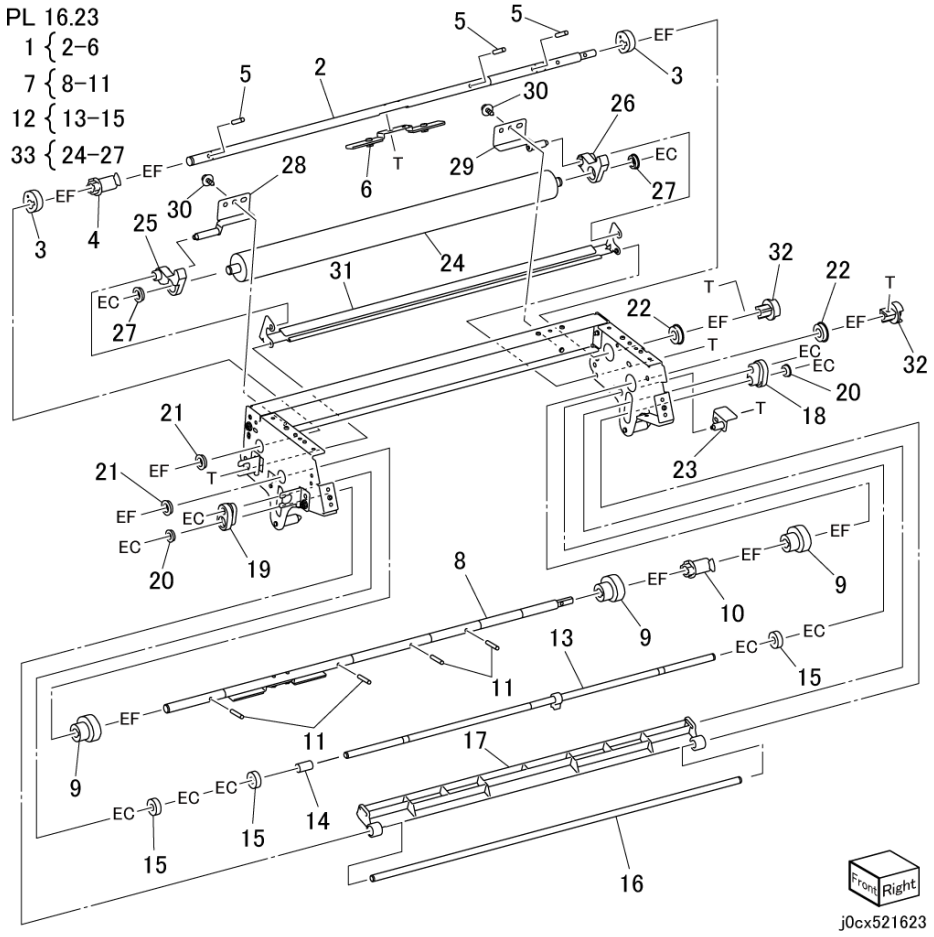
【PL16.22】
Upper Decurler Transport Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD059K5556X/	AS	Pinch Roll
4	0TD013E2705X/	AQ	Bearing
5	0TD809E8611X/	AL	Pinch Spring
6	-----	-----	
7	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
8	-----	-----	
9	-----	-----	
10	0TD809E9100X/	AQ	Latch Spring
11	0TD413W75959/	AG	Bearing
12	0TD803E0636X/	AL	Latch
13	-----	-----	
14	0TD803E3524X/	BE	KNOB-DECURLER PG
15	0TD970E8633X/	BL	LABEL-DECURLER NB
16	-----	-----	
17	-----	-----	
18	-----	-----	
19	0TD930W00126/	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
20	-----	-----	
21	0TD930W00212/	AS	Pre and registration sensors
22	0TD962K7739X/	AW	(SCC) Wire Harness
23	-----	-----	
24	-----	-----	
25	-----	-----	
26	0TD054K4025X/	BS	Exit Upper Chute Assembly (Item 1-7)



【PL16.23】
Upper Decurler Transport Assembly (2 of 2)

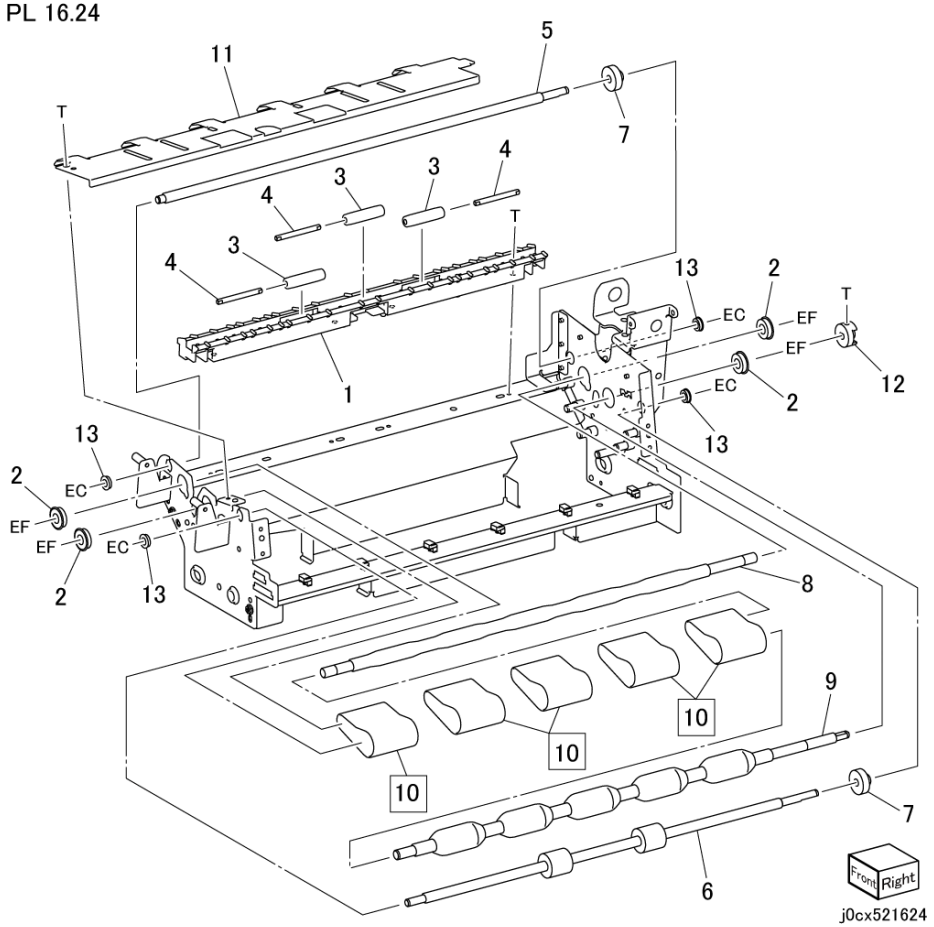
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD006K8825X/	BE	Cam Shaft Assembly (Item 2-6)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	0TD006K8828X/	BD	Belt Cam Shaft Assembly (Item 8-11)
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD006K8826X/	BK	Follow Shaft Assembly (Item 13-15)
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	0TD806E3246X/	AX	Belt Shaft
17	0TD054K2071X/	BD	Inlet Chute
18	0TD014E3875X/	BA	Block (Rear)
19	0TD014E4348X/	AZ	Block (Front)
20	0TD413W66250/	AL	Bearing
21	0TD413W96950/	AS	Ball Bearing
22	0TD413W08350/	AK	Bearing
23	0TD068K6457X/	AW	Chute Bracket
24	0TD059K5645X/	BP	Pene Roll
25	-----	-----	
26	-----	-----	
27	0TD413W96950/	AS	Ball Bearing
28	0TD068K6455X/	AY	Lever Bracket (Front)
29	0TD068K6627X/	AY	Lever Bracket (Rear)
30	-----	-----	
31	0TD054E4043X/	BG	Upper Chute
32	0TD005E3020X/	AT	Decurler Coupling
33	0TD059K6748X/	BR	ROLL ASSY-LEVER PENE



【PL16.24】
Lower Decurler Transport Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD013E4002X/	AY	BEARING-BALL
3	-----	-----	
4	0TD806E2811X/	AN	Support Shaft
5	0TD806E3552X/	BG	Drive Shaft
6	0TD059K6499X/	BL	Exit Drive Roll
7	0TD807E3003X/	AX	Gear (22T)
8	0TD059E0536X/	BM	Belt Entrance Roll
9	0TD059K6210X/	BP	Belt Drive Roll
10	0TD023E2950X/	AW	BELT-DECURLER
11	0TD054E4044X/	BP	Lower Exit Chute
12	0TD005E3020X/	AT	Decurler Coupling
13	0TD413W66250/	AL	Bearing

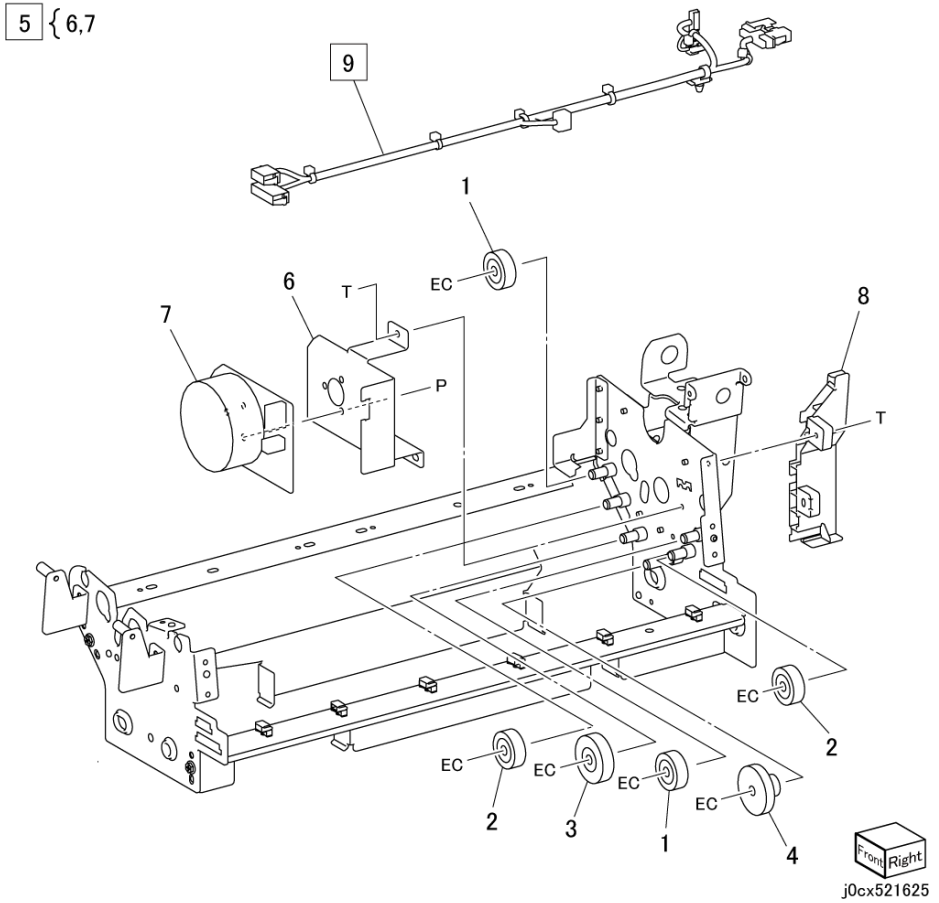
PL 16.24



【PL16.25】
Lower Decurler Transport Assembly (2 of 2)

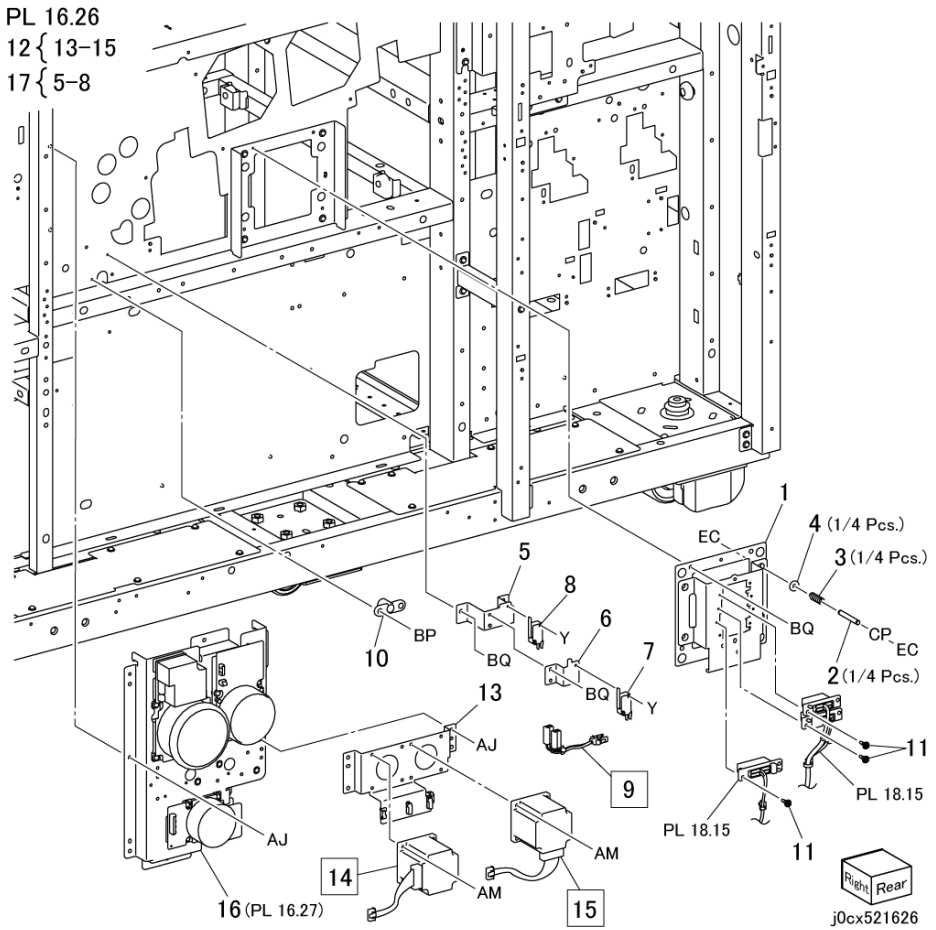
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD007K1620X／	AV	Gear Assembly (26T)
2	0TD007K1619X／	AU	Gear Assembly (24T)
3	0TD007K1618X／	AV	Gear Assembly (34T)
4	0TD807E2753X／	AL	Gear (35T/14T)
5	0TD068K6976X／	BS	DCR Roll Drive Motor Assembly (Item 6, 7)
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD962K7288X／	BC	(SCC) Wire Harness

PL 16.25



【PL16.26】
Drawer Rear

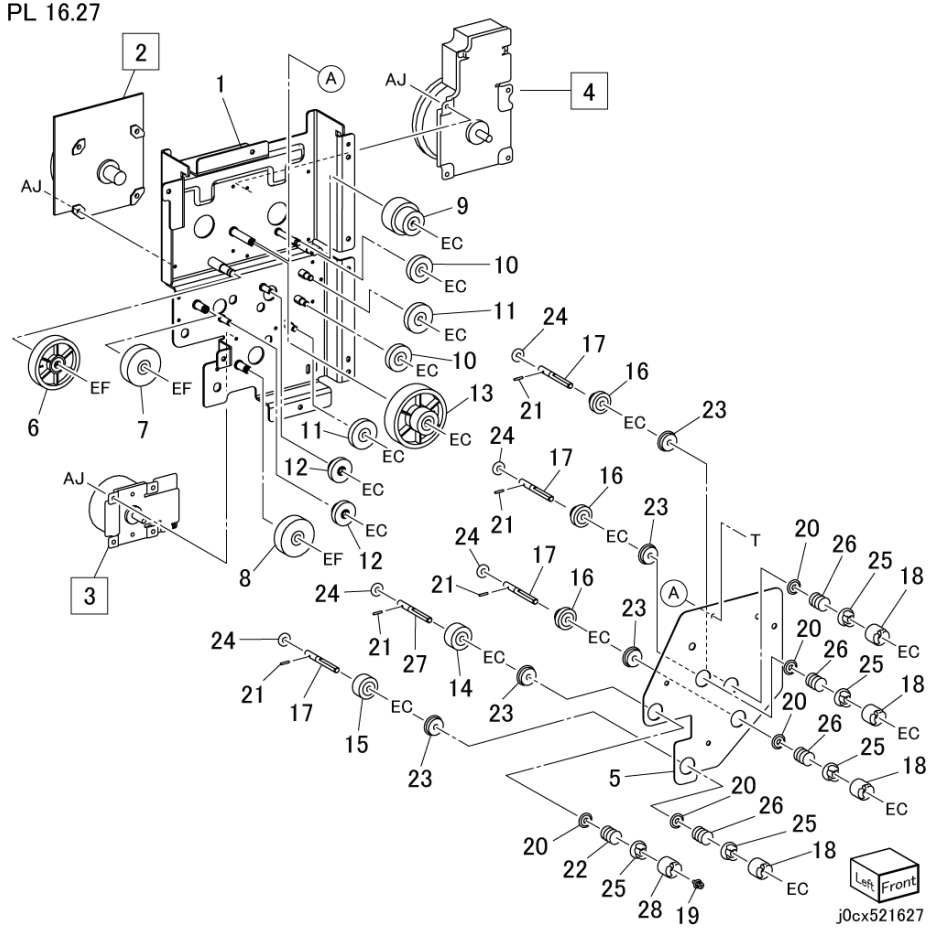
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD413W75659／	AF	Bearing
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD962K7926X／	AZ	(SCC) Wire Harness
10	0TD013E3514X／	AR	Locate Bearing
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	0TD127K5977X／	BW	(SCC) Decurler Belt Pene Motor
15	0TD127K5977X／	BW	(SCC) Decurler Belt Pene Motor
16	0TD007K2243X／	DA	CLG/DCR Drive Assembly
17	0TD110K1840X／	BK	Exit Drawer Interlock Switch 1/2 Assembly (Item 5-8)



【PL16.27】
CLG/DCR Drive Assembly

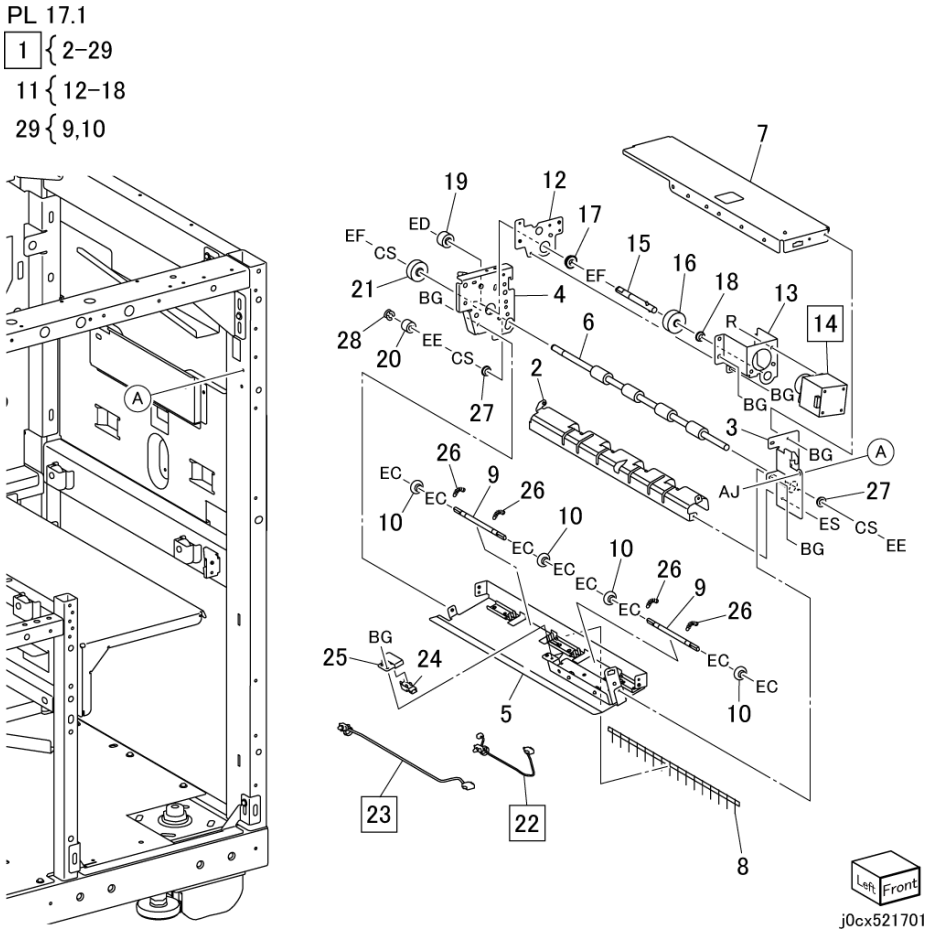
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD127K7095X／	BV	(SCC) Cooling Upper Motor
3	0TD127K4866X／	BV	(SCC) Cooling Lower Motor
4	0TD127K5718X／	BZ	(SCC) Decurler Belt Drive Motor
5	－－－－－	-----	
6	0TD007K2244X／	BA	Gear (65Z)
7	0TD007K1579X／	AY	Gear (50Z)
8	0TD007K1580X／	AY	Gear (65Z)
9	0TD007K2246X／	AZ	Gear (31T/42T)
10	0TD007K1612X／	AV	Gear Assembly (33T)
11	0TD007K1613X／	AV	Gear Assembly (37T)
12	0TD007K1725X／	AX	Gear (30T/19T)
13	0TD007K2245X／	BA	Gear (30T/77T)
14	0TD807E2827X／	AN	Drive Gear (30Z)
15	0TD807E2828X／	AN	Drive Gear (40Z)
16	0TD807E2973X／	AL	Gear (26T)
17	0TD806E2431X／	AV	Coupling Shaft
18	0TD005E2596X／	AQ	Pene Coupling
19	－－－－－	-----	
20	0TD120E2788X／	AX	Retainer
21	0TD029E4609X／	AP	Pin
22	0TD809E9309X／	AT	CLG Spring
23	0TD413W06650／	AU	Bearing
24	0TD413W75659／	AF	Bearing
25	0TD005E3023X／	AQ	Slide Coupling
26	0TD809E9135X／	AN	Spring
27	－－－－－	-----	
28	0TD005E3095X／	AL	CLG Coupling

PL 16.27



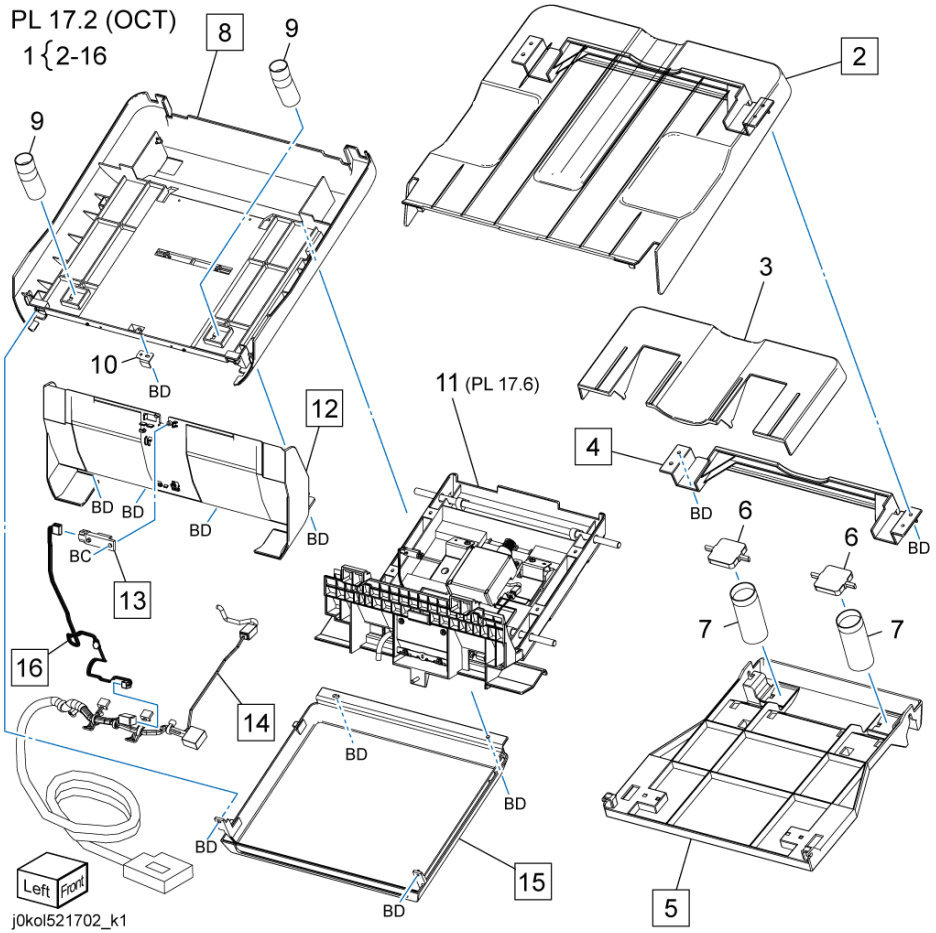
【PL17.1】
Exit Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD859K1205X/	CQ	Exit Assembly (Item 2-29)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD859K1058X/	BN	IOT Exit Roll
	0TD059K6114X/	BN	IOT Exit Roll (OCT, LCT-Option)
7	-----	-----	
8	0TD105E1733X/	AP	Eliminator
9	-----	-----	
10	0TD059E1385X/	BF	Pinch Roll
	0TD059K6221X/	BC	Pinch Roll (OCT, LCT-Option)
11	0TD068K6518X/	BU	Exit Motor Assembly (Item 12-18)
12	-----	-----	
13	-----	-----	
14	0TD127K5927X/	BP	(SCC) Dup Invert Motor
15	-----	-----	
16	-----	-----	
17	0TD413W08350/	AK	Bearing
18	0TD413W88650/	AL	Bearing
19	0TD807E2686X/	AK	Drive Gear (Z16)
20	0TD807E2741X/	AL	Idler Gear (Z20)
21	0TD807E3244X/	AL	Idler Gear (Z31)
22	0TD962K7265X/	AP	(SCC) Wire Harness (Sensor)
23	0TD962K7264X/	AT	(SCC) Wire Harness (Motor)
24	0TD930W00212/	AS	Pre and registration sensors
25	0TD868E2964X/	AH	Sensor Bracket
26	0TD809E8609X/	AL	Pinch Spring
	0TD809E8622X/	AZ	Pinch Spring (OCT, LCT-Option)
27	0TD413W88650/	AL	Bearing
28	0TD019E9199X/	AF	KL-Clip
29	0TD859K1266X/	BT	Pinch Roll Assembly (Item 9,10)
	-----	-----	



【PL17.2】
OCT Assembly (1 of 2)(Option)

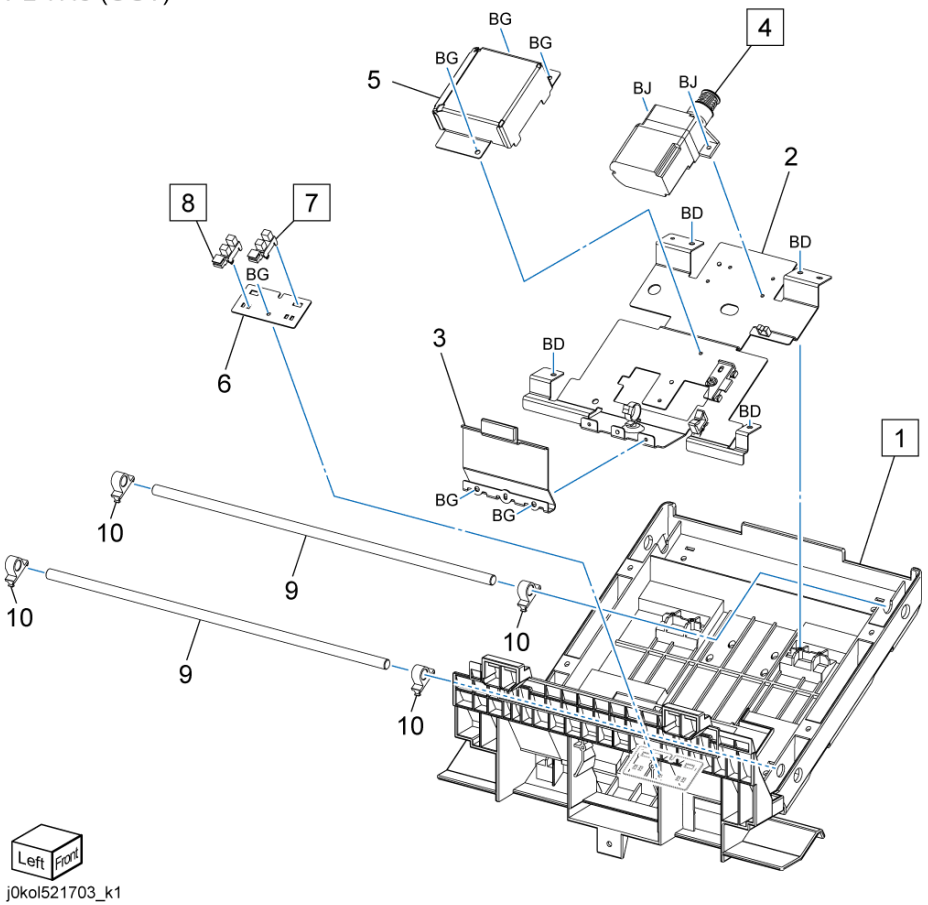
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD850K0191X／	CF	TRAY ASSY-OCT NB
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	0TD930W00211／	AS	HCF Tray 1/2 Pre Feed Sensor
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	



【PL17.3】
OCT Assembly (2 of 2)(Option)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	0TD930W00126／	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
	0TD130E2147X／	AS	Tray 1/2 Front Misset Sensor
8	0TD930W00126／	AU	(SCC) 1st BTR Cont/Ret Sensor R1, R2, R3, R4 (REP 99.1.1)
	0TD130E2147X／	AS	Tray 1/2 Front Misset Sensor
9	– – – – –	-----	
10	– – – – –	-----	

PL 17.3 (OCT)

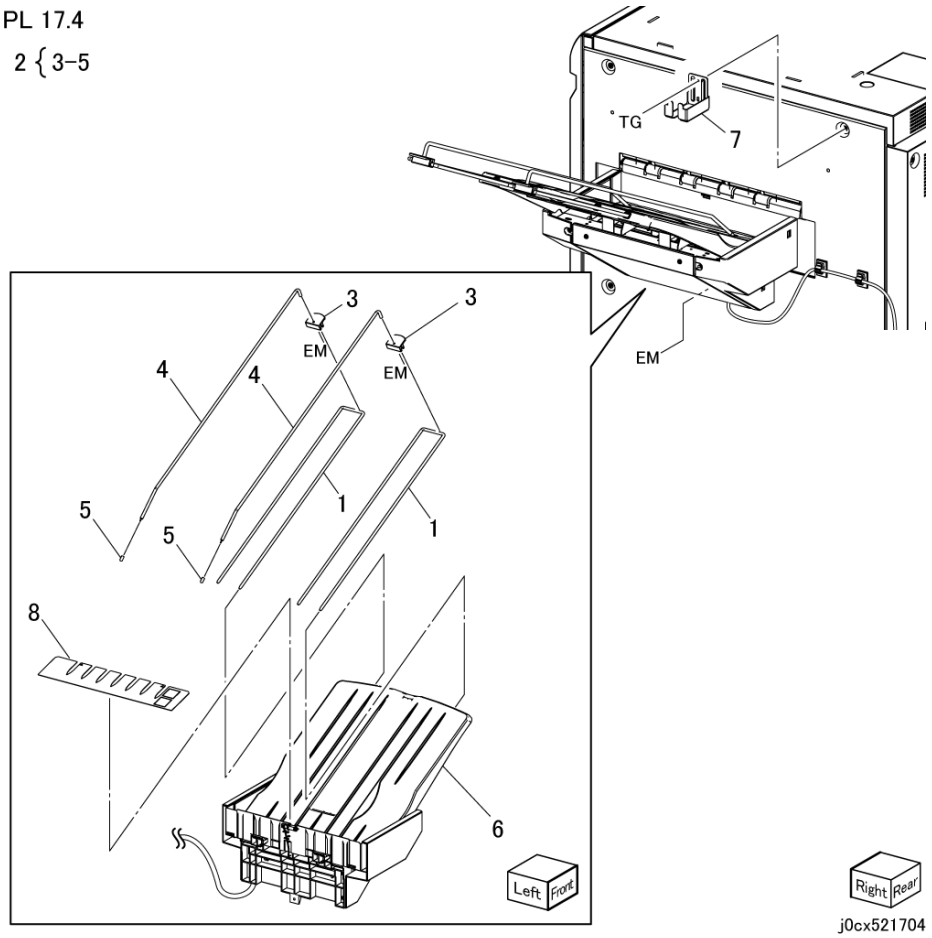


【PL17.4】
LCT Assembly (1 of 3) (Option)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD038E5047X／	BE	Extension Wire Tray
2	0TD038K2627X／		Corrugation Wire Tray
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	

PL 17.4

2 { 3-5



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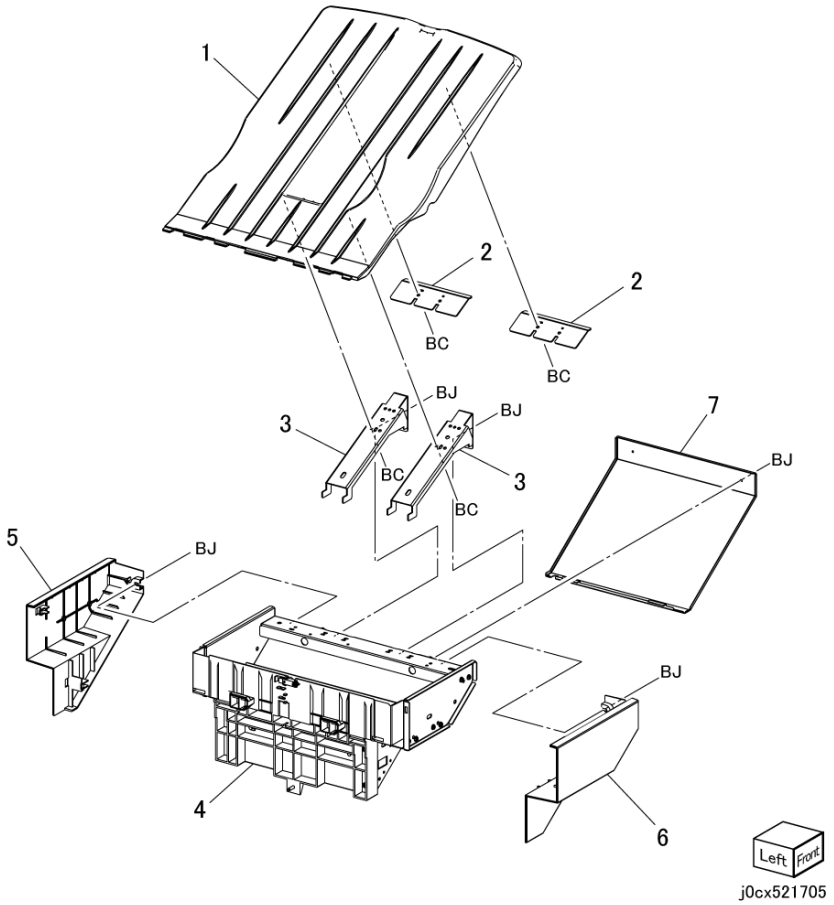
【PL17.5】
LCT Assembly (2 of 3) (Option)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	

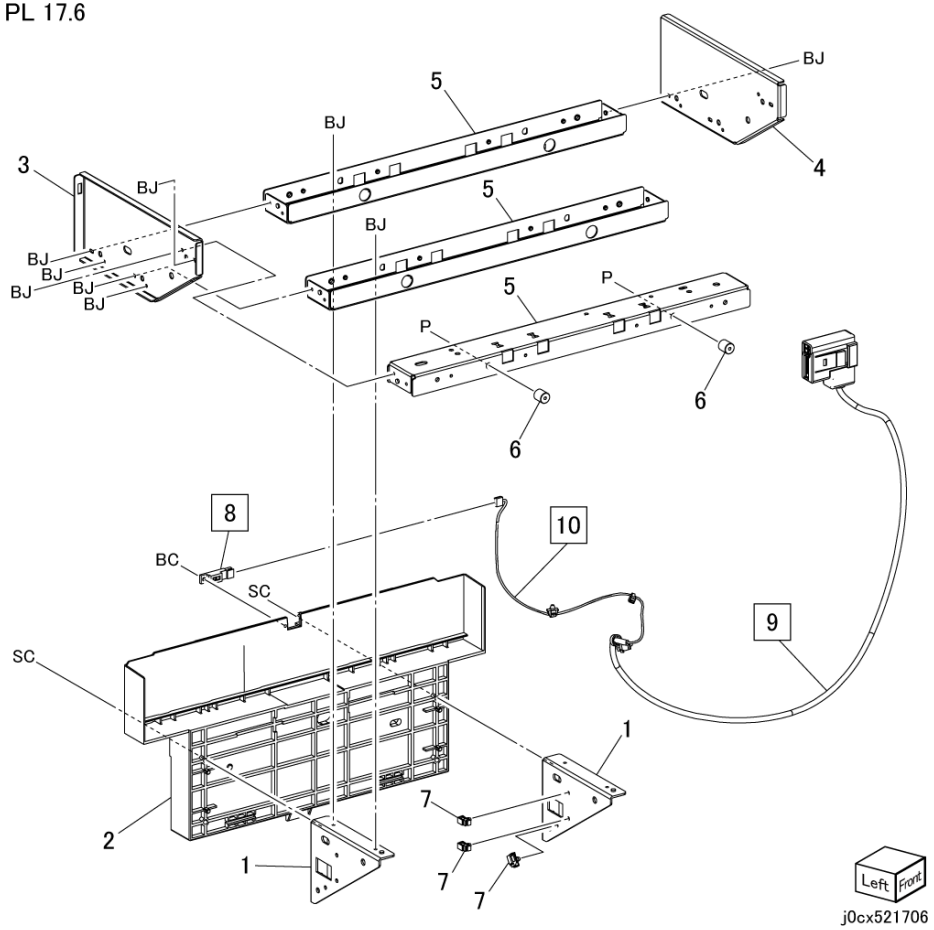
PL 17.5



【PL17.6】
LCT Assembly (3 of 3) (Option)

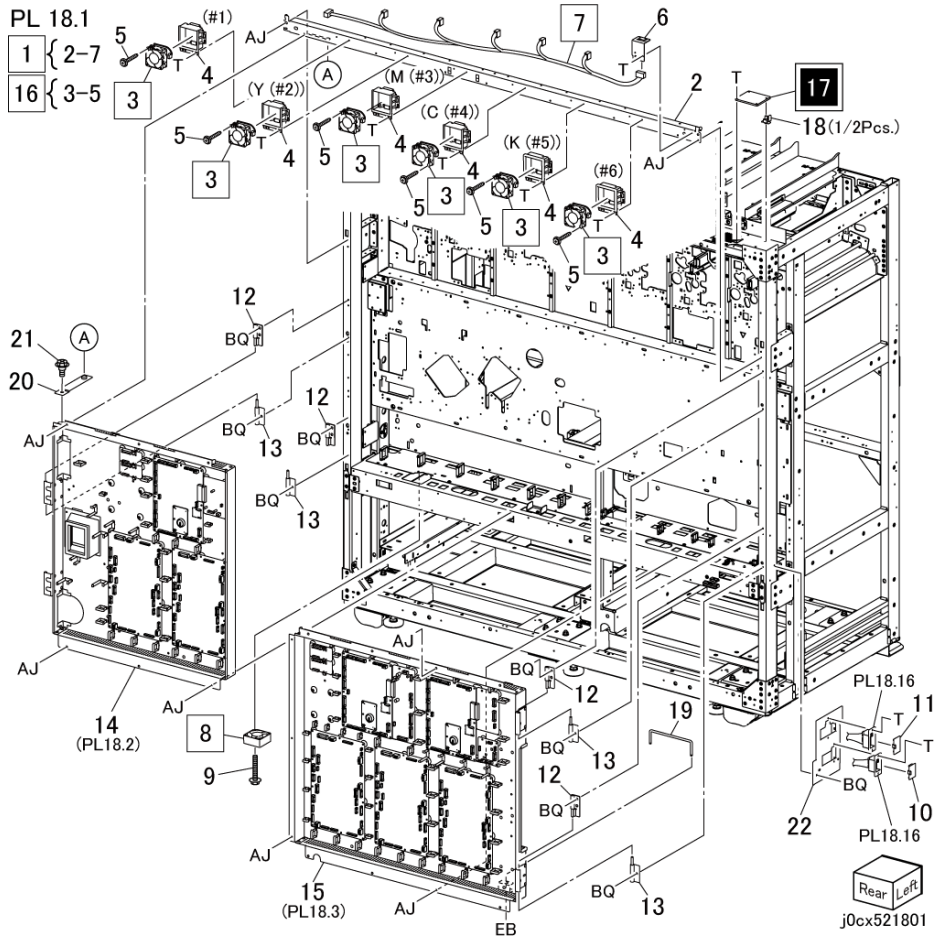
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	0TD930W00211／	AS	HCF Tray 1/2 Pre Feed Sensor
9	0TD952K4342X／	BC	(SCC)Wire Harness
10	0TD952K4344X／	AR	(SCC)Wire Harness

PL 17.6



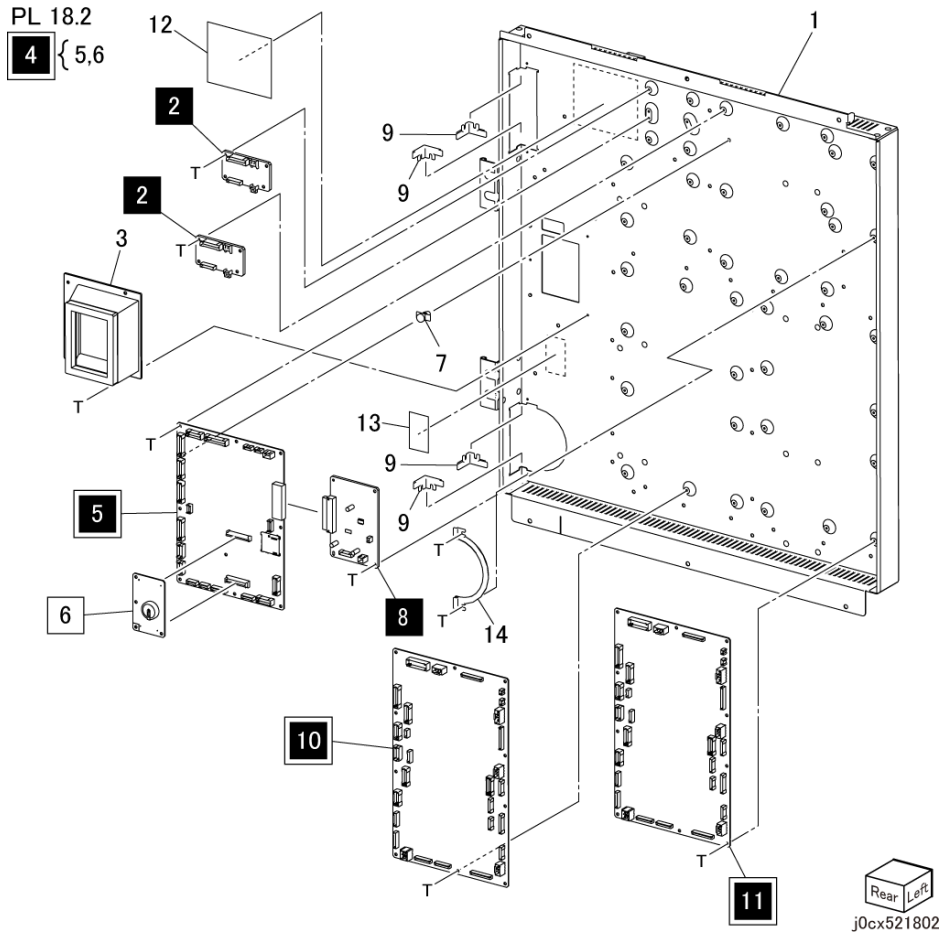
【PL18.1】
IOT-L Left/Right PWB Chassis Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD127K7418X／	BA	(SCC) Fusing Waste Fan
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	0TD962K7278X／	BA	(SCC) Wire Harness
8	0TD127K7418X／	BA	(SCC) Fusing Waste Fan
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	0TD127K7616X／	BF	Rear Drive Fan Assembly (Item 3-5)
17	0TD960K9082X／	BS	(SCC) Toner Crum PWB
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	



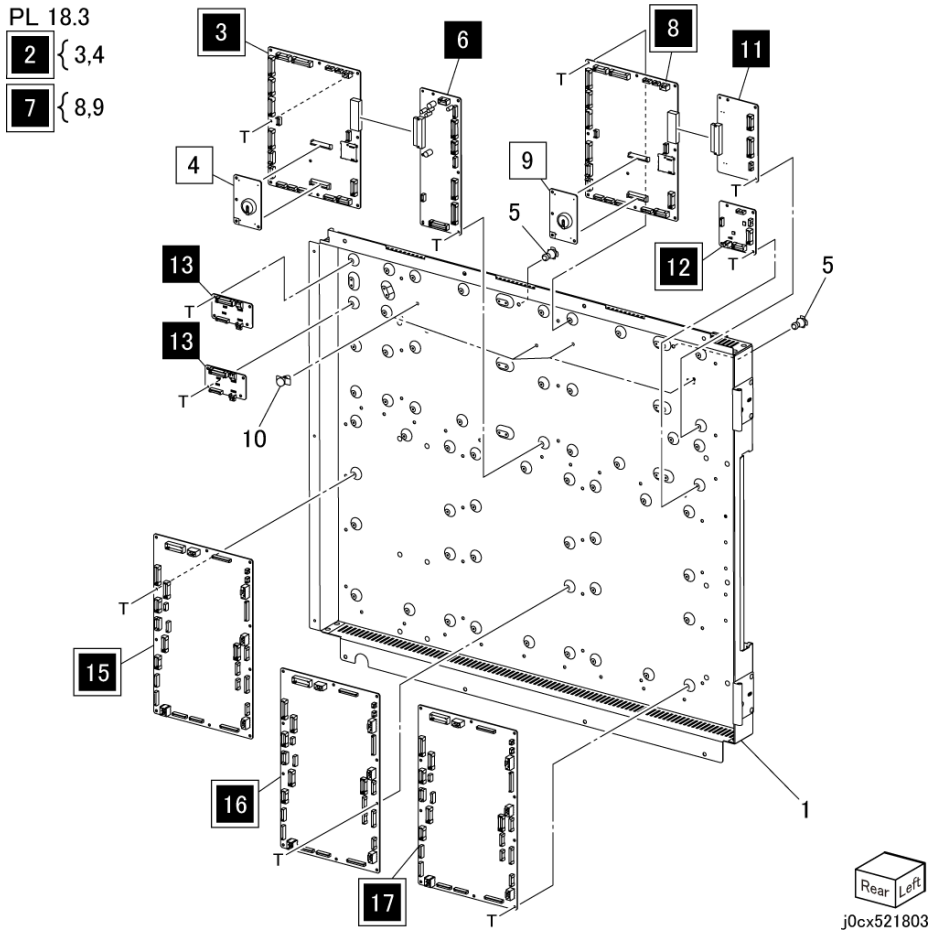
【PL18.2】
IOT-L Right PWB Chassis Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD960K1526X／	BB	PH 2 Sensor PWB (Upper)
	0TD960K1526X／	BB	PH 2 Sensor PWB (Upper)
3	－－－－－	-----	
4	－－－－－	-----	
5	0TD961K2164X／	CT	SCC PH Core PWB
6	0TD960K4324X／	CG	(SCC) NVM PWB
7	－－－－－	-----	
8	0TD960K4385X／	CE	PH ADC PWB
9	－－－－－	-----	
10	0TD960K8669X／	CU	(SCC) PH 1 MD PWB
11	0TD960K8669X／	CU	(SCC) PH 1 MD PWB
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	



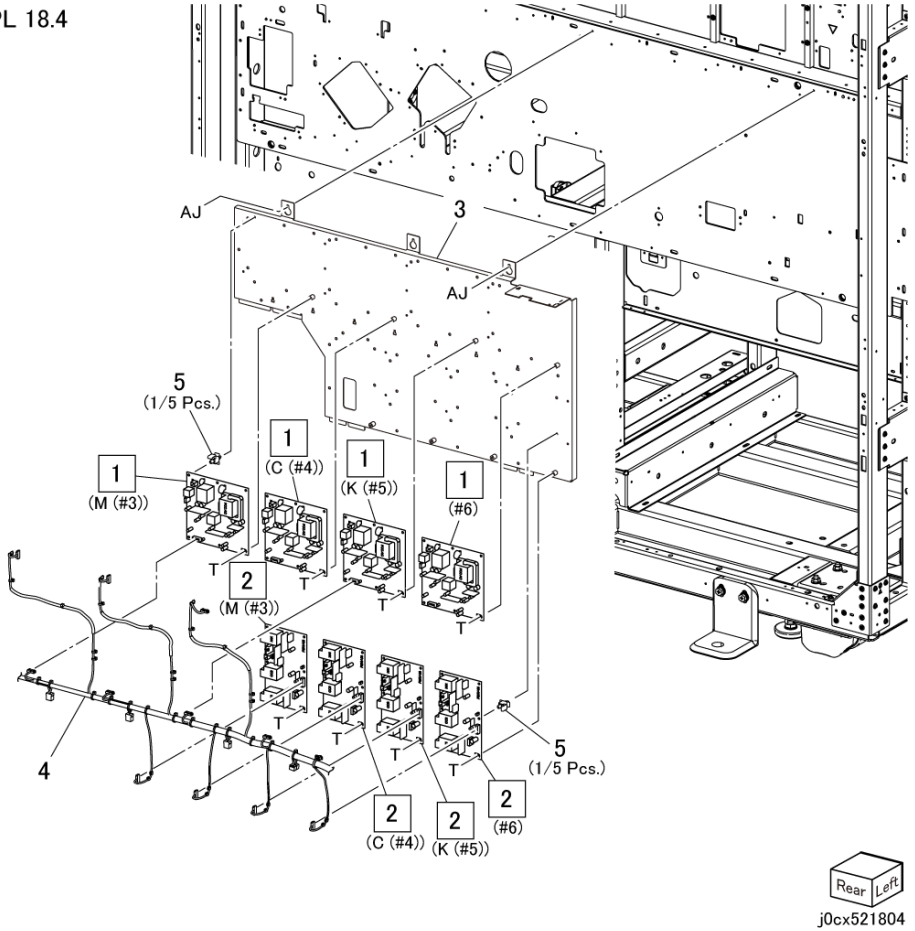
【PL18.3】
IOT-L Left PWB Chassis Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	0TD961K2164X／	CT	SCC PH Core PWB
4	0TD960K4324X／	CG	(SCC) NVM PWB
5	－－－－－	-----	
6	0TD960K4382X／	CN	MK DRV ADC PWB
7	－－－－－	-----	
8	0TD961K2164X／	CT	SCC PH Core PWB
9	0TD960K4324X／	CG	(SCC) NVM PWB
10	－－－－－	-----	
11	0TD960K4383X／	CG	MK XERO ADC PWB
12	0TD960K9082X／	BS	(SCC) Toner Crum PWB
13	0TD960K1526X／	BB	PH 2 Sensor PWB (Upper)
	0TD960K1526X／	BB	PH 2 Sensor PWB (Upper)
14	－－－－－	-----	
15	0TD960K8903X／	CU	(SCC) MK DRV MD PWB
16	0TD960K8669X／	CU	(SCC) PH 1 MD PWB
17	0TD960K8669X／	CU	(SCC) PH 1 MD PWB



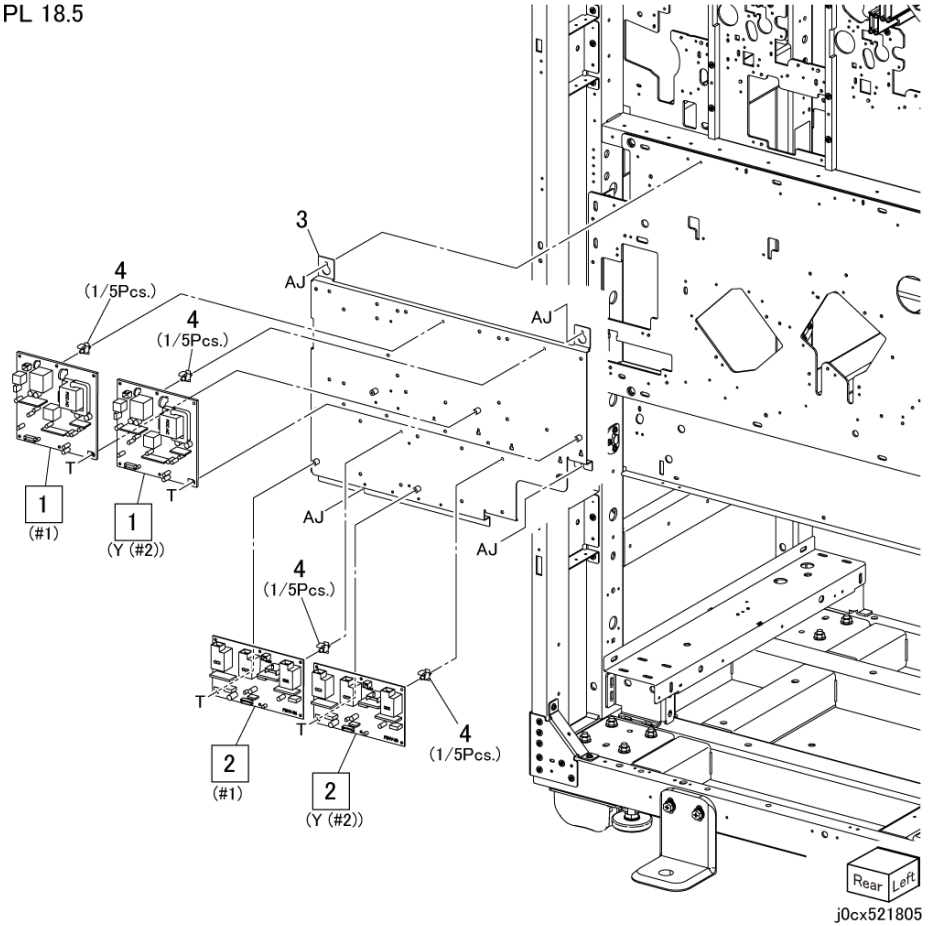
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD105E1806X／	CA	(SCC) PCC HVPS M (#3)/C (#4)/K (#5)/#6
2	0TD105E1174X／	BR	(SCC) CC HVPS M (#3)/C (#4)/K (#5)/#6
3	－－－－－	-----	
4	0TD952K3167X／	BW	(SCC) Wire Harness (HV)
5	－－－－－	-----	

PL 18.4



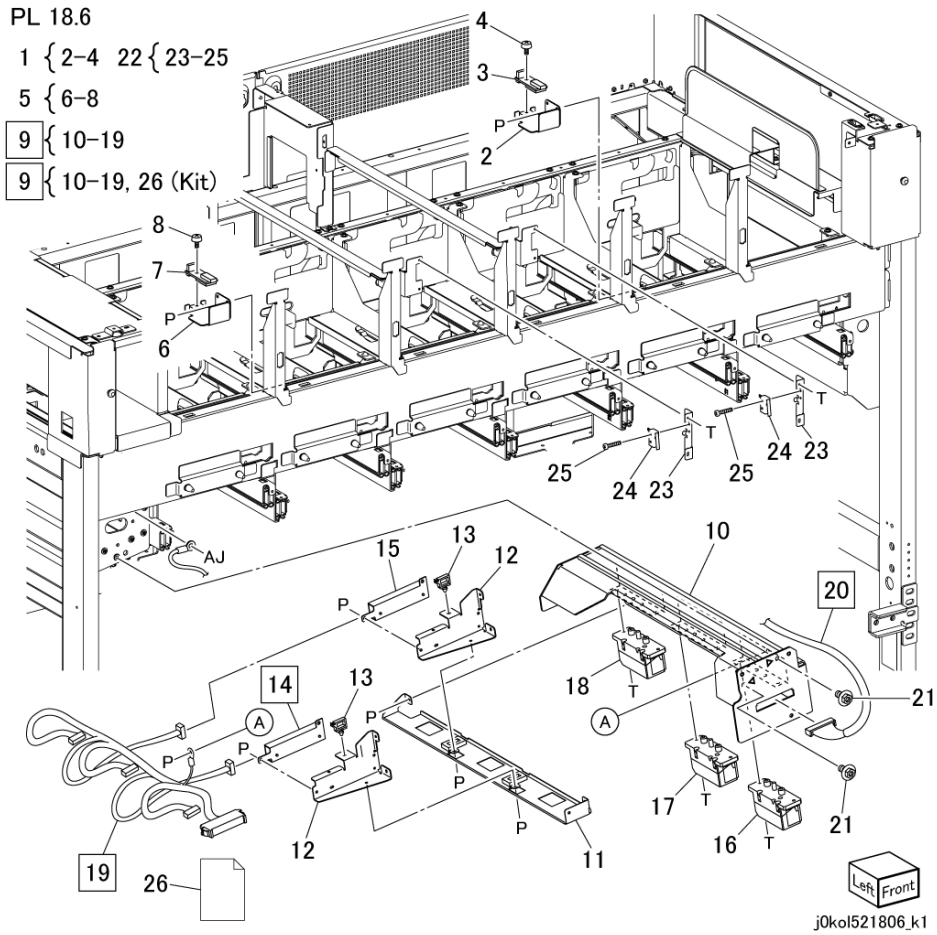
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD105E1806X／	CA	(SCC) PCC HVPS M (#3)/C (#4)/K (#5)/#6
2	0TD105E1174X／	BR	(SCC) CC HVPS M (#3)/C (#4)/K (#5)/#6
3	－－－－－	-----	
4	－－－－－	-----	

PL 18.5

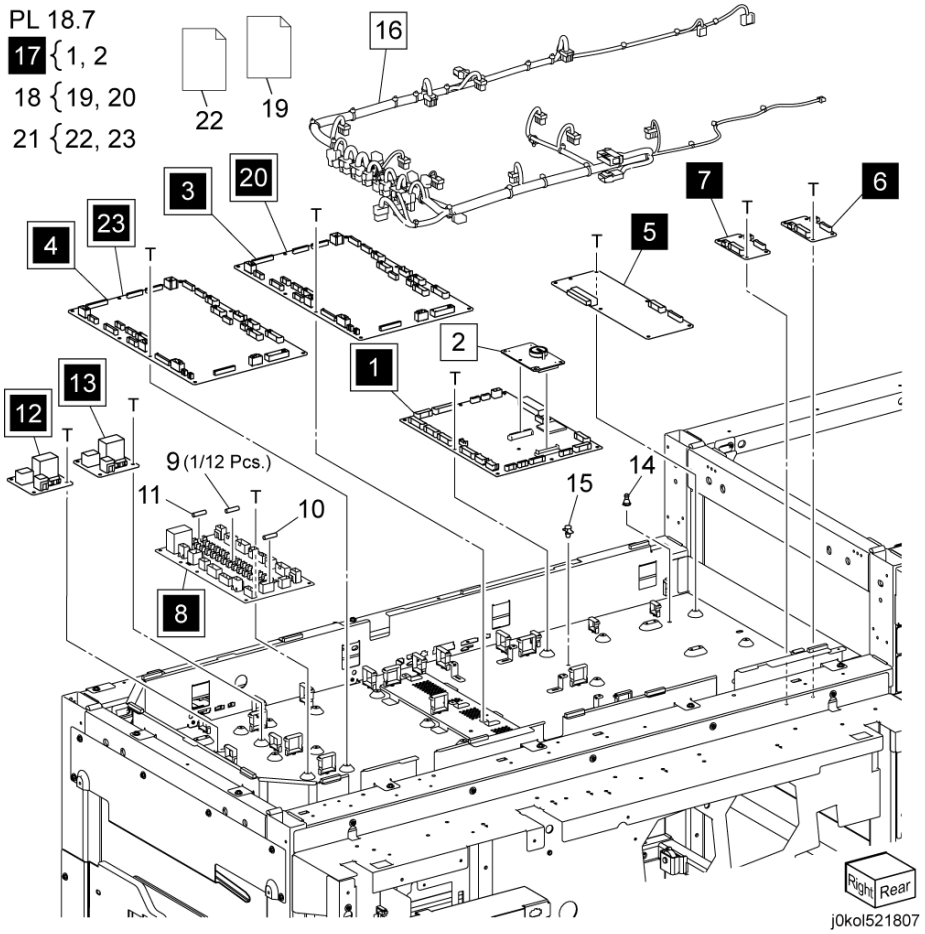


【PL18.6】
ReC ADC Sensor Assembly/Temp & Humidity Sensor Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD130K5769X/	BL	Temp & Humidity Sensor Assembly 1 (Item 2-4)
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	0TD130K5769X/	BL	Temp & Humidity Sensor Assembly 1 (Item 2-4)
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD607K6001X/	CW	KIT NT ADC MOB ASSY(Item 10-19m26)
	0TD607K6002X/	CY	KIT ADC MOB ASSY
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
	0TD930K0709X/	BZ	SENSOR ASSY ADC, E
15	0TD130E8352X/	BQ	Front ADC Sensor
	0TD930K0709X/	BZ	SENSOR ASSY ADC, E
16	0TD130K7327X/	BU	OUT (Front) MOB Sensor
17	0TD130K7327X/	BU	OUT (Front) MOB Sensor
18	0TD130K7327X/	BU	OUT (Front) MOB Sensor
19	-----	-----	
	0TD952K7064X/	BG	HARNESS ASSY REC ADC
20	0TD952K3681X/	BQ	(SCC) Wire Harness (MOB)
21	-----	-----	
22	0TD110K1839X/	BG	Dispenser Interlock Switch Assembly (Item 23-25)
23	-----	-----	
24	-----	-----	
25	-----	-----	
26	-----	-----	

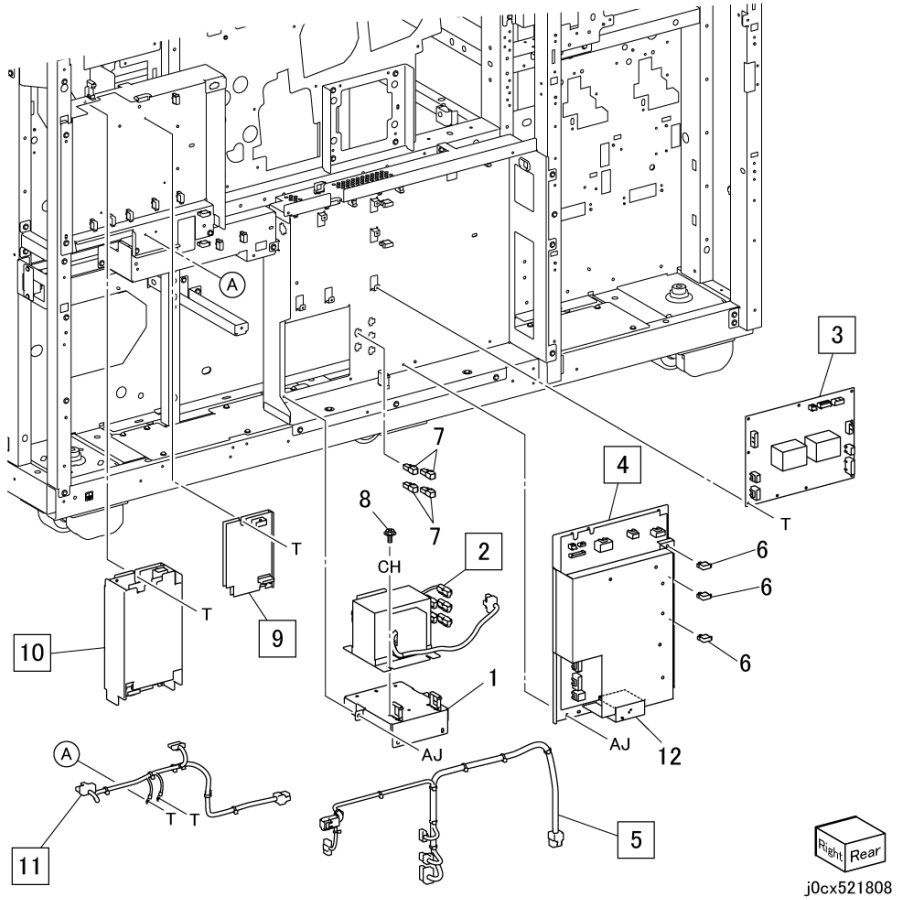


Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD961K2164X/	CT	SCC PH Core PWB
2	0TD960K4324X/	CG	(SCC) NVM PWB
3	0TD961K2568X/	CR	FSR/INV 1 MD PWB
4	0TD961K2569X/	CP	FSR/INV 2 MD PWB
5	0TD960K4384X/	CH	Fusing ADC PWB
6	0TD960K1526X/	BB	PH 2 Sensor PWB (Upper)
7	0TD960K1526X/	BB	PH 2 Sensor PWB (Upper)
8	0TD960K4722X/	CA	(SCC) DST 2 PWB (With Item 10-12)
9	-----	-----	
10	-----	-----	
11	-----	-----	
12	0TD960K8705X/	BT	(SCC) FLY 2 PWB
13	0TD960K8705X/	BT	(SCC) FLY 2 PWB
14	-----	-----	
15	-----	-----	
16	0TD952K3170X/	BQ	(SCC) Wire Harness
17	-----	-----	
18	0TD607K4075X/	CR	(SCC) FSR/INV 1 MD PWB
19	-----	-----	
20	-----	-----	
21	0TD607K4076X/	CN	(SCC) FSR/INV 2 MD PWB
22	-----	-----	
23	-----	-----	

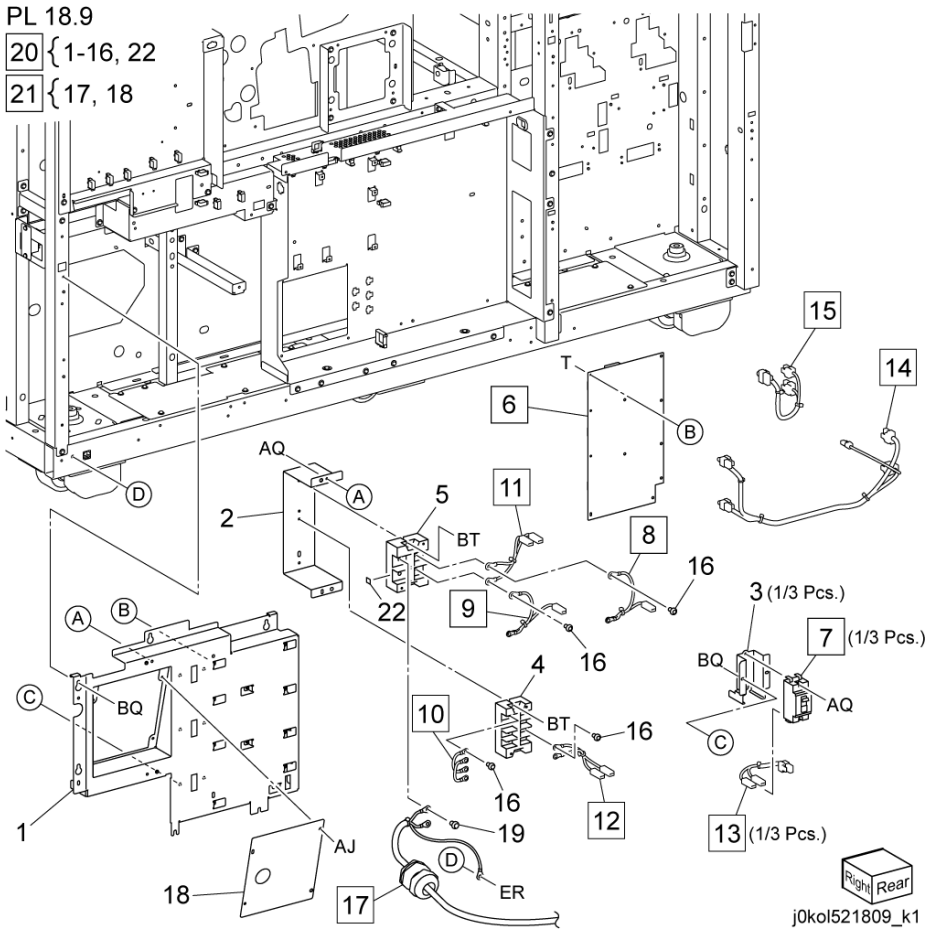


Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD105E1922X／	CS	(SCC) Transformer
3	0TD960K4723X／	CE	(SCC) AC Relay PWB
4	0TD105E1919X／	CU	(SCC) TRIAC PWB
5	0TD952K3168X／	BF	(SCC) Wire Harness
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD105E1644X／	BZ	(SCC) LVPS DP2R
10	0TD105E1907X／	CV	(SCC) LVPS S36-2
11	0TD952K0797X／	BA	(SCC) Wire Harness
12	－－－－－	-----	

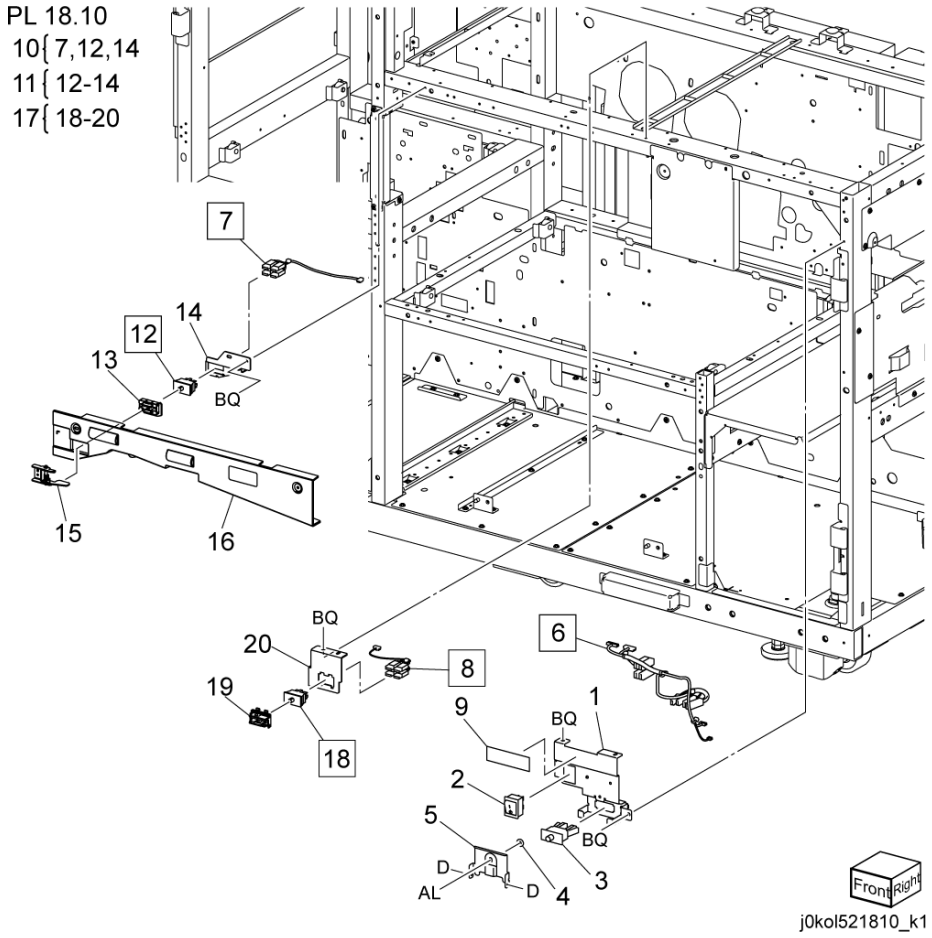
PL 18.8



Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD105E2576X／	CH	POWER SUPPLY-NF-CHA
7	0TD908W00924／	BQ	(SCC) GFI 1/ 2/ 3
8	0TD952K0809X／	AW	(SCC) Wire Harness (JP0)
9	0TD952K0802X／	AW	(SCC) Wire Harness (AC JP1)
10	0TD952K0803X／	AU	(SCC) Wire Harness (AC JP2)
11	0TD952K0793X／	AU	(SCC) Wire Harness (GFI IN1)
12	0TD952K0801X／	AU	(SCC) Wire Harness (GFI IN2)
13	0TD952K0794X／	AV	(SCC) Wire Harness (GFI OUT)
14	0TD952K0796X／	BA	(SCC) Wire Harness (AC FSR)
15	0TD952K0795X／	AW	(SCC) Wire Harness (AC LV)
16	－－－－－	-----	
17	－－－－－	-----	
18	－－－－－	-----	
19	－－－－－	-----	
20	0TD101K7727X／	DD	(SCC) Inlet GFI Chassis Assembly (Item 1-16, 22) (REP 18.9.1, REP 99.1.1)
21	－－－－－	-----	
	－－－－－	-----	
	－－－－－	-----	
	－－－－－	-----	
	－－－－－	-----	
22	－－－－－	-----	

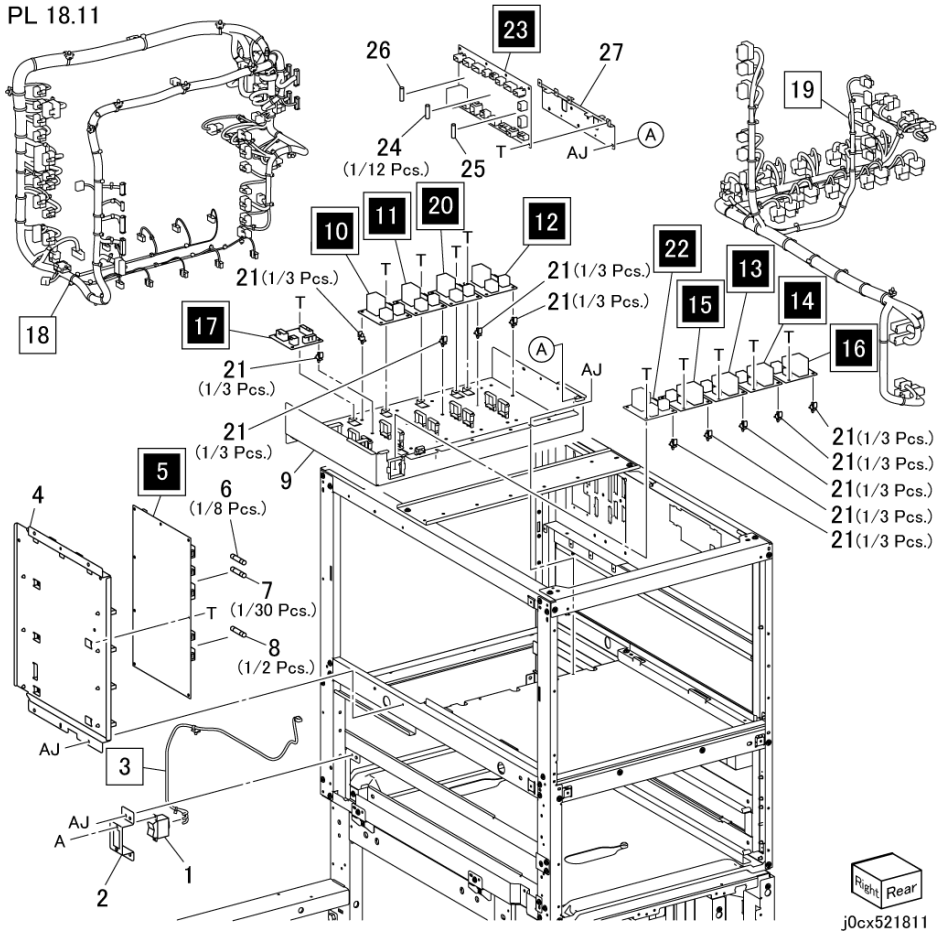


Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD110E9857X／	BE	Emergency Switch
3	0TD110E1254X／	BD	Service Interlock Switch
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD962K7218X／	AY	(SCC) Wire Harness
7	－－－－－	-----	
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD110K1874X／	BN	IOT-L F-Cover Interlock SWITCH ASSY CMN2
11	－－－－－	-----	
12	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X／	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X／	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	－－－－－	-----	
18	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X／	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	0TD110E1522X／	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X／	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	



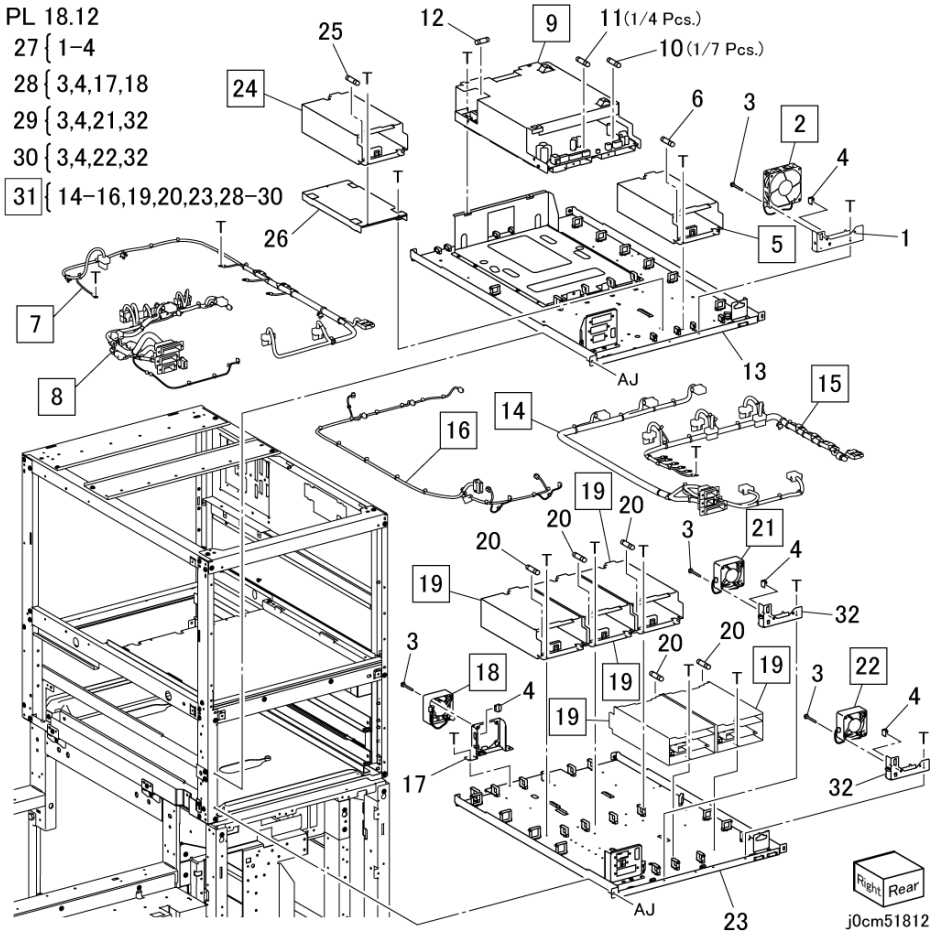
【PL18.11】
ELEC Box (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD110E1555X/	BK	Main Switch
2	-----	-----	
3	0TD952K0781X/	AZ	(SCC) Wire Harness
4	-----	-----	
5	0TD960K4721X/	CH	(SCC) DST 1 PWB (With Item 6-8)
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	0TD960K8705X/	BT	(SCC) FLY 2 PWB
11	0TD960K8705X/	BT	(SCC) FLY 2 PWB
12	0TD960K8705X/	BT	(SCC) FLY 2 PWB
13	0TD960K8705X/	BT	(SCC) FLY 2 PWB
14	0TD960K8705X/	BT	(SCC) FLY 2 PWB
15	0TD960K8705X/	BT	(SCC) FLY 2 PWB
16	0TD960K8705X/	BT	(SCC) FLY 2 PWB
17	0TD960K4725X/	BL	(SCC) LED Power PWB
18	0TD952K2989X/	CA	(SCC) Wire Harness (DC IN)
19	0TD952K2991X/	BY	(SCC) Wire Harness (ATL)
20	0TD960K8705X/	BT	(SCC) FLY 2 PWB
21	-----	-----	
22	0TD960K8705X/	BT	(SCC) FLY 2 PWB
23	0TD960K4722X/	CA	(SCC) DST 2 PWB (With Item 10-12)
24	-----	-----	
25	-----	-----	
26	-----	-----	
27	-----	-----	



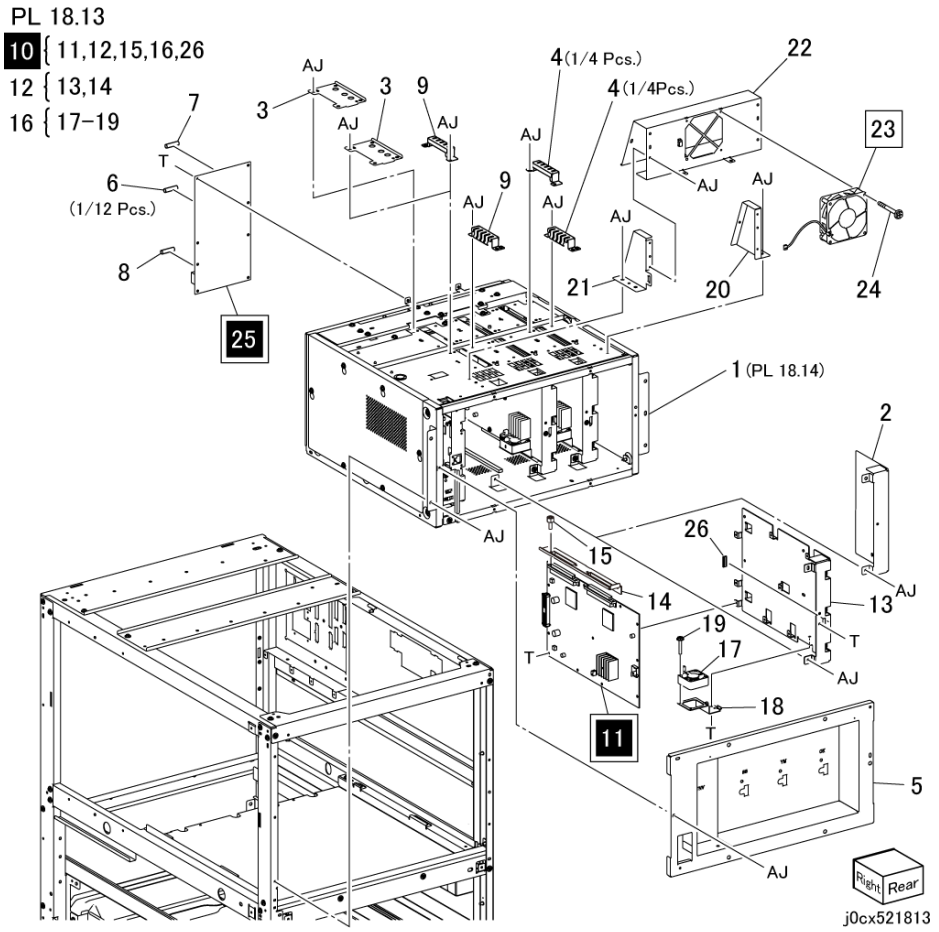
【PL18.12】
ELEC Box (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD127K7421X/	BA	(SCC) LVPS Fan 1
3	-----	-----	
4	-----	-----	
5	0TD105E1907X/	CV	(SCC) LVPS S36-2
6	-----	-----	
7	0TD952K2988X/	BG	(SCC) Wire Harness (H1U)
8	0TD952K2987X/	BW	(SCC) Wire Harness (DCH1U)
9	0TD105E1702X/	CS	(SCC) LVPS H1U (With Item 10-12)
10	-----	-----	
11	-----	-----	
12	-----	-----	
13	-----	-----	
14	0TD952K3500X/	BU	(SCC) Wire Harness (DC24)
15	0TD952K0778X/	BG	HARNESS ASSY-LVAC24
16	0TD952K0808X/	BC	(SCC) Wire Harness (DC24SQ)
17	0TD868E4978X/	AP	Fan Bracket
18	0TD127K7418X/	BA	(SCC) Fusing Waste Fan
19	0TD105E1906X/	CU	(SCC) LVPS S24-1/2/3/4/5 (With Item 20)
20	-----	-----	
21	0TD127K7418X/	BA	(SCC) Fusing Waste Fan
22	0TD127K7418X/	BA	(SCC) Fusing Waste Fan
23	-----	-----	
24	0TD105E1906X/	CU	(SCC) LVPS S24-1/2/3/4/5 (With Item 20)
25	-----	-----	
26	-----	-----	
27	0TD127K7615X/	BL	LV Fan 1 Assembly (Item 1-4)
28	0TD127K7636X/	BF	LV Fan 4 Assembly (Item 3, 4, 17, 18)
29	0TD127K7614X/	BH	LV Fan 3 Assembly (Item 1, 3, 4, 21)
30	0TD127K7614X/	BH	LV Fan 3 Assembly (Item 1, 3, 4, 21)
31	0TD101K7044X/	EZ	LVPS S24 Chassis Assembly (Item 14-16, 19, 20, 23, 28-30)
32	-----	-----	



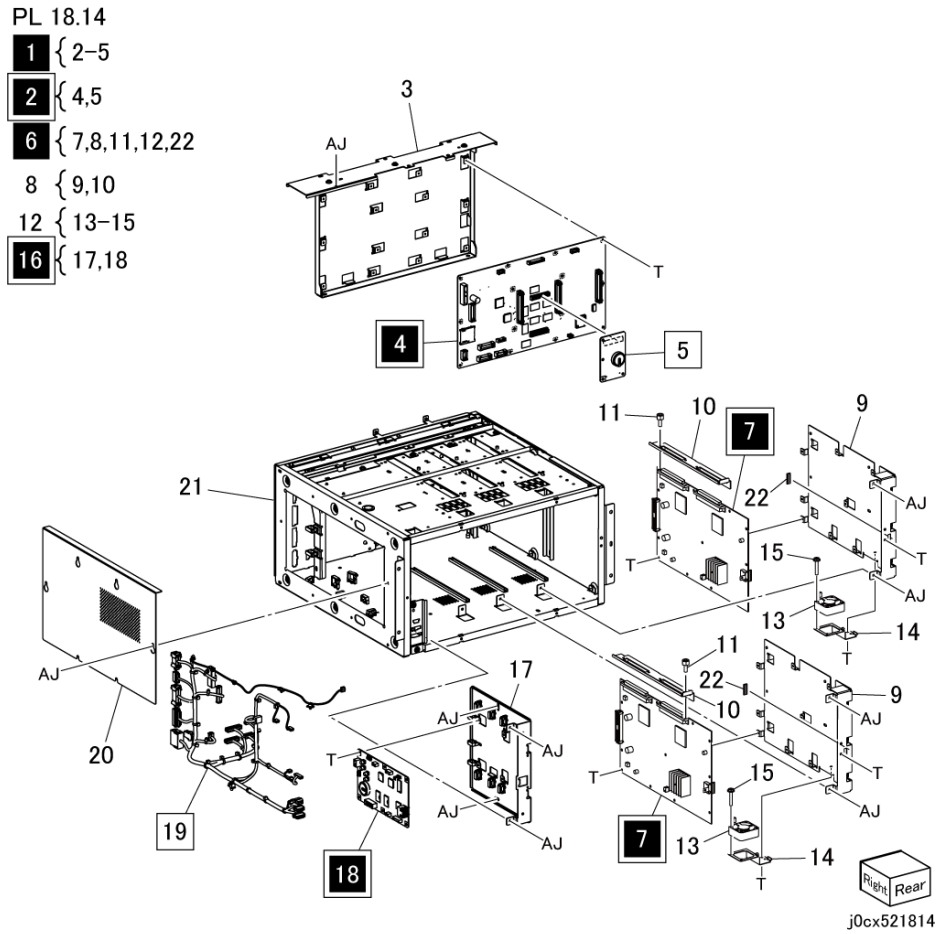
【PL18.13】
Video Box Unit (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	0TD101K7720X／	DA	Halftone PWB Assembly (Item 11, 12, 15, 16, 26)
11	0TD961K0959X／	CX	(SCC) Halftone PWB SS
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	0TD049K4318X／	BH	Halftone PWB Fan Bracket Assembly CMN2 (Item 17-19)
17	– – – – –	-----	
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	
22	– – – – –	-----	
23	0TD127K7598X／	BF	(SCC) Video Box Fan
24	– – – – –	-----	
25	0TD960K4722X／	CA	(SCC) DST 2 PWB (With Item 10-12)
26	– – – – –	-----	



【PL18.14】
Video Box Unit (2 of 2)

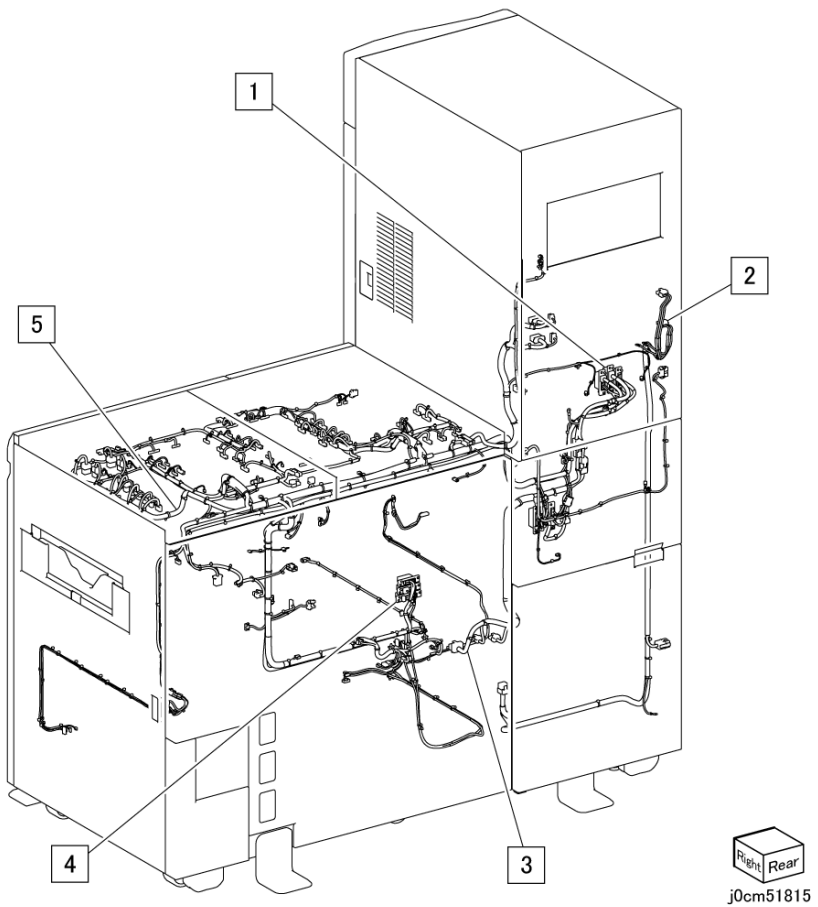
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD101K7042X／	DK	IOT Main PWB Chassis Assembly (Item 2, 3)
2	0TD960K8895X／	DH	(SCC) IOT Main PWB Assembly (Item 4, 5)
3	－－－－－	-----	
4	0TD960K8459X／	CX	(SCC) IOT Main PWB
5	0TD960K4324X／	CG	(SCC) NVM PWB
6	0TD101K7720X／	DA	Halftone PWB Assembly (Item 11, 12, 15, 16, 26)
7	0TD961K0959X／	CX	(SCC) Halftone PWB SS
8	－－－－－	-----	
9	－－－－－	-----	
10	－－－－－	-----	
11	－－－－－	-----	
12	0TD049K4318X／	BH	Halftone PWB Fan Bracket Assembly CMN2 (Item 17-19)
13	－－－－－	-----	
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	－－－－－	-----	
18	0TD961K2109X／	CH	PWB ASSY-SYS2 F
19	0TD952K2990X／	BT	(SCC) Wire Harness (Video box)
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	



【PL18.15】
IOT-R Wire Harness

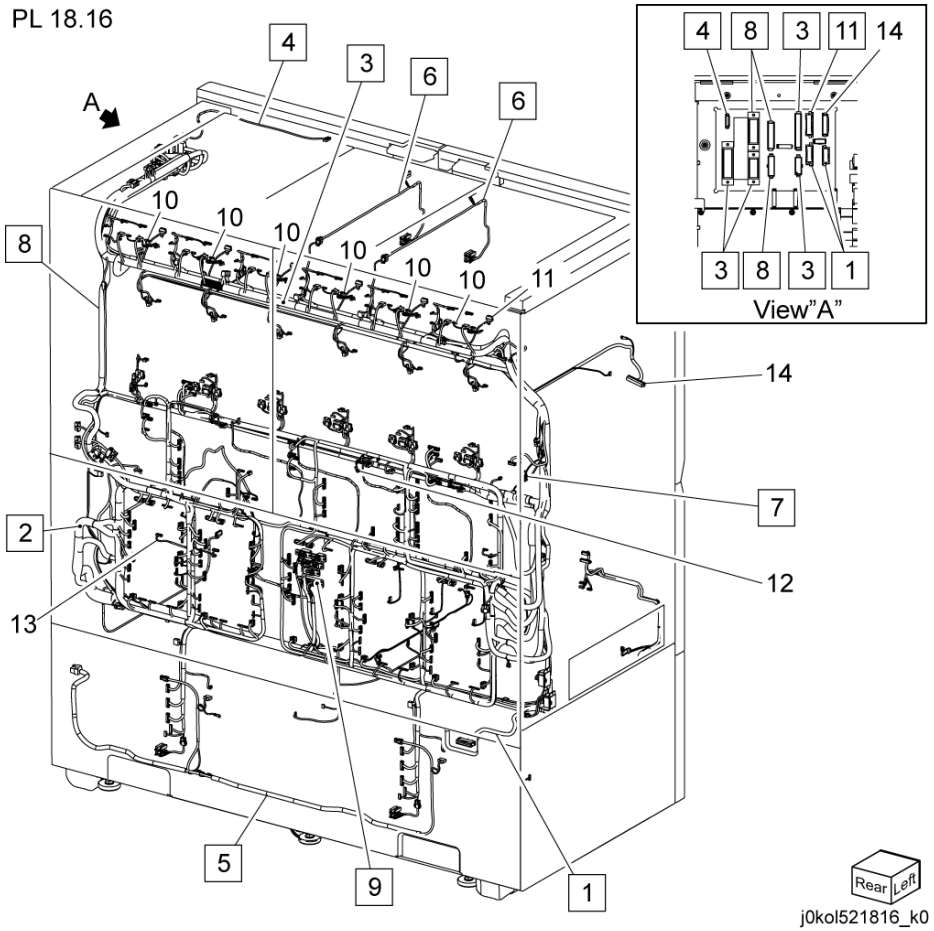
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD952K2984X／	CR	(SCC) Wire Harness (DCMAIN) DJ844/845
2	0TD952K0774X／	BD	(SCC) Wire Harness (ACMAIN)
3	0TD952K0792X／	BD	(SCC) Wire Harness (ACMAIN FSR)
4	0TD952K3456X／	BW	(SCC) Wire Harness (SMR) DJ846
5	0TD952K2985X／	BT	(SCC) Wire Harness (DCPWR)

PL 18.15



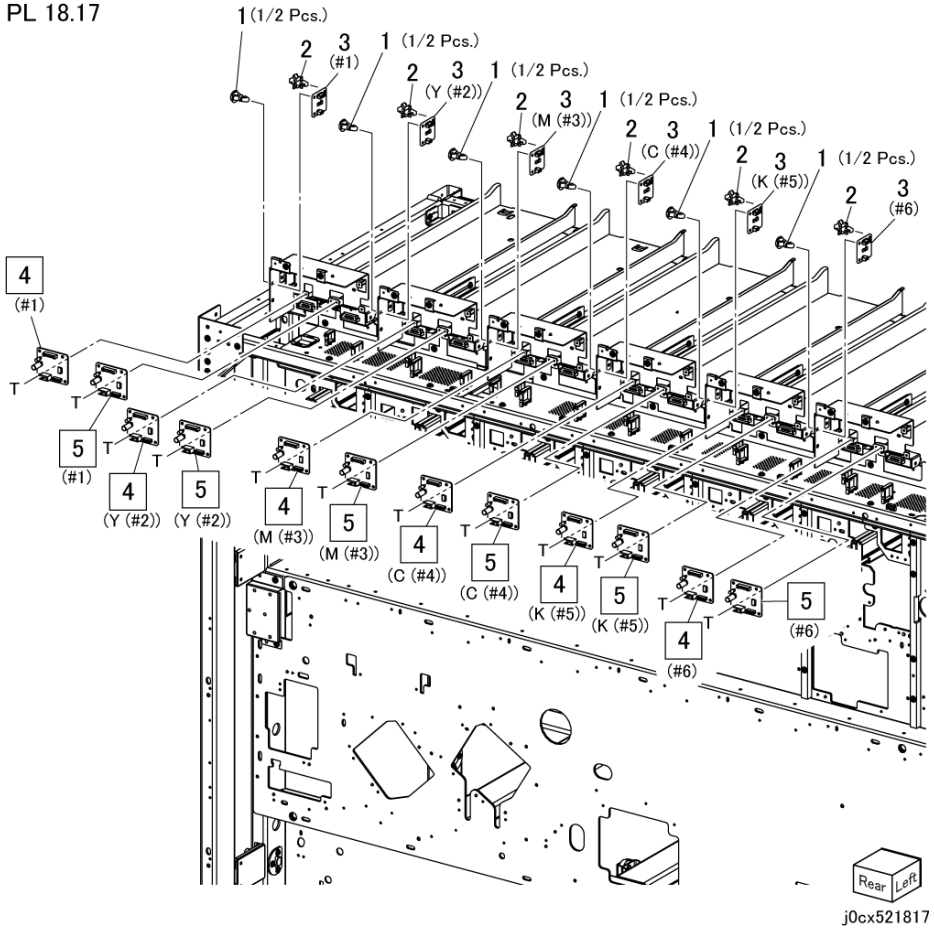
【PL18.16】
IOT-L Wire Harness

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD952K2981X／	CN	(SCC) Wire Harness (DC Main-L1)
2	0TD952K6896X／	DB	(SCC) Wire Harness (DC Main-L2) DP796/797 (REP 99.1.1)
3	0TD952K2983X／	CA	(SCC) Wire Harness (DC Power-L)
4	－－－－－	-----	
5	0TD952K0785X／	BE	(SCC) Wire Harness (AC Main-L)
6	－－－－－	-----	
7	0TD952K3457X／	BX	(SCC) Wire Harness (SML1) DP795
8	0TD952K3461X／	BV	(SCC) Wire Harness (Power-L2)
9	0TD952K3458X／	CA	(SCC) Wire Harness(SML2) DP798/799
10	0TD952K3501X／	BA	(SCC) Wire Harness (DISPSM)
11	0TD952K2992X／	BH	(SCC) Wire Harness (ROS)
12	0TD962K8193X／	AY	Wire Harness (CIRC,TERM)
13	－－－－－	-----	
14	－－－－－	-----	



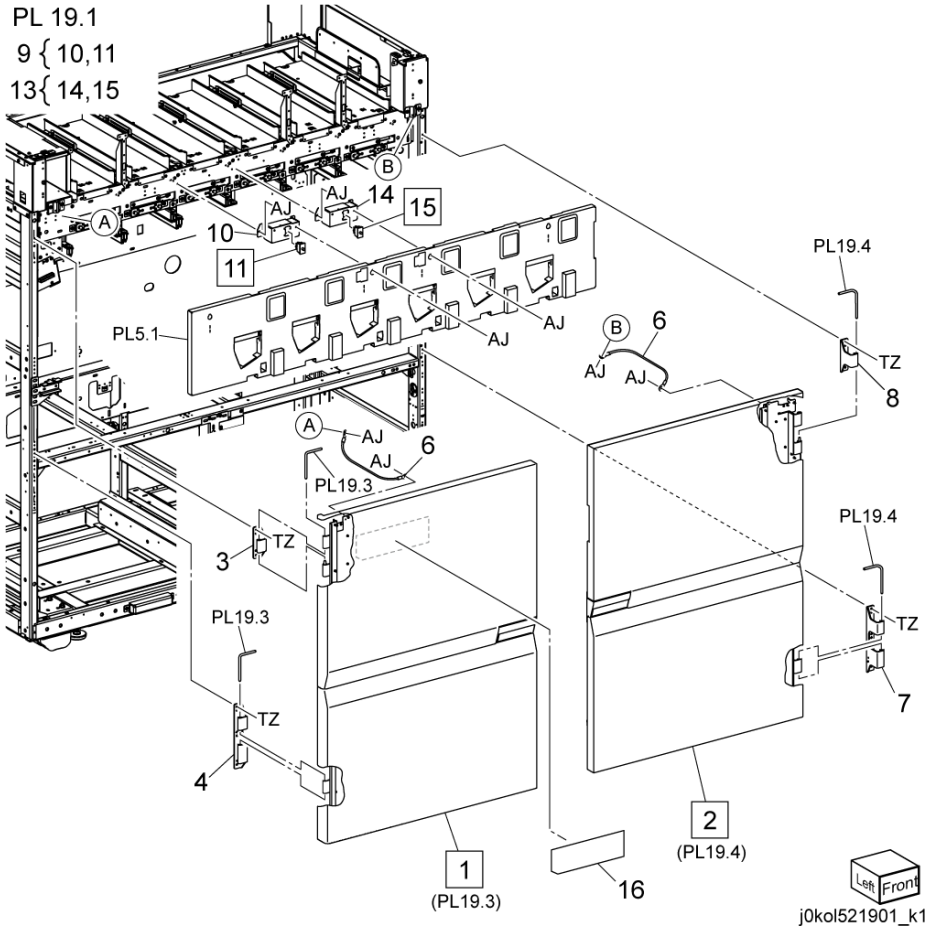
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	0TD120E9879X/	AU	PWB Support
3	0TD960K8471X/	BF	Drum Sub Crum PWB (#1/ Y (#2)/ M (#3)/ C (#4)/ K (#5)/ #6) (P/O Item 1,2)
4	0TD960K7375X/	BQ	(SCC) Toner Dispense Motor Drive PWB
5	0TD960K7375X/	BQ	(SCC) Toner Dispense Motor Drive PWB

PL 18.17



【PL19.1】
IOT-L Front Left Door and IOT-L Front Right Door Assembly

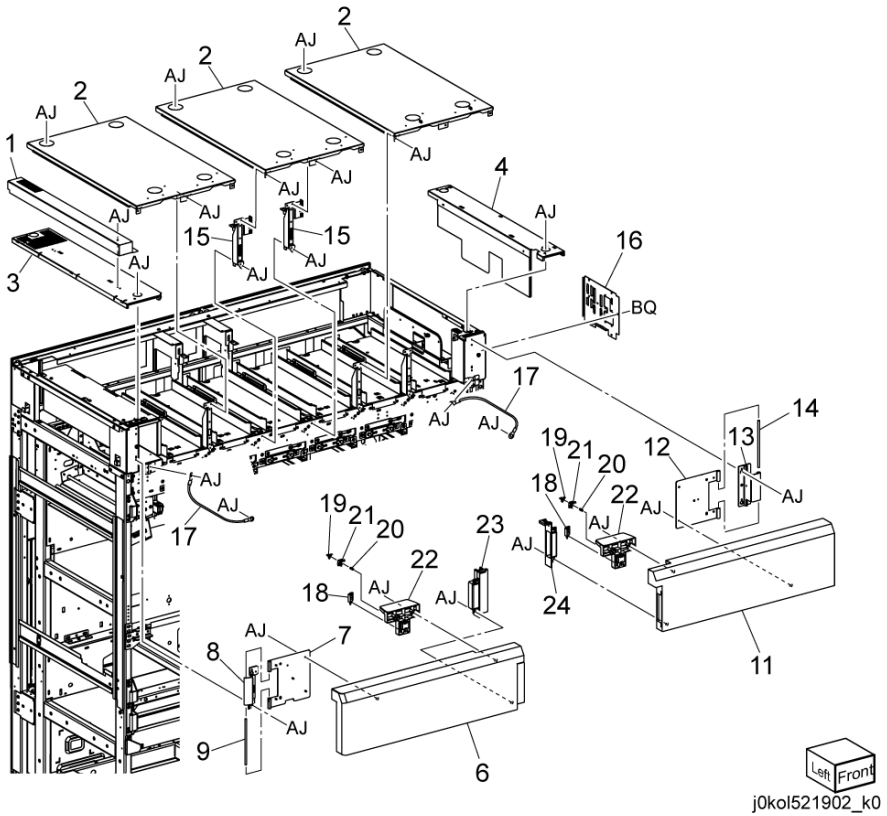
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD948K7474X/	EH	IOT-L Front Left Door Assembly
2	0TD948K7475X/	EK	IOT-L Front Right Door Assembly
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	0TD803E0569X/	AP	Stopper Wire
7	-----	-----	
8	-----	-----	
9	-----	-----	
10	-----	-----	
11	0TD110E1522X/	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X/	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	0TD110E1522X/	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X/	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	-----	-----	
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	0TD110E1522X/	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X/	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	0TD110E1522X/	AY	SW,INTLCK CF-DD-2MZ0-K5-2
	0TD110E1525X/	BA	(SCC) Tray 2 Interlock Switch (#545256-)
	-----	-----	
16	-----	-----	



【PL19.2】
IOT-L Top Cover and Dispenser Cover Assembly

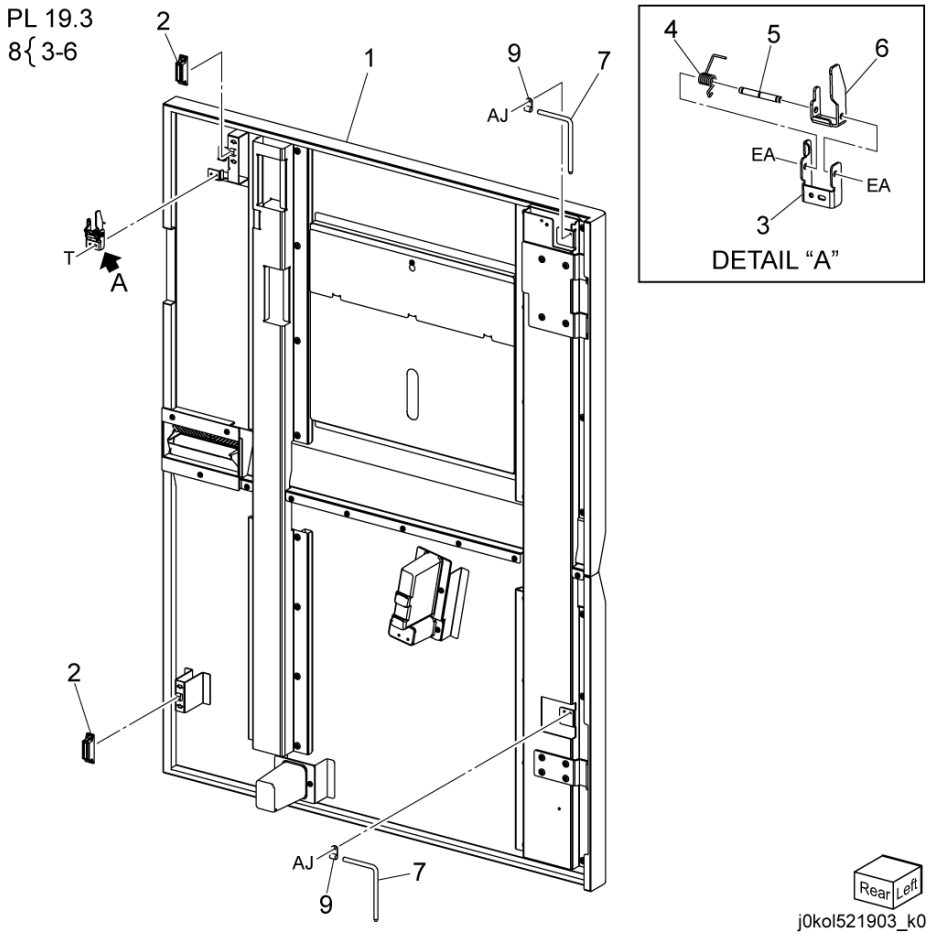
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	0TD948K7428X／	DA	Left Dispenser Cover Assembly (Item 6-9, 18-23)
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	0TD948K7429X／	DA	Right Dispenser Cover Assembly (Item 11-14, 18-22,24)
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	0TD110K1839X／	BG	Dispenser Interlock Switch Assembly (Item 23-25)
16	– – – – –	-----	
17	0TD803E0569X／	AP	Stopper Wire
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	
22	– – – – –	-----	
23	– – – – –	-----	
24	– – – – –	-----	

PL 19.2
5 { 6-9,18-23
10 { 11-14,18-22,24



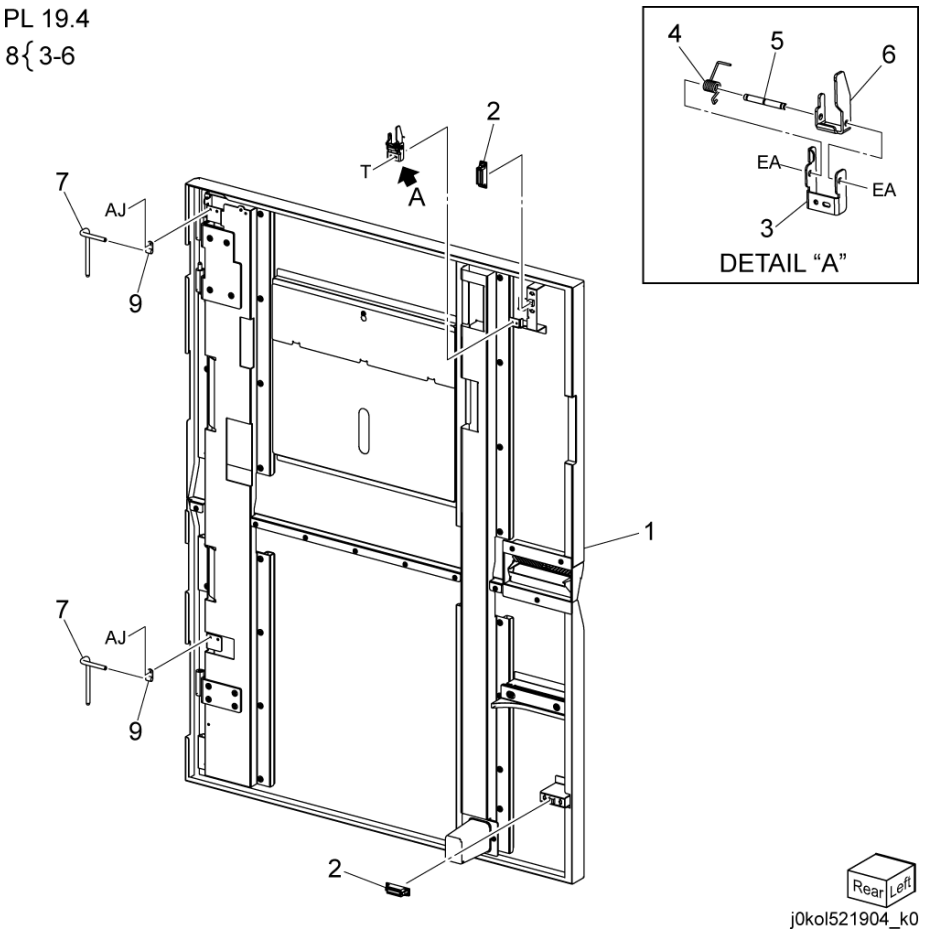
【PL19.3】
IOT-L Front Left Door Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD121E9287X／	AS	Magnet
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD920W00003／	AF	Clamp



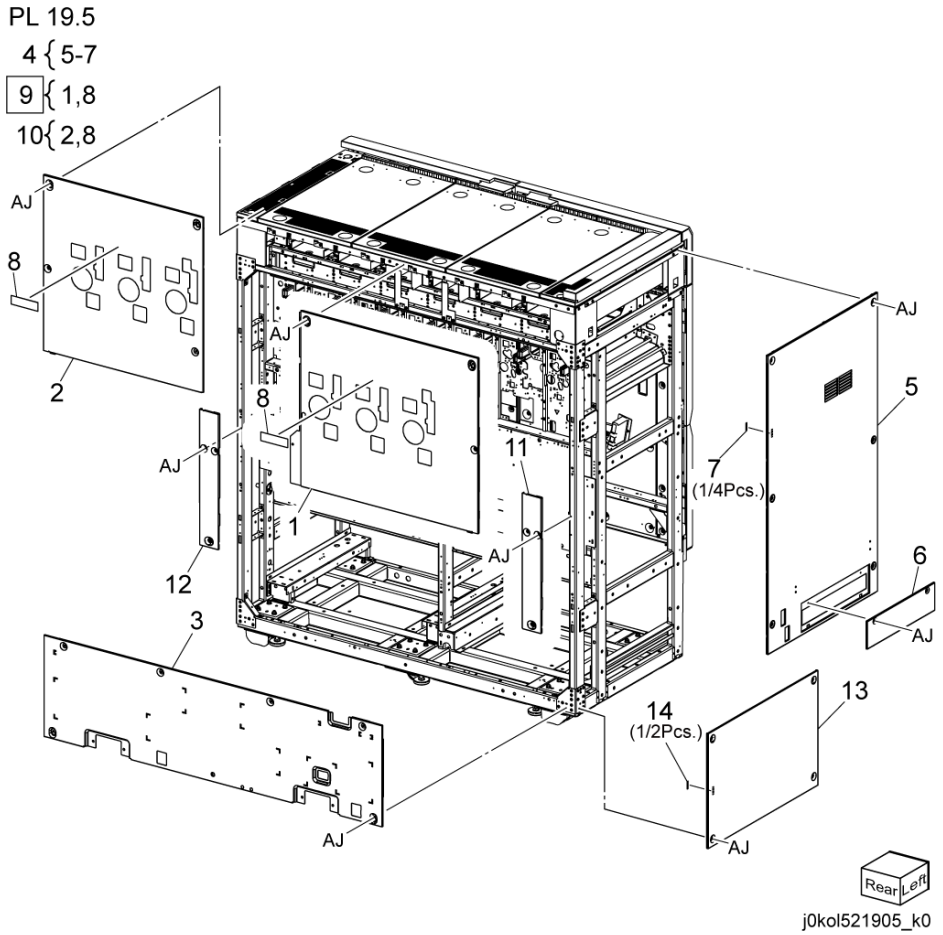
【PL19.4】
IOT-L Front Right Door Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	0TD121E9287X／	AS	Magnet
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	－－－－－	-----	
7	－－－－－	-----	
8	－－－－－	-----	
9	0TD920W00003／	AF	Clamp



【PL19.5】
IOT-L Rear Cover and IOT-L Left Cover Assembly

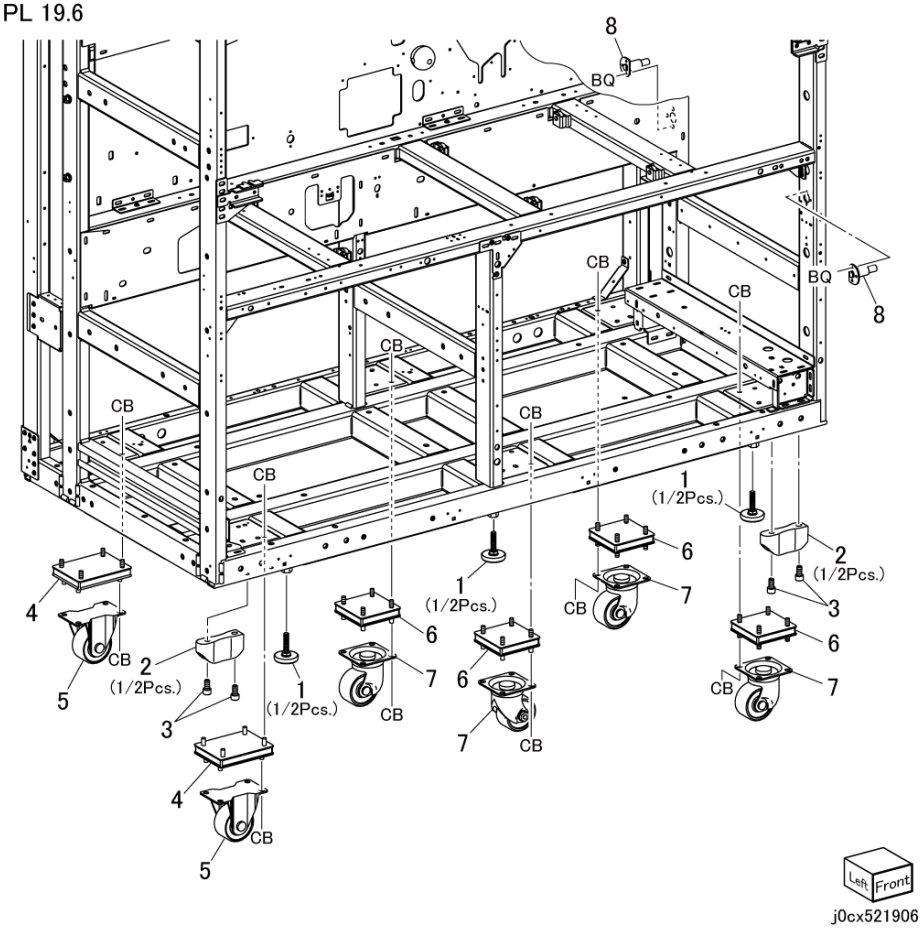
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	0TD948K7430X／	DE	IOT-L Left Cover Assembly (Item 5-7)
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	0TD948K7426X／	CU	IOT-L Rear Left Cover Assembly (Item 1, 8)
10	0TD948K7431X／	CT	IOT-L Rear Right Cover Assembly (Item 2, 8)
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	



【PL19.6】
IOT-L Caster and Foot

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	

PL 19.6



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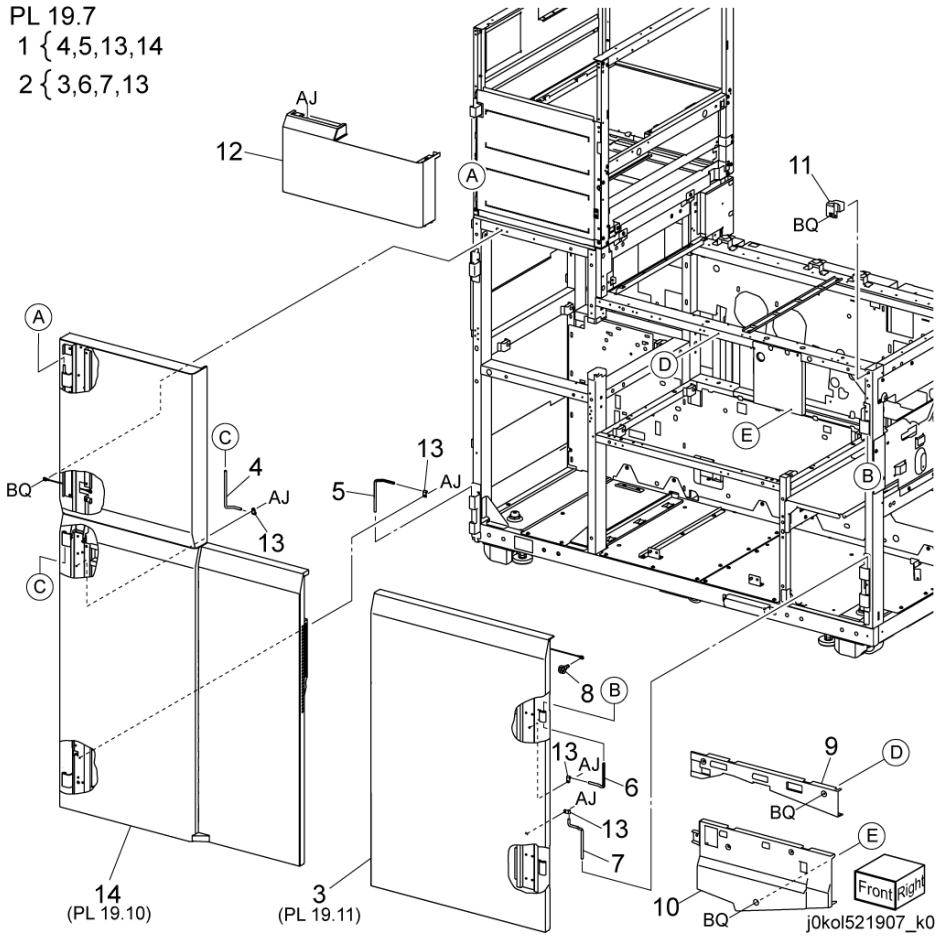
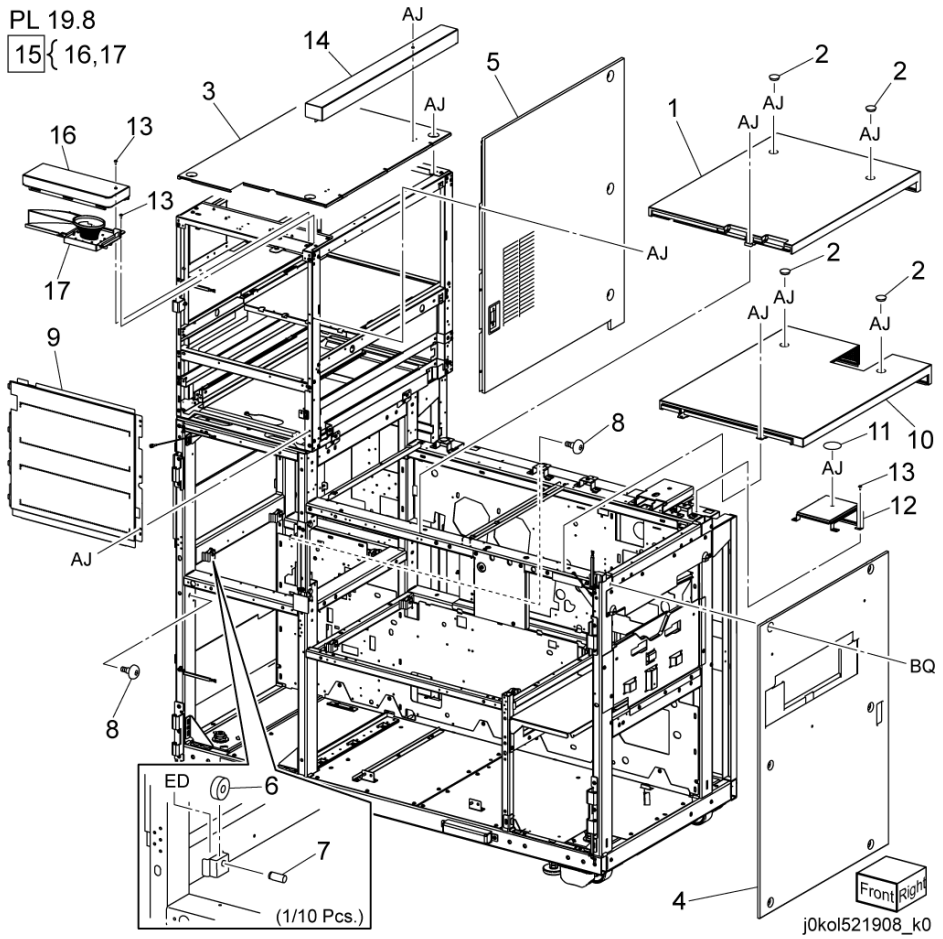
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD948K7432X/	FC	IOT-R Front Left Cover Unit (Item 4, 5, 13, 14)
2	0TD948K5128X/	DT	COVER ASSY-FRONT RH (Item 3, 6, 7, 13)
3	-----	-----	
4	-----	-----	
5	-----	-----	
6	-----	-----	
7	-----	-----	
8	-----	-----	
9	0TD822E8214X/	BH	COVER-INNER LH NB SPEC
10	0TD822E8213X/	BS	COVER-INNER RH NB SPEC
11	0TD822E8215X/	BG	COVER-PIPE FRONT NB SPEC
12	0TD948K7347X/	CL	ELEC Box Front Cover
13	-----	-----	
14	-----	-----	

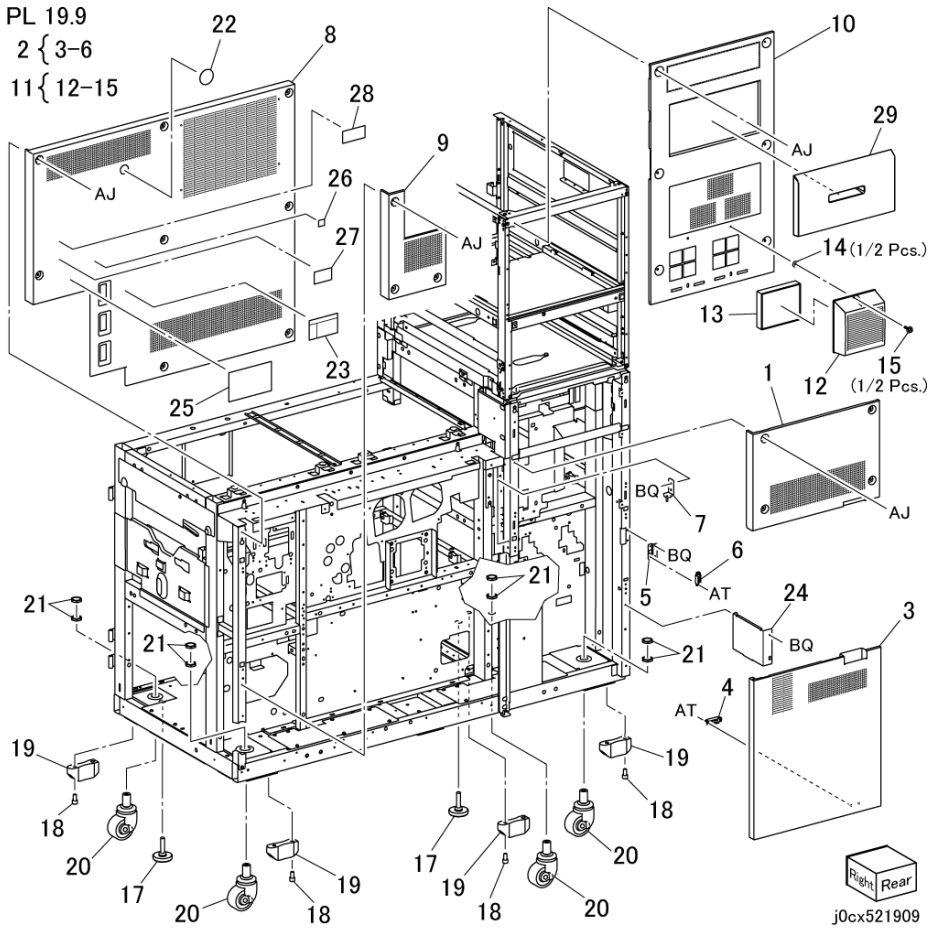


Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	0TD948K4302X／	CM	COVER ASSY-RIGHT FIN
5	0TD948K7442X／	CP	ELEC Box Side Cover
6	0TD413W08550／	AP	Bearing
7	0TD806E3140X／	AU	Shaft
8	－－－－－	-----	
9	－－－－－	-----	
10	0TD948K7436X／	CS	Top Cover
11	0TD970E9917X／	BA	LABEL-REAR
12	－－－－－	-----	
13	－－－－－	-----	
14	－－－－－	-----	
15	0TD607K2831X／	CM	KIT-ATL,KO
16	－－－－－	-----	
17	－－－－－	-----	



【PL19.9】
IOT-R (3 of 3)

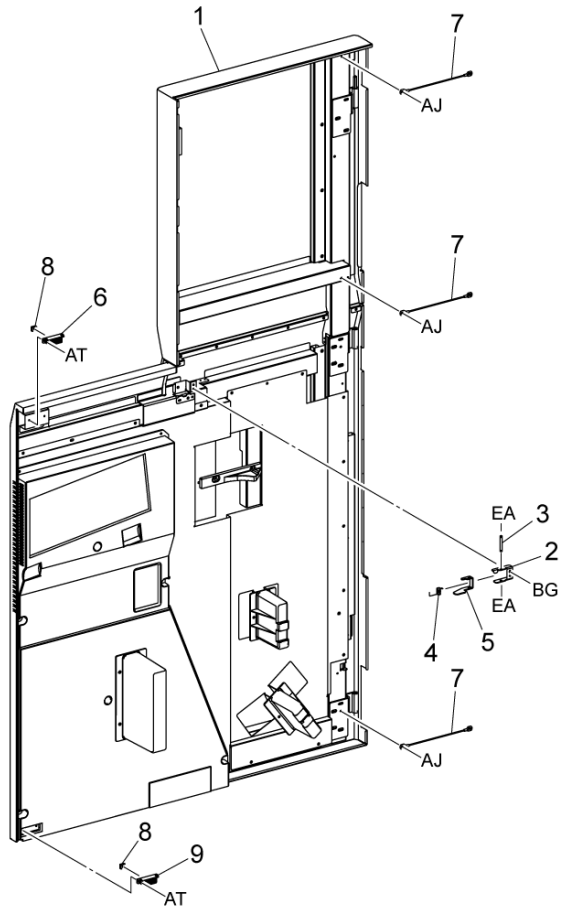
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD948K7355X／	BZ	IOT-R Rear Left Cover
2	0TD948K7434X／	CF	Toner Bottle Cover Assembly (Item 3-6)
3	－－－－－	-----	
4	0TD121E2064X／	AY	Magnet Catch
5	－－－－－	-----	
6	0TD121E2064X／	AY	Magnet Catch
7	－－－－－	-----	
8	0TD948K4301X／	CU	COVER ASSY-REAR RH FIN
9	0TD822E8212X／	BW	COVER-REAR RH LWR FIN
10	0TD948K7443X／	CL	ELEC Box Rear Cover
11	0TD053K0769X／	BU	VOC Filter Assembly (Item 12-15)
12	－－－－－	-----	
13	0TD053K9612X／	BK	FILTER-VOC UPPER
14	－－－－－	-----	
15	－－－－－	-----	
16	－－－－－	-----	
17	0TD017E1208X／	AW	Adjuster Foot
18	－－－－－	-----	
19	－－－－－	-----	
20	－－－－－	-----	
21	－－－－－	-----	
22	－－－－－	-----	
23	－－－－－	-----	
24	－－－－－	-----	
25	－－－－－	-----	
26	－－－－－	-----	
27	－－－－－	-----	
28	－－－－－	-----	
29	－－－－－	-----	



【PL19.10】
IOT-R Front Left Cover Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD121E2064X／	AY	Magnet Catch
7	0TD803E0569X／	AP	Stopper Wire
8	－－－－－	-----	
9	－－－－－	-----	

PL 19.10

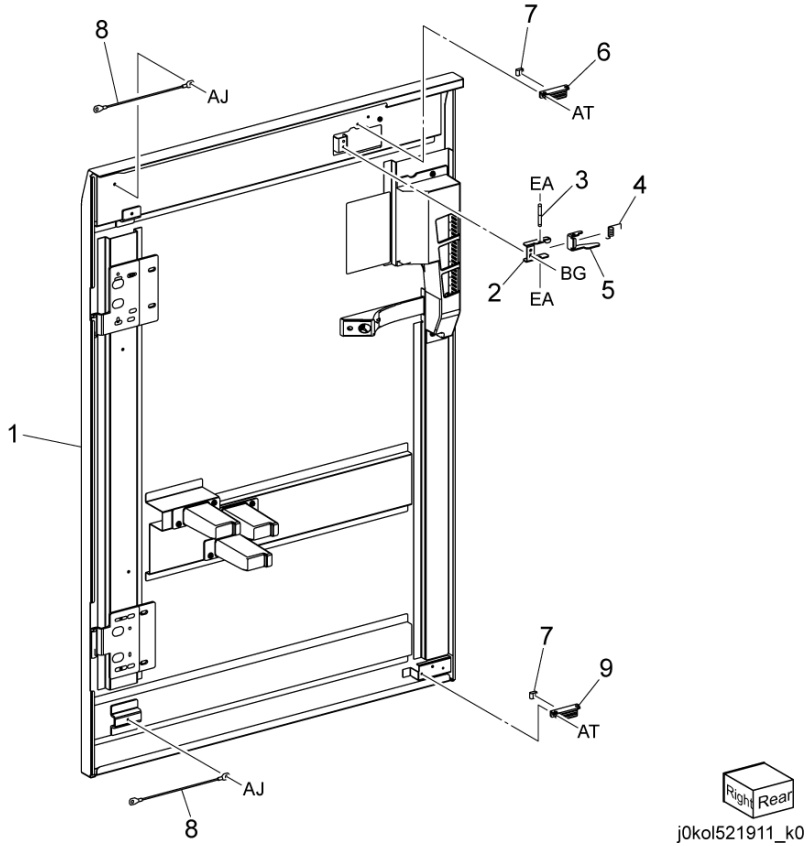


j0kol521910_k0

【PL19.11】
IOT-R Front Right Cover Assembly

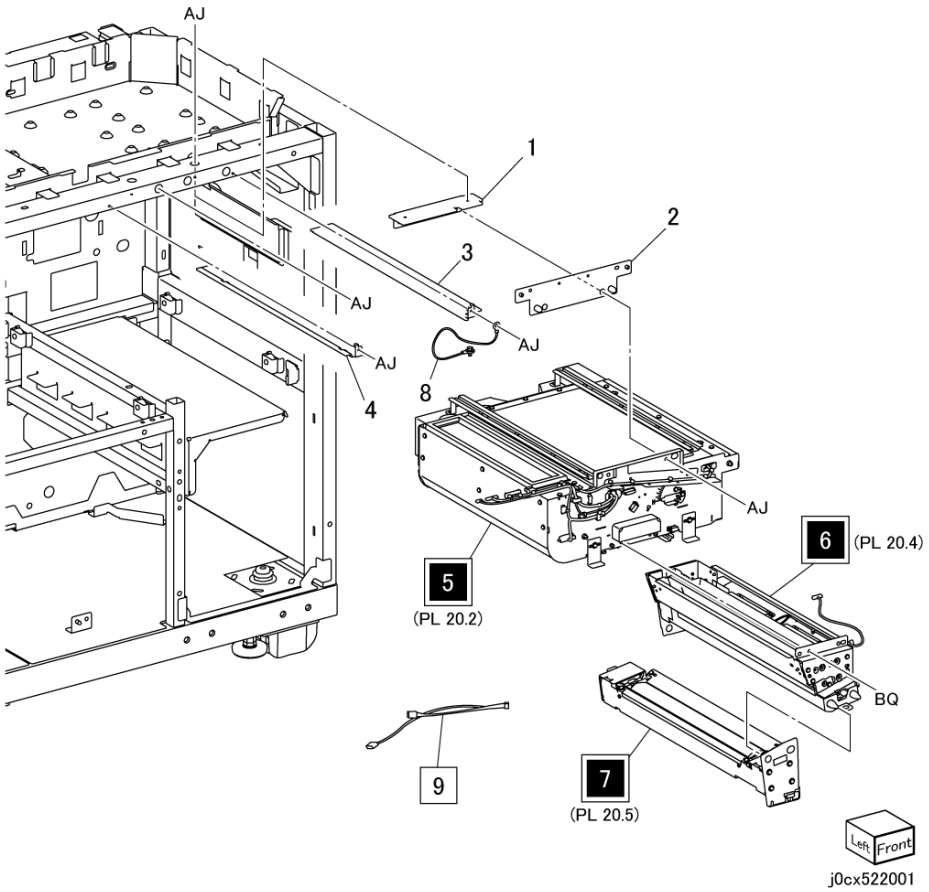
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	－－－－－	-----	
2	－－－－－	-----	
3	－－－－－	-----	
4	－－－－－	-----	
5	－－－－－	-----	
6	0TD121E2064X／	AY	Magnet Catch
7	－－－－－	-----	
8	0TD803E0569X／	AP	Stopper Wire
9	－－－－－	-----	

PL 19.11



Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	-----	-----	
4	-----	-----	
5	0TD062K2739X/	EY	ILS Assembly
6	0TD122K9468X/	DN	Lamp Assembly
7	0TD859K0936X/	CP	WR Roll Assembly
8	0TD003K8857X/	AY	Wire Stopper Assembly
9	0TD962K8536X/	AR	(SCC) Wire Harness

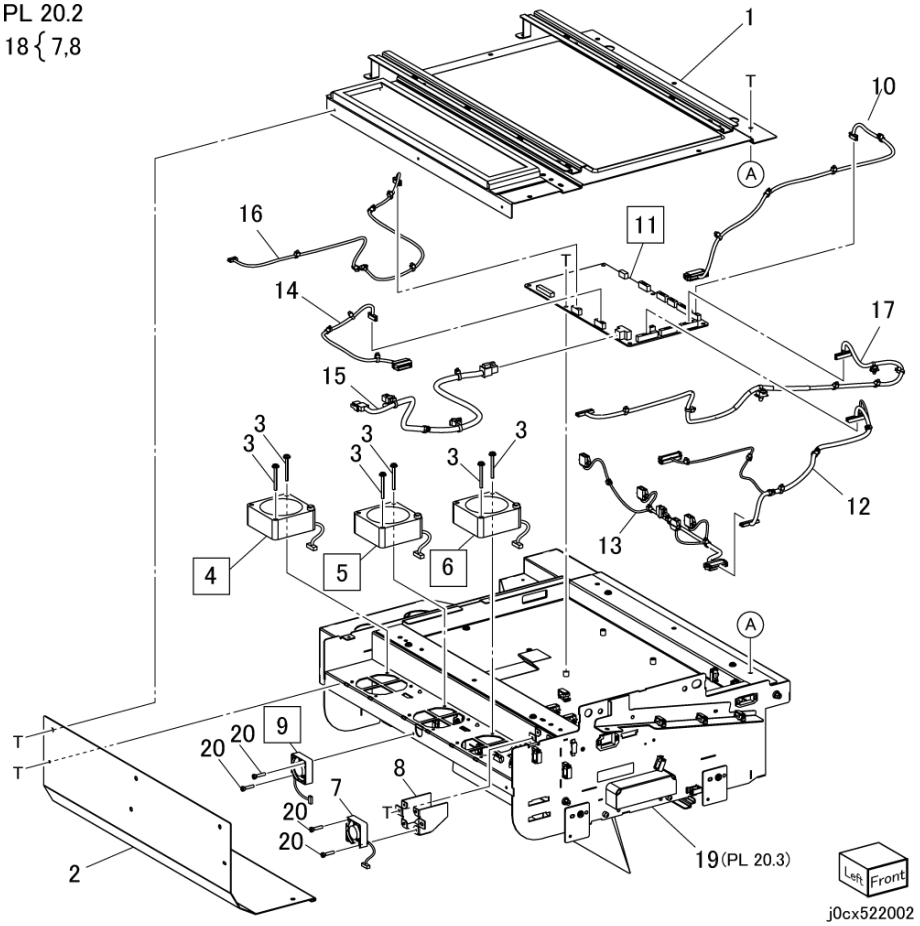
PL 20.1



【PL20.2】
ILS Assembly (1 of 2)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	-----	-----	
4	0TD127K6293X/	AZ	(SCC) ILS Fan 3
5	0TD127K6293X/	AZ	(SCC) ILS Fan 3
6	0TD127K6293X/	AZ	(SCC) ILS Fan 3
7	-----	-----	
8	-----	-----	
9	0TD127K7177X/	BD	(SCC) ILS Fan 2
10	-----	-----	
11	0TD961K1767X/	CY	PWB ASSY-ILSDP TR BCP2
12	-----	-----	
13	-----	-----	
14	-----	-----	
15	-----	-----	
16	-----	-----	
17	-----	-----	
18	0TD049K2849X/	BM	ILS Fan 1 Assembly (Item 7, 8)
19	-----	-----	
20	-----	-----	

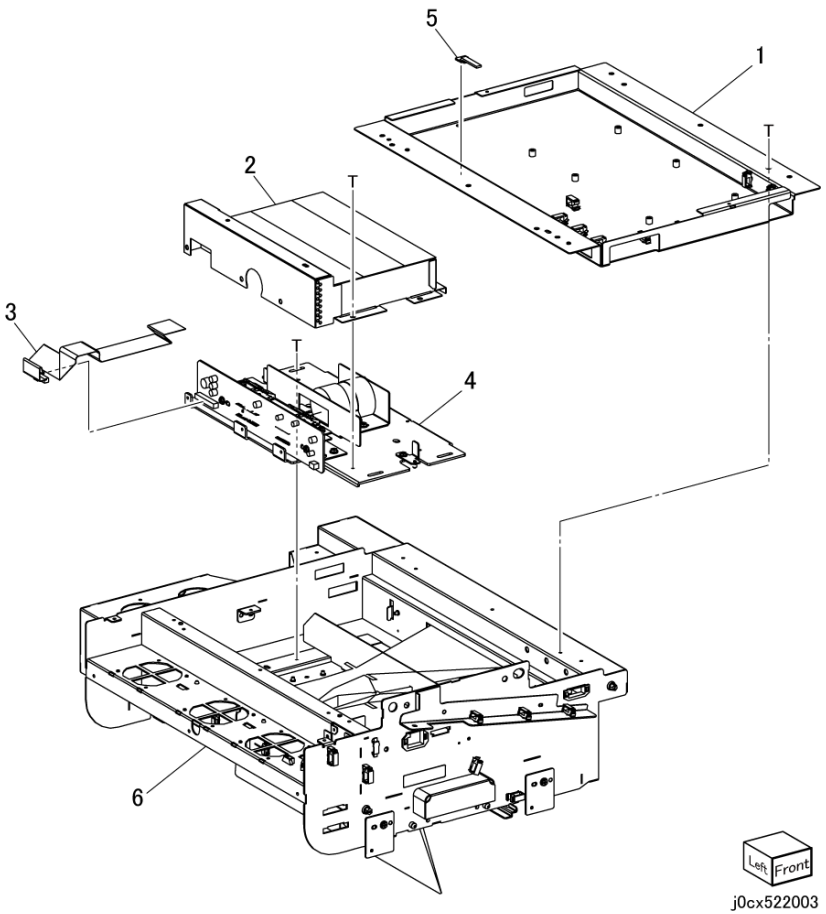
PL 20.2
18 { 7,8



【PL20.3】
ILS Assembly (2 of 2)

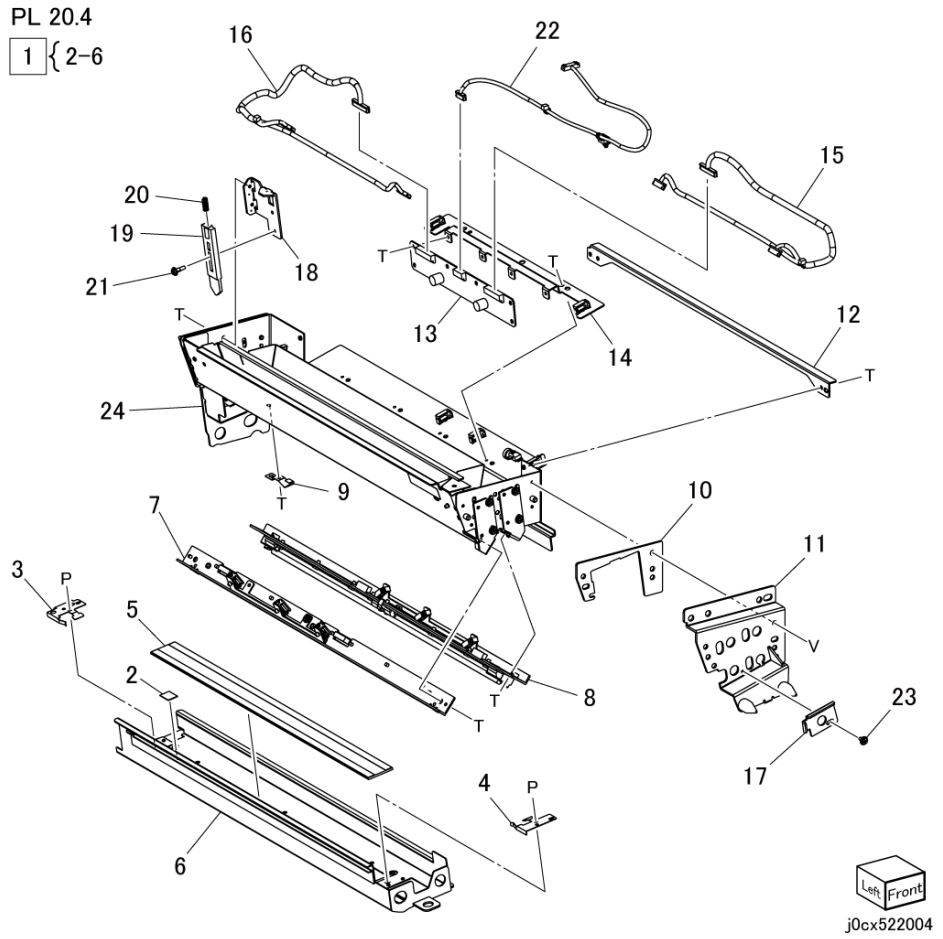
Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	-----	-----	
2	-----	-----	
3	0TD117E3256X/	BS	FFC Cable
4	-----	-----	
5	-----	-----	
6	-----	-----	

PL 20.3



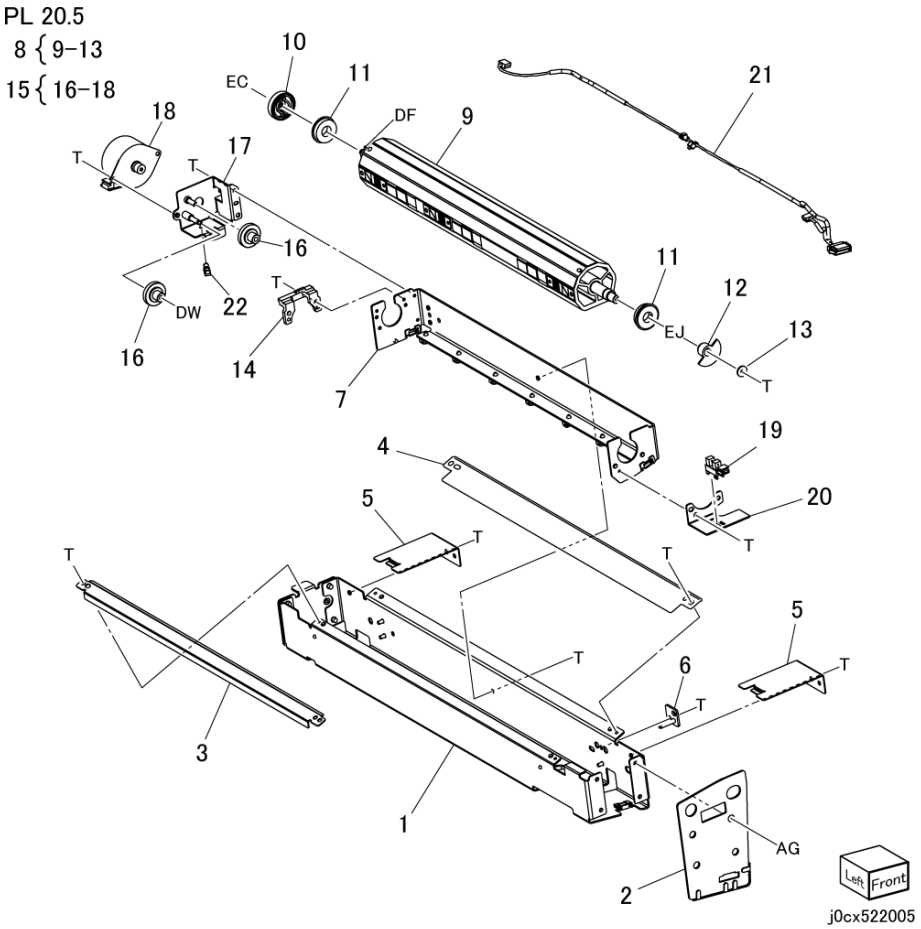
【PL20.4】
Lamp Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	– – – – –	-----	
17	– – – – –	-----	
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	
22	– – – – –	-----	
23	– – – – –	-----	
24	– – – – –	-----	



【PL20.5】
WR Roll Assembly

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	– – – – –	-----	
2	– – – – –	-----	
3	– – – – –	-----	
4	– – – – –	-----	
5	– – – – –	-----	
6	– – – – –	-----	
7	– – – – –	-----	
8	– – – – –	-----	
9	– – – – –	-----	
10	– – – – –	-----	
11	– – – – –	-----	
12	– – – – –	-----	
13	– – – – –	-----	
14	– – – – –	-----	
15	– – – – –	-----	
16	– – – – –	-----	
17	– – – – –	-----	
18	– – – – –	-----	
19	– – – – –	-----	
20	– – – – –	-----	
21	– – – – –	-----	
22	– – – – –	-----	



【Screws】

Item	PARTS CODE	PRICE RANK	DESCRIPTION
A	– – – – –	-----	Screw (M3x6)
B	– – – – –	-----	Sems Screw (M3x6)
C	– – – – –	-----	Sems Screw (M3x6)
D	– – – – –	-----	Sems Screw (RED)(M3x8)
E	– – – – –	-----	Sems Screw (M3x8)
F	– – – – –	-----	Sems Screw (M3x8)
G	– – – – –	-----	Sems Screw (M3x10)
H	– – – – –	-----	Sems Screw (M3x20)
J	– – – – –	-----	Sems Screw (M3x40)
K	– – – – –	-----	Sems Screw (M4x16)
L	– – – – –	-----	Sems Screw (M4x40)
M	– – – – –	-----	Sems Screw (M8x20)
N	– – – – –	-----	Screw (M2x4)
P	– – – – –	-----	Screw (M3x4)
Q	– – – – –	-----	Pan Head Screw (M2.5x4)
R	– – – – –	-----	Screw (M3x5)
S	– – – – –	-----	Screw (RED)(M3x6)
T	– – – – –	-----	Screw (M3x6)
U	– – – – –	-----	Pan Head Screw (M2.5x6)
V	– – – – –	-----	Screw (M3x8)
W	– – – – –	-----	Screw (M3x10)
X	– – – – –	-----	Screw (M3x12)
Y	– – – – –	-----	Screw (M3x14)
Z	– – – – –	-----	Screw (M3x18)
AA	– – – – –	-----	Screw (M3x25)
AB	– – – – –	-----	Pan Head Screw (M3x4)
AC	– – – – –	-----	Pan Head Screw (M3x5)
AD	– – – – –	-----	Pan Head Screw (M3x6)
AE	– – – – –	-----	Pan Head Screw (M3x12)
AF	– – – – –	-----	Screw (M4x5)
AG	– – – – –	-----	Screw (M4x6)
AH	– – – – –	-----	Screw (RED)(M4x8)
AJ	– – – – –	-----	Screw (M4x8)
AK	– – – – –	-----	Pan Head Screw (M4x8)
AL	– – – – –	-----	Screw (M4x10)
AM	– – – – –	-----	Screw (M4x12)
AN	– – – – –	-----	Screw (M3x25)
AP	– – – – –	-----	Screw (M4x20)
AQ	– – – – –	-----	Pan Head Screw (M4x20)
AR	– – – – –	-----	Pan Head Screw (M4x40)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
AS	– – – – –	-----	Screw (M4x45)
AT	– – – – –	-----	Bind Head Screw (M3x6)
AU	– – – – –	-----	Capscrew (M8x14)
AV	– – – – –	-----	Setscrew (M3x3)
AW	– – – – –	-----	Setscrew (M3x4)
AX	– – – – –	-----	Setscrew (M4x4)
AY	– – – – –	-----	Setscrew (M4x8)
AZ	– – – – –	-----	Tapping Screw (M4x8)
BA	– – – – –	-----	Tapping Screw (M4x10)
BB	– – – – –	-----	Tapping Screw (M3x6)
BC	– – – – –	-----	Tapping Screw (M3x8)
BD	– – – – –	-----	Tapping Screw (M3x10)
BE	– – – – –	-----	Tapping Screw (M3x12)
BF	– – – – –	-----	Tapping Screw (M3x8)
BG	– – – – –	-----	Screw (M3x6)
BH	– – – – –	-----	Round Screw (M3x7)
BJ	– – – – –	-----	Screw (M3x8)
BK	– – – – –	-----	Round Screw (M3x9)
BL	– – – – –	-----	Screw (M3x12)
BM	– – – – –	-----	Screw (M4x6)
BN	– – – – –	-----	Pan Head Screw (M4x12)
BP	– – – – –	-----	Screw (RED)(M4x8)
BQ	– – – – –	-----	Screw (M4x8)
BR	– – – – –	-----	Pan Head Screw (M4x8)
BS	– – – – –	-----	Pan Head Screw (M4x10)
BT	– – – – –	-----	Screw (M4x25)
BU	– – – – –	-----	Screw (M5x10)
BV	– – – – –	-----	Nut (3)
BW	– – – – –	-----	Nut (6)
BX	– – – – –	-----	Nut (8)
BY	– – – – –	-----	Nut (12)
BZ	– – – – –	-----	Flange Nut (3)
CA	– – – – –	-----	Flange Nut (4)
CB	– – – – –	-----	Flange Nut (8)
CC	– – – – –	-----	Speed Nut (2.9)
CD	– – – – –	-----	Washer (3)
CE	– – – – –	-----	Washer (3)
CF	– – – – –	-----	Washer (4)
CG	– – – – –	-----	Washer (4)
CH	– – – – –	-----	Washer (5)

【Screws】

Item	PARTS CODE	PRICE RANK	DESCRIPTION
CJ	– – – – –	-----	Washer (6)
CK	– – – – –	-----	Washer (8)
CL	– – – – –	-----	Nylon Washer (4)(t0.25)
CM	– – – – –	-----	Nylon Washer (4)(t0.5)
CN	– – – – –	-----	Nylon Washer (6)(t0.5)
CP	– – – – –	-----	Nylon Washer (6)(t1)
CQ	– – – – –	-----	Nylon Washer (6)(t1.5)
CR	– – – – –	-----	Nylon Washer (8)(t0.25)
CS	– – – – –	-----	Nylon Washer (8)(t0.5)
CT	– – – – –	-----	Nylon Washer (8)(t1)
CU	– – – – –	-----	Nylon Washer (10)(t0.5)
CV	– – – – –	-----	Nylon Washer (10)(t1.5)
CW	– – – – –	-----	Nylon Washer (15)(t0.5)
CX	– – – – –	-----	Spring Washer (8)
CY	– – – – –	-----	Dowel Pin (2x10)
CZ	– – – – –	-----	Dowel Pin (2x16)
DA	– – – – –	-----	Dowel Pin (2.5x10)
DB	– – – – –	-----	Dowel Pin (2.5x12)
DC	– – – – –	-----	Dowel Pin (2.5x14)
DD	– – – – –	-----	Dowel Pin (3x6)
DE	– – – – –	-----	Dowel Pin (3x8)
DF	– – – – –	-----	Dowel Pin (3x16)
DG	– – – – –	-----	Dowel Pin (3x22)
DH	– – – – –	-----	Dowel Pin (4x20)
DJ	– – – – –	-----	Spring Pin (2x8)
DK	– – – – –	-----	Spring Pin (2x10)
DL	– – – – –	-----	Spring Pin (2x12)
DM	– – – – –	-----	Spring Pin (2.5x20)
DN	– – – – –	-----	Spring Pin (3x12)
DP	– – – – –	-----	Spring Pin (3x16)
DQ	– – – – –	-----	C-Clip (8)
DR	– – – – –	-----	C-Clip (14)
DS	– – – – –	-----	C-Clip (20)
DT	– – – – –	-----	C-Clip (32)
DU	– – – – –	-----	C-Clip (40)
DV	– – – – –	-----	M-Ring (12)
DW	– – – – –	-----	E-Clip (2)
DX	– – – – –	-----	E-Clip (2.4)
DY	– – – – –	-----	E-Clip (2.5)
DZ	– – – – –	-----	KL-Clip

Item	PARTS CODE	PRICE RANK	DESCRIPTION
EA	– – – – –	-----	E-Clip (3)
EB	– – – – –	-----	KL-Clip
EC	– – – – –	-----	E-Clip (4)
ED	– – – – –	-----	E-Clip (5)
EE	– – – – –	-----	KL-Clip
EF	– – – – –	-----	E-Clip (6)
EG	– – – – –	-----	E-Clip (7)
EH	– – – – –	-----	KL-Clip
EJ	– – – – –	-----	E-Cip (8)
EK	– – – – –	-----	E-Clip (9)
EL	– – – – –	-----	E-Clip (10)
EM	– – – – –	-----	Screw (M4x16)
EN	– – – – –	-----	Setscrew (M3x6)
EP	– – – – –	-----	Spring Washer (3)
EQ	– – – – –	-----	Special Nut
ER	– – – – –	-----	Sems Screw (M6x12)
ES	– – – – –	-----	Screw (RED)(M3x6)
ET	– – – – –	-----	Screw (RED)(M3x6)
SA	– – – – –	-----	Screw (M3x4)
SB	– – – – –	-----	Screw (M3x6)
SC	– – – – –	-----	Screw (M3x16)
SD	– – – – –	-----	Pan Head Screw (M3x6)
SE	– – – – –	-----	Screw (M3x25)
SF	– – – – –	-----	Tapping Screw (M3x6)
SG	– – – – –	-----	Tapping Screw (M3x8)
SH	– – – – –	-----	Tapping Screw (M3x8)
SJ	– – – – –	-----	Screw (M3x6)
SK	– – – – –	-----	Round Screw (M3x7)
SL	– – – – –	-----	Screw (M3x8)
SM	– – – – –	-----	Screw (M3x12)
SN	– – – – –	-----	Screw (M4x8)
SP	– – – – –	-----	Flange Nut (3)
SQ	– – – – –	-----	Washer (8)
SR	– – – – –	-----	Nylon Washer (6)(t1)
SS	– – – – –	-----	Nylon Washer (8)(t0.25)
ST	– – – – –	-----	Dowel Pin (2.5x16)
SU	– – – – –	-----	E-Clip (2)
SV	– – – – –	-----	KL-Clip
SW	– – – – –	-----	E-Clip (3)
SX	– – – – –	-----	KL-Clip

【Screws】

Item	PARTS CODE	PRICE RANK	DESCRIPTION
SY	– – – – –	-----	E-Clip (4)
SZ	– – – – –	-----	E-Clip (5)
TA	– – – – –	-----	KL-Clip
TB	– – – – –	-----	E-Clip (6)
TC	– – – – –	-----	E-Cip (8)
TD	– – – – –	-----	Screw (M4x12)
TE	– – – – –	-----	Screw (M4x30)
TF	– – – – –	-----	Screw (M4x45)
TG	– – – – –	-----	Screw (M3x16)
TH	– – – – –	-----	Sems Screw (M3x40)
TJ	– – – – –	-----	Screw (M4x12)
TK	– – – – –	-----	Nut (4)
TL	– – – – –	-----	Setscrew (M4x4)
TM	– – – – –	-----	Nylon Washer (12)(t0.5)
TN	– – – – –	-----	Tapping Screw (M4x8)
TP	– – – – –	-----	Washer (6)
TQ	– – – – –	-----	Spring Washer (6)
TR	– – – – –	-----	Washer (4)
TS	– – – – –	-----	Spring Washer (12)
TT	– – – – –	-----	Nylon Washer
TU	– – – – –	-----	Shoulder Screw
TV	– – – – –	-----	Nylon Washer (3)(t0.25)
TW	– – – – –	-----	KL-Clip
TX	– – – – –	-----	Tapping Screw (M3x4)
TY	– – – – –	-----	Nylon Washer (10)(t1.5)
TZ	– – – – –	-----	Screw (M4x10)
UA	– – – – –	-----	Screw (RED) (M4x10)

Item	PARTS CODE	PRICE RANK	DESCRIPTION
1	0TD499T00289／	BV	SCREEN METER
2	0TD499T00301／	AN	SCREW DRIVER (-) 3×50
3	0TD499T00302／	AV	SCREW DRIVER (-) 6×100
4	0TD499T00356／	AX	SCREW_DRIVER (+) WITH_MAGNET
5	0TD499T00353／	AY	STUBBY DRIVER (+)(-)
6	0TD499T00355／	BA	SCREW DRIVER (+) 100MM
7	0TD499T00451／	BA	SPANNER AND WRENCH 5.5×5.5
8	0TD499T00452／	BA	SPANNER AND WRENCH 7×7
9	0TD499T90638／	BU	Hex Key Set PB
10	0TD499T01423／	BN	5.5mm BOX DRIVER WITH MAGNET
11	0TD499T01426／	BR	BOX DRIVER WITH MAGNET 5.5mm×180mm
12	0TD499T01901／	BN	SIDE CUTTING NIPPER
13	0TD499T02004／	BP	ROUND NOSE PLIER
14	0TD499T90665／	DD	NEW DIGITAL MULTI METER SET
15	0TD600T91616／	BA	INTERLOCK CHEATER
16	0TD499T02601／	CL	SILVER SCALE 150MM
17	0TD499T06402／	BG	MAGNETIC SCREW PICK UP TOOL
18	0TD499T06607／	BA	SCRIBER TOOL
19	0TD499T07403／	BU	LOUPE
20	0TD499T08107／	BR	LED FLASH LIGHT
21	0TD499T08902／	BB	BRUSH
22	0TD499T09586／	BN	NEW D.M.M LEAD WIRE RED
23	0TD499T09587／	BN	NEW D.M.M LEAD WIRE BLACK
24	0TD499T09588／	BE	NEEDLE ADAPTER
25	0TD499T00247／	BF	TEST PATTERN A3
26	0TD499T00276／	BN	COLOR TEST PATTERN
27	0TD499T00324／	BL	Test Pattern (A4)(STP5416)
28	0TD499T00454／	BB	SPANNER&OFFSET WRENCH 10mm x 10mm
29	0TD499T02005／	BQ	ROUND NOSE PLIER
30	0TD499T02602／	BA	SILVER SCALE 300mm
31	0TD499T07776／	BG	For PSW Software Upgrade USB Cable
32	0TD499T07780／	BN	For IOT log information gathering 10BaceT-Cross Cable
33	0TD499T90694／	BM	For PSW Software Upgrade USB Cable (499T 07776 Alternatives)

Navi 1.1 Processor + Option

Navi 1.1

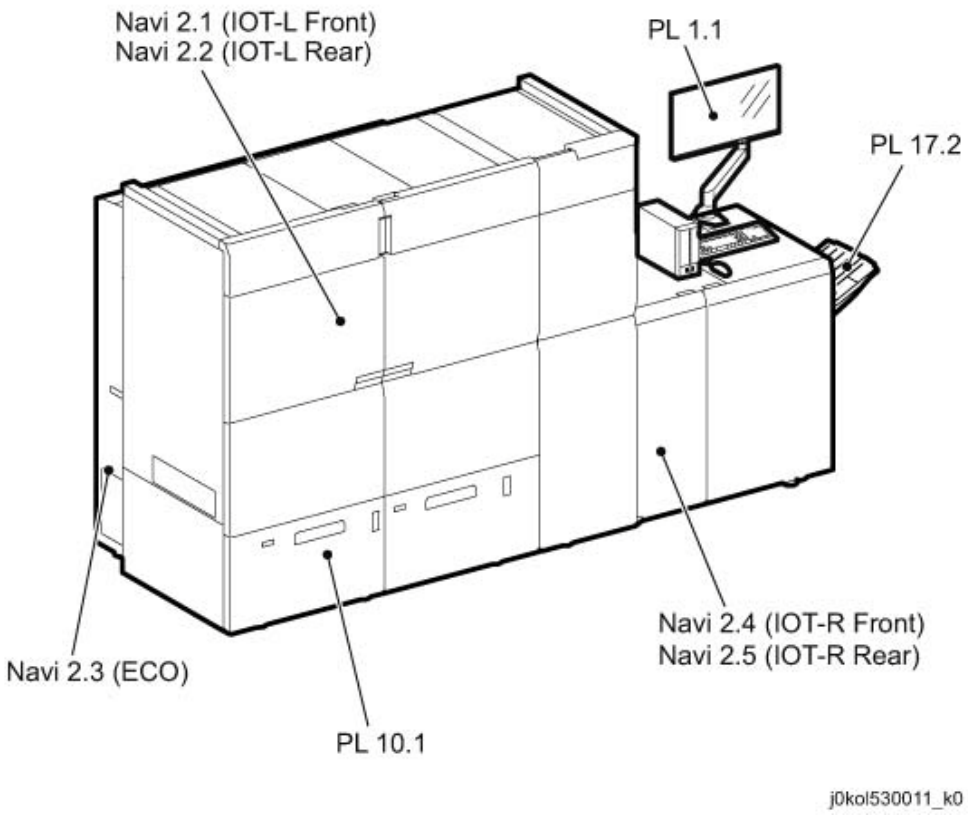


Figure 1 j0kol530011_k0

Navi 2.1 IOT-L Front

Navi 2.1

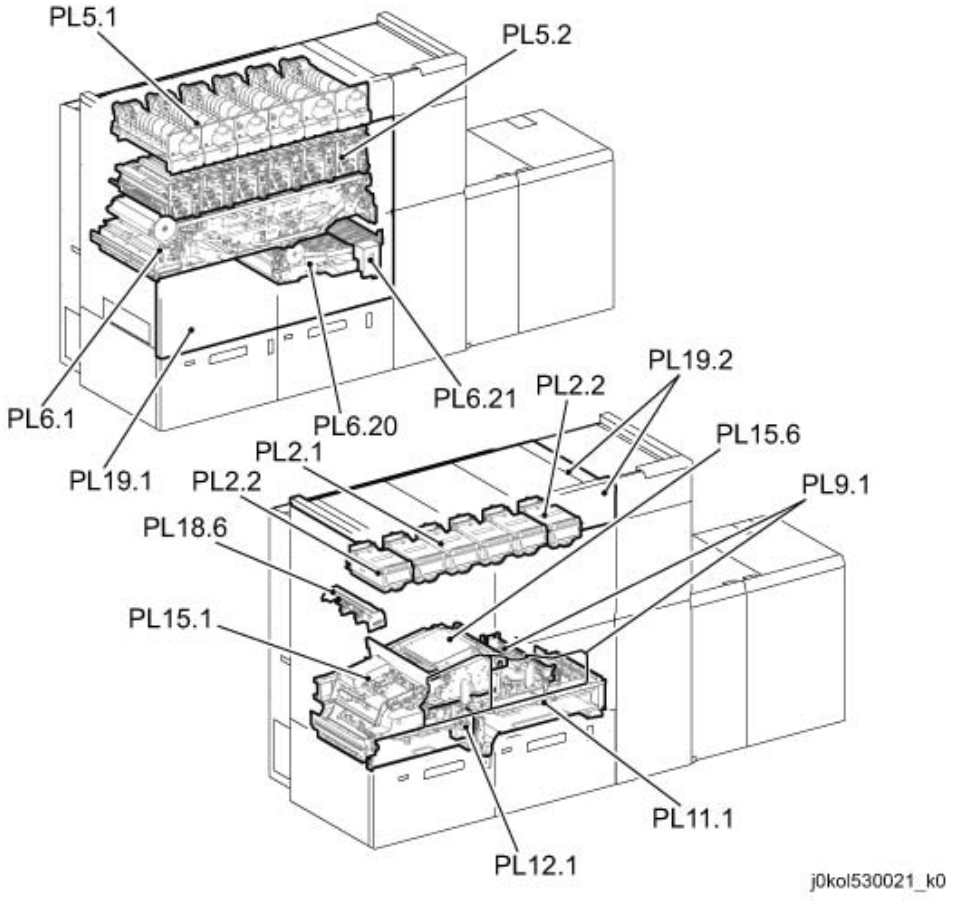


Figure 1 j0kol530021_k0

Navi 2.2 IOT-L Rear

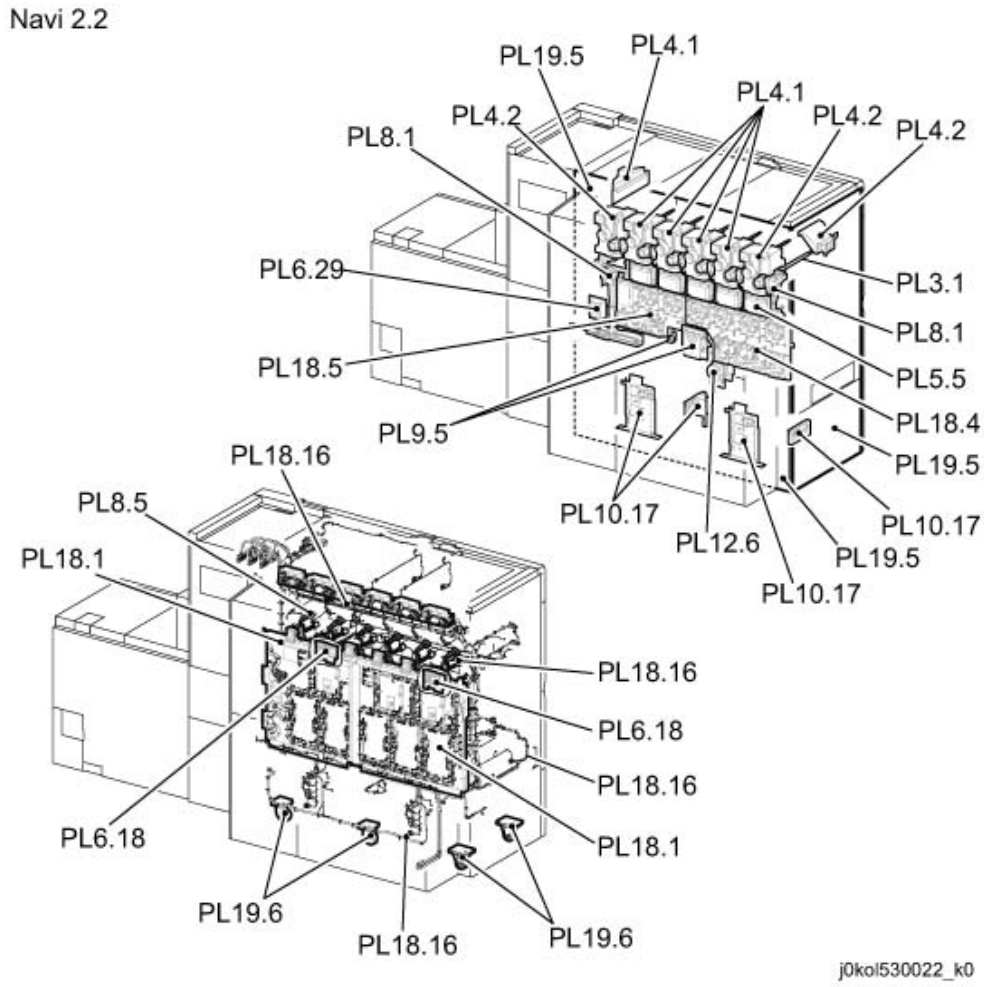


Figure 1 j0kol530022_k0

Navi 2.3 ECO + Option

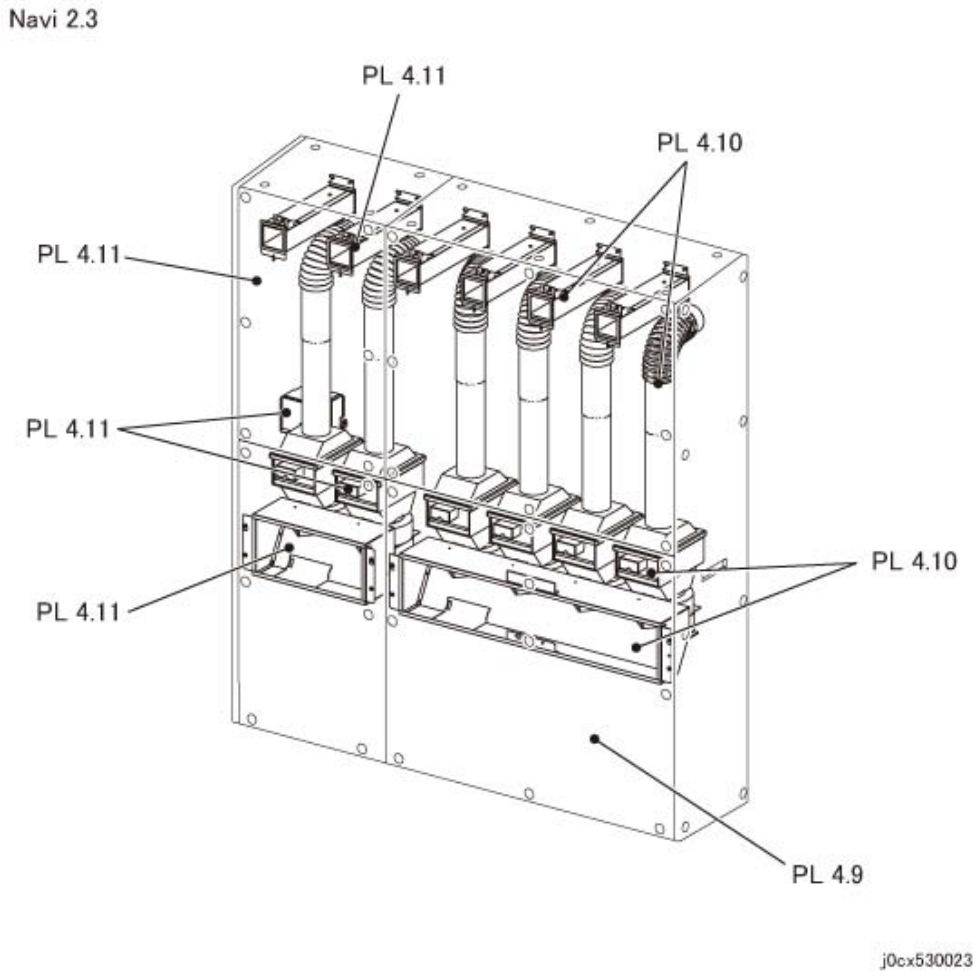


Figure 1 j0cx530023

Navi 2.4 IOT-R Front

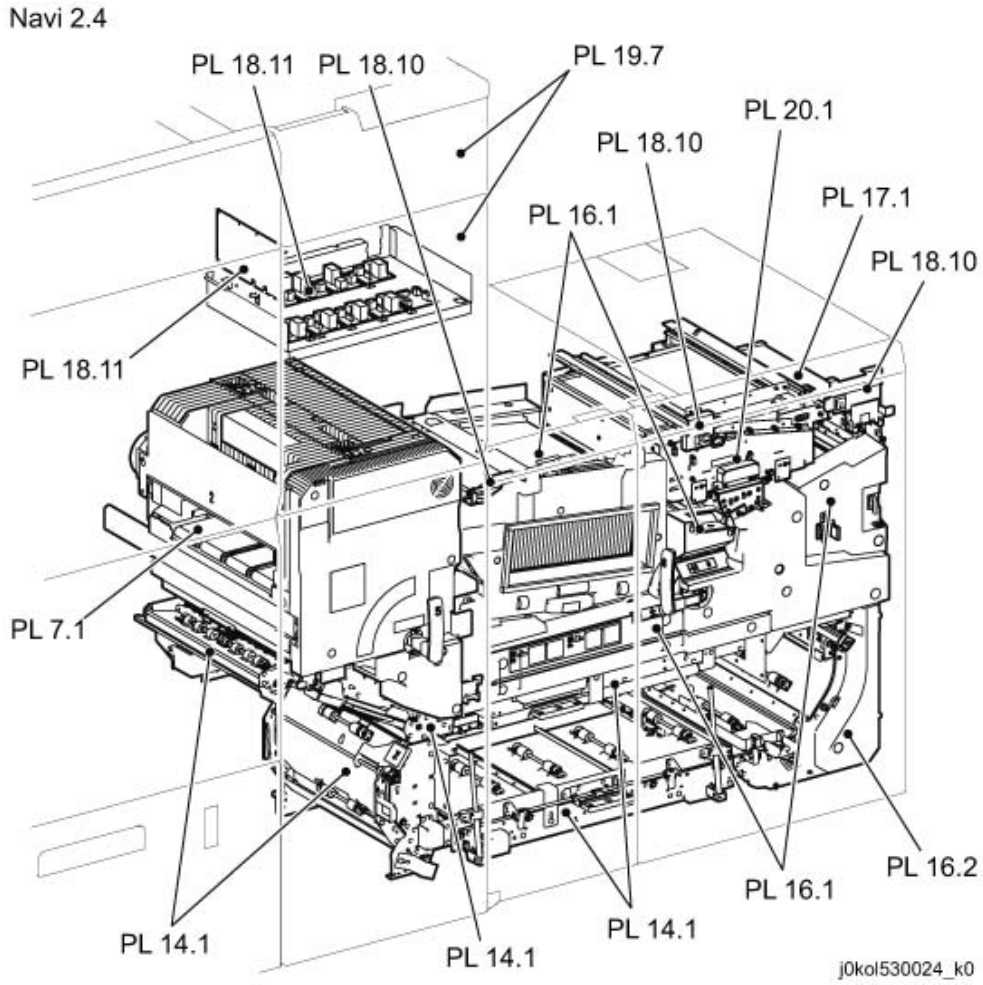


Figure 1 j0kol530024_k0

Navi 2.5 IOT-R Rear

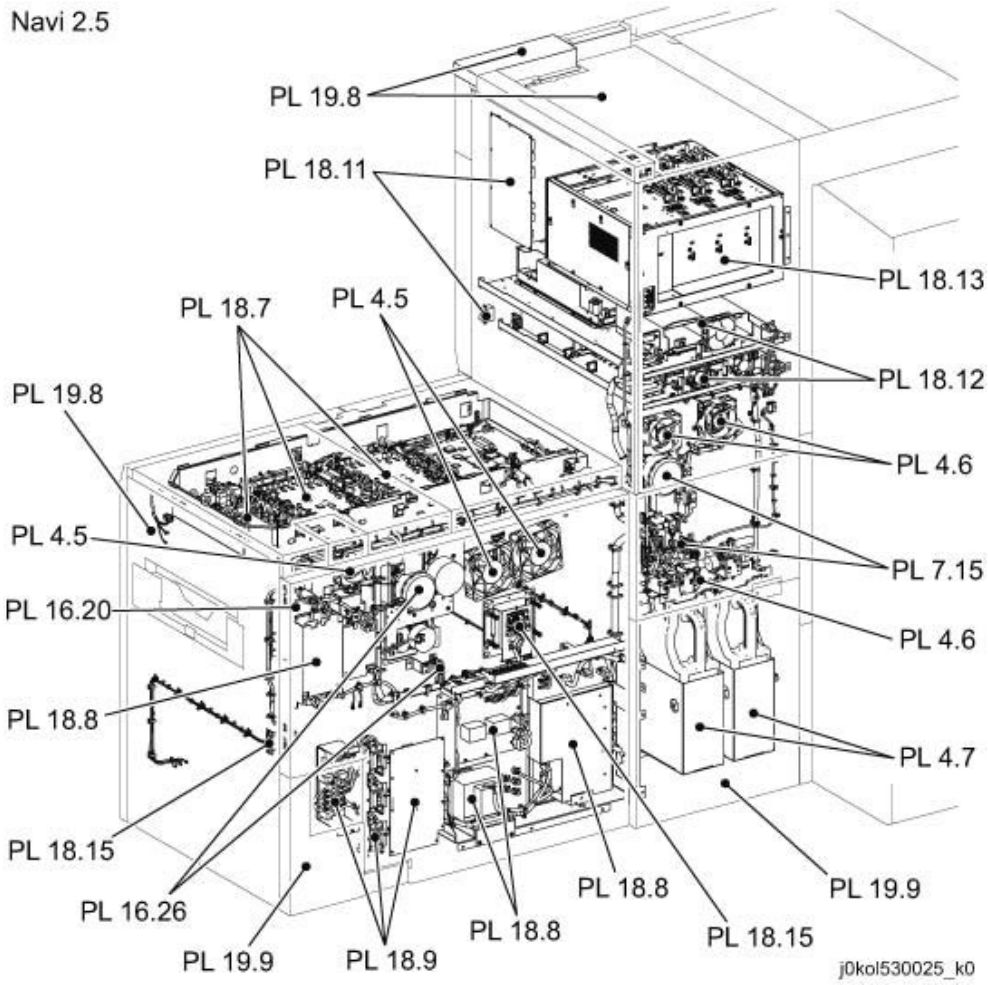


Figure 1 j0kol530025_k0

Chapter 6 General

6 General

6.1 Specifications

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6.1.1 Product Code

- Main Unit Product Code

Table 1

Product Name	Product Code
Digital Full Color Production Printer(Model-4C)	BP-1200CL
	BP-1200CR
Digital Full Color Production Printer(Model-6C)	BP-1200SL
	BP-1200SR
Printer Operation PC	BP-PM10

- IN/OUT Related Product Code (Optional)

Table 2

Product Name	Product Code
Post Card Kit ***NOTE:*** *For High Capacity Feeder A3/ 2nd High Capacity Feeder A3*	BP-PT24
High Capacity Feeder A3	BP-PT17
2nd High Capacity Feeder A3	BP-PT18
Air Suction Feeder A3	BP-PT12
Air Suction Feeder A3 for Banner	BP-PT13
Chained Air Suction Feeder A3 R	BP-PT14
Chained Air Suction Feeder A3 L	BP-PT15
Chained Air Suction Feeder A3 L for Banner	BP-PT16
Post Card kit for Air Suction Feeder	BP-PT23
Banner Unit for Air Suction Feeder	BP-PT22
Position Adjuster	BP-PT21
Offset Catch Tray	BP-PP10
Multi Bypass Tray	BP-PT10
Catch Tray Enabling Kit	BP-PP12
Interface Decurler Module*1	BP-PP13
High Capacity Stacker	BP-PP17
Stacker Cart (Dedicated Cart for High Capacity Stacker)	BP-PP18
Accessibility Kit for HCS	BP-PP19
Static Eliminator	BP-PP15
Static Eliminator Corotron	BP-PP16
Finisher	BP-PP23
Finisher with Booklet Maker	BP-PP24

Table 2

Product Name	Product Code
Banner Print Extension Kit Extra	BP-PP28
Finisher Tray Extension Kit	BP-PP27
Punch Module 2/ 3(US Standard)	BP-PP25
Inserter (IP)	BP-PP14
Crease/Two-sided Trimmer (TCBM)	BP-PP21
Square Back Fold Trimmer (SBFT)	BP-PP29
Folder Unit	BP-PP22
Stacking Guide for Output Tray	BP-PP26
Interface Cable 850mm	BP-PZ13
Interface Cable 2M	BP-PZ14
Finisher Interface Cable 3M	BP-PZ15
Finisher Interface Cable 4M	BP-PZ16
Connection Module*2	BP-PT19
Multi Bypass Tray for Banner Print	BP-PT11
Banner Feeder Guide	BP-PT25
Banner Feeder Extension Kit	BP-PT26
Air Suction Feeder Docking Bracket	BP-PT20
Long Catch Tray	BP-PP11
High Capacity Stacker Top Tray Extension Kit	BP-PP20

NOTE:

**1: This unit is required when installing HCS or Finisher.*

**2: This unit is required when installing HCF.*

- Additional Function Option Product Code

Table 3

Product Name	Product Code
Speciality Color Engine Kit (Overlay)	BP-PM12
Speciality Color Engine Kit (Underlay)	BP-PM13
Specialty Color Extension Kit	BP-PM11
Marking Module Kit	BP-PM14
White Marking Module Kit	BP-PM15
Toner Enabling Kit (Clear)	BP-PM16
Toner Enabling Kit (Gold)	BP-PM17
Toner Enabling Kit (Silver)	BP-PM18
Toner Enabling Kit (White)	BP-PM21
Toner Enabling Kit (Textured Paper)	BP-PM20

Table 3

Product Name	Product Code
Toner Enabling Kit (Pink)	BP-PM19
Mobility Plate A	BP-PZ10
Mobility Plate B	BP-PZ11
Mobility Plate C	BP-PZ12
Media Expansion Kit	BP-PM24
Storage Box for Specialty Toner	BP-PM23
Specialty Toner Exchange Kit	BP-PM22

6.1.2 Weight, Machine Size, and Mobility Plate Configuration

- Weight of Main Unit/Main Options

  For details on the High Capacity Feeder/Finisher, refer to the supplementary manual.

Table 1

Name		Weight (kg)
IOT		4C config: 1440 kg or less* 5C config: 1490 kg or less* 6C config: 1540 kg or less* 6C Enabling: 1510 kg or less*
IOT-L		4C config: 790 kg or less* 5C config: 830 kg or less* 6C config: 870 kg or less* 6C Enabling: 840 kg or less*
IOT-R (including Elec Box)		534 kg or lighter
ECO Box-4, ECO Box-2		4C config: 116 kg or less* 6C config: 126 kg or less* 6C config: 136 kg or less* 6C Enabling: 136 kg or less*
High Capacity Feeder A3	Without Top Cover, Bypass Tray	215 kg or lower
	With Top Cover	237 kg or lower
	With Bypass Tray	232 kg or lower
	With F-Tra	245 kg or lower
	With Multi Sheet Inserter for Banner Print, Banner Feeder Guide, Banner Feeder Extension Kit	240 kg or lower
	Top Cover (itself)	22 kg or lower
	Bypass Tray (itself)	17 kg or lower
	F-Tra (itself)	30 kg or lighter
2nd High Capacity Feeder A3	Without Top Cover, Bypass Tray	205 kg or lower
	With Top Cover	227 kg or lower
	With Bypass Tray	222 kg or lower
	With F-Tra (configuration during move in)	235 kg or lighter
	With Multi Sheet Inserter for Banner Print, Banner Feeder Guide, Banner Feeder Extension Kit	230 kg or lower
Air Suction Feeder A3(for Banner)	With Bypass Tray	190 kg or lower
	With F-Tra	210 kg or lower
	With Bypass Tray, XLS Tray	190 kg or lower
Chained Air Suction Feeder A3(for Banner)	With Bypass Tray	190 kg or lower
	With Bypass Tray, XLS Tray	190 kg or lower
Offset Catch Tray		6 kg or lower

Table 1

Name		Weight (kg)
Long Catch Tray	LCT (itself)	3.8 kg or lower
	With Extension Wire Tray	4.3 kg or lower
	With Extension Wire Tray, Corrugation Wire Tray	4.7 kg or lower
Interface Decurler Module (CDM)		40 kg or lighter
Inserter (IP)		45 kg or less
Static Eliminator		40 kg or lighter
HCS	High Capacity Stacker ***NOTE:*** *Including Stacker Cart 11 kg*	155 kg or lower
	High Capacity Stacker Top Tray Extension Kit	6.2 kg or lower
Crease/Two-sided Trimmer (TCBM)		128 kg or lower
Finisher	Finisher	85 kg or lower
	Finisher with Booklet Maker	105 kg or lower
	Folder Unit	55 kg or lighter
	Punch Module 2/ 3	6 kg or lower
	Finisher Tray Extension Kit	0.7 kg or lower
	Banner Print Extension Kit Extra	1.72 kg or lower
Square Back Fold Trimmer (SBFT)		100 kg or lower

NOTE: **: Weight when Toner Cartridge, PC-UI, and OCT are excluded. However, Power Cord is included.*

- <Machine Size>

  IOT + OCT for example

  3395.5mm x 1786mm x 1101.7mm (W x H x D)

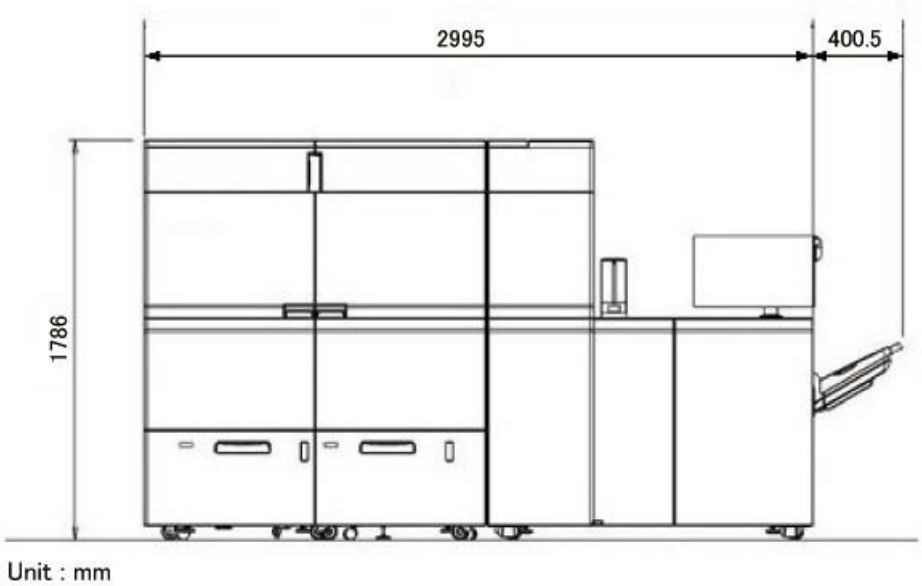


Figure 1 dar610001

- <ASF> + <2nd HCF A3> + <HCF A3> + <IOT> + <CDM> + <IP> + <SEM> + <HCS> + <HCS (Chained)> + <TCBM> + <Folder> + <Finisher (Booklet)> + <SBFT> for example

  10463.1mm x 1786mm x 1101.7mm (W x H x D)

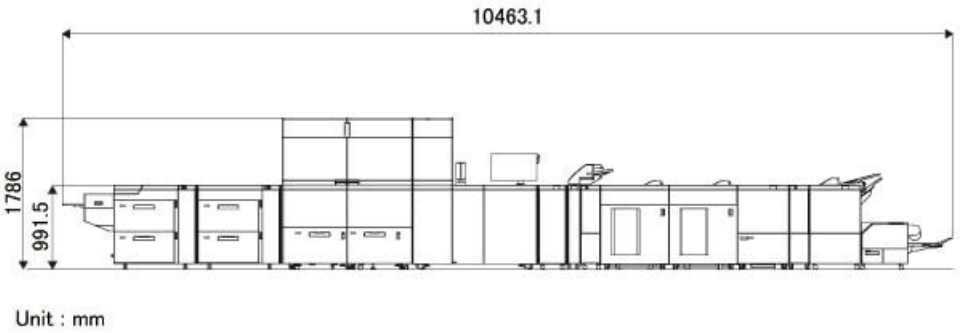


Figure 2 dar610002

- <Mobility Plate>

  As the combination will differ depending on the machine configuration, refer to [9.1.6.1] in Chapter 9.

6.1.3 Installation Space

- IOT + OCT for example

  4475mm x 3435.7mm (W x D)

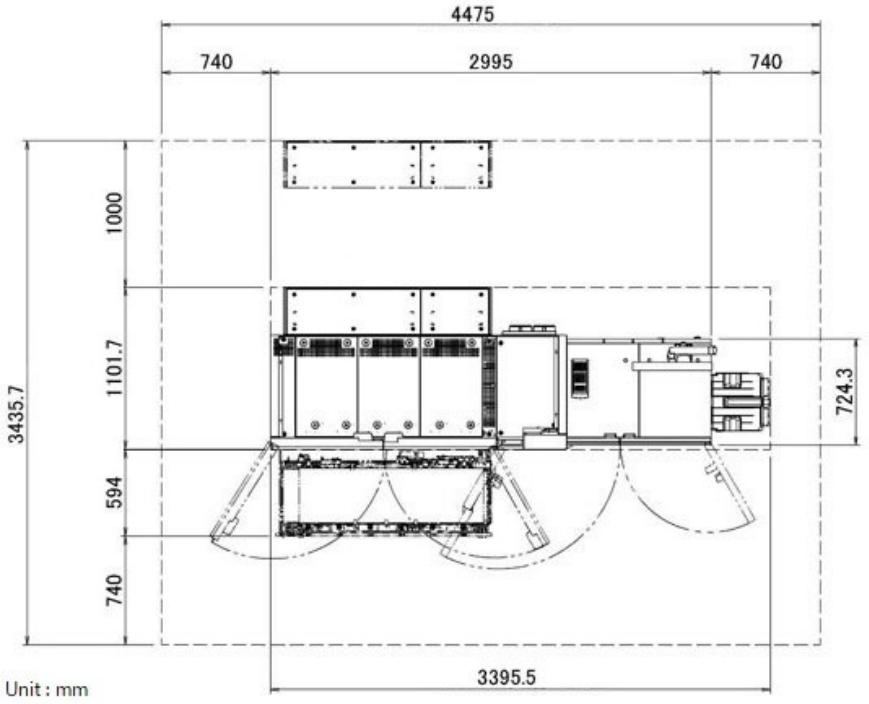


Figure 1 j0kol610003

- <ASF> + <2nd HCF A3> + <HCF A3> + <IOT> + <CDM> + <IP> + <SEM> + <HCS> + <HCS (Chained)> + <TCBM> + <Folder> + <Finisher (Booklet)> + <SBFT> for example

  11943.1mm x 3435.7mm (W x D)

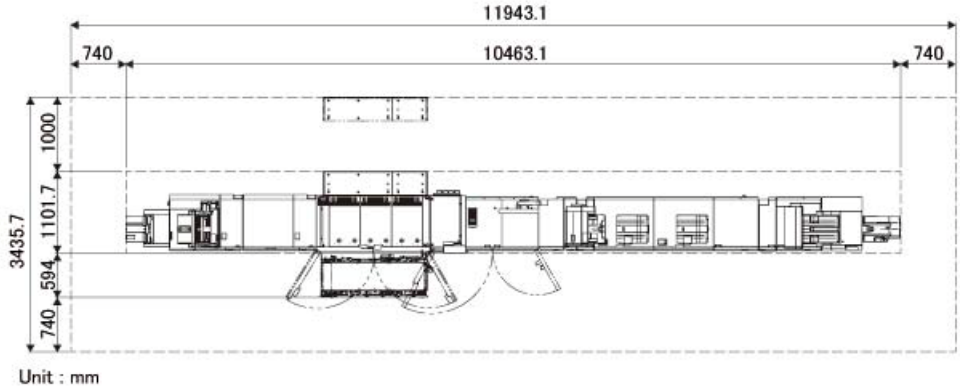


Figure 2 dar610003

6.1.4 Installation Environment

6.1.4.1 Usage Temperature/Humidity

- Temperature: 10 to 32 degrees
- Humidity: 15 to 85% (No condensation)

6.1.4.2 Levelness

- Left/Right Direction: Within 10 mm
- Front/Back Direction: Within 5 mm

6.1.4.3 Operating Atmospheric Pressure

The unit operates normally in the following elevation range. However, if the elevation exceeds 2,000 m, field adjustment may be required.

- 0 - 8,200 ft (0 - 2,500 m)

6.1.4.4 Operating Ambient Lighting

- 3,000 lx or lower (No lighting from direct sunlight)

6.1.5 Electrical Specifications/Power Consumption/Exhaust Heat

[Main Unit]

60A circuit is required.

Table 1

Rated voltage (V)	Rated Current (A)	Frequency (Hz)
208/220/230/240 [+/-]10%	44	50/60 [+/-] 3%

[PC-UI]

- Power Cable

  128V 15A capacity.

- Power Supply

  AC100-240V [+/-] 10%, 50/60Hz

[Other Options]

For details on the High Capacity Feeder and Finisher D6, refer to the supplementary manual.

[Main Unit Exhaust Heat]

Table 2

Heat Output [Kcal/h]	
Ready	2408
Operating	-
Maximum Power	7740
Sleep Mode	86

6.1.6 Noise

Table 1

Item	IOT (6C Configuration)	Full*1 (Unit: B)
During Standby*2	6.87	6.81
During Operation*2	8.22	8.59

NOTE:

**1. Full: Main Unit + MBT + HCF A3 + IOT (6C Configuration) + CDM + IP + HCS + TCBM + Folder + Finisher + SBFT+ Fiery Server*

**2. LwAd: Publicly announced sound power level = Measured LwA (1) + 0.3B*

6.1.7 Emissions

The chemicals output from the machine is according to the following reference values.

Table 1

Substance	Generation Rate
Benzene	0.001 mg/m3 or lower
Styrene	0.02 mg/m3 or lower
Total Volatile Organic Compounds (TVOC)	0.4 mg/m3 or lower
Ozone	0.02 mg/m3 or lower
Total Dust	0.08 mg/m3 or lower
Formaldehyde	0.1 mg/m3 or lower
Acetaldehyde	0.048 mg/m3 or lower
Nonanal	0.042 mg/m3 or lower
Diethylhexyl phthalate (DEHM)	0.12 mg/m3 or lower
Phenol	0.13 mg/m3 or lower

6.1.8 Warm Up Time

Under 7 minutes (from Power ON to Standby mode)

6.1.9 FPOT (First Print Output Time)

Minimum time taken after the IOT has started up until the trail edge of the 1st printout passes through the Exit Sensor.

<FPOT output conditions and measurement conditions>

Table 1

Item	Condition
Color Mode	1C #5 (K only) or 4C
Productivity Mode	Single Paper Type Mode - > Tray Feed
Output Image	Stability DTP70
Paper Type	Uncoated
Paper Type/Size	J Paper (82 gsm)/A4 LEF
Paper Supply	Tray 2 (IOT built-in)
Output Tray	Offset Catch Tray
Face Up/Down	Face Up
State of IOT	After Power ON, 1 output in Full Color mode has been completed
	Placed in an environment where the humidity inside the machine is 70% or lower for 24 hours or longer
Others	Output 2 sets of Job continuously and measure the FPOT using the 2nd Job

<Specified values>

Table 2

Color Mode	Simplex	2 Sided
1C #5 (K only)	25 s or faster	40 s or faster
4C		

6.1.10 Print Speed

- Single Paper Type: Tray Feed

Table 1

Type	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
	or longer	or shorter	Simplex	2 Sided	
– Plain Paper/Postcard (Uncoated, Coated, Coated, Matte Coated, Cast-coated-white)	148.0	181.9	120	N/A	Postcard Kit is required
	182.0	216.0	120	60	-
	216.1	280.0	96	48	-
– Recycled	280.1	482.6	60	30	-
– Labels – Transparency - Other than Transparent – Transfer Paper – Tack Paper	482.7	488.0	48	24	-

- Single Paper Type: MBT Feed

Table 2

Type	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
	or longer	or shorter	Simplex	2 Sided	
– Plain Paper/Postcard (Uncoated, Coated, Coated, Matte Coated, Cast-coated-white)	146.0	181.9	68.6	N/A	-
	182.0	216.0	68.6	60	-
	216.1	280.0	60	48	-
– Recycled	280.1	364.0	48	24	-
	364.1	431.8	43.6	24	-
– Labels – Transparency - Other than Transparent – Transfer Paper – Tack Paper	431.9	488.0	40	20	-
– Plain Paper (Uncoated, Coated, Matte Coated, Cast-coated-white)	488.1	585.0	40	20	-
	585.1	729.0	34.3	17	
– Recycled – Embossed	729.1	1200.0	20	N/A	

NOTE: *For Coated paper, MBT Feed is by individual sheets.*

- Single Paper Type: Hard-fusing Media Tray/MBT Feed

Table 3

Type	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
	or longer	or shorter	Simplex	2 Sided	
– Plain Paper/ Postcard (other than Cast-coated-white)	148.0(146 .0*)	181.9	60	N/A	*: MBT Feed
	182.0	216.0	48	24	-
	216.1	280.0	40	20	-
– Transparency - Transparent	280.1	482.6	24	12	-
– Metallic Paper	482.7	488.0	20	10	-

- Single Paper Type Mode: Output Mode by Paper Type

Table 4

Type	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
	or longer	or shorter	Simplex	2 Sided	
Transparency High Quality Mode	146.0	181.9	60	N/A	Postcard Kit is required
	182.0	216.0	60	N/A	-
	216.1	488.0	30	N/A	
Transparency High Productivity Mode	146.0	181.9	120	N/A	Postcard Kit is required
	182.0	216.0	120	N/A	-
	216.1	482.6	60	N/A	
	482.7	488.0	48	N/A	
Embossed High Quality Mode	146.0	181.9	60	N/A	Postcard Kit is required
	182.0	280.0	60	30	-
	280.1	431.0	40	20	
	431.1	488.0	36.9	18.4	
Embossed High Productivity Mode	146.0	181.9	120	N/A	Postcard Kit is required
	182.0	216.0	120	60	Tray Feed only
	216.1	280.0	96	48	
	280.1	482.6	60	30	
	482.7	488.0	48	24	
Fusing Priority Mode	146.0	181.9	60	N/A	Postcard Kit is required
	182.0	216.0	48	24	Although this can be applied to all Paper Types, the performance is not guaranteed
	216.1	280.0	40	20	
	280.1	482.6	24	12	
	482.7	488.0	20	10	

- Mixed Paper Type Mode 1: Tray Feed

Table 5

Type	Weight (gsm)	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
		or longer	or shorter	Simplex	2 Sided	
– Plain Paper/ Postcard (Uncoated, Coated, Coated, Matte Coated, Cast-coated-white)	52-220	148.0	181.9	120	N/A	Postcard Kit is required
		182.0	216.0	120	60	In Mixed Paper Type mode 2, the fusing temperature at 105 gsm or lighter will be lower by 10 degrees
		216.1	280.0	96	48	
		280.1	482.6	60	30	
		482.7	488.0	48	24	
– Recycled	221-400	148.0	181.9	60	30	Postcard Kit is required
– Labels		182.0	280.0	60	30	Fusing Unit speed will decelerate to 320 mm/s Same as productivity for Embossed
– Transparency - Other than Transparent		280.1	431.8	40	20	
– Transfer Paper		431.9	488.0	36.9	18.4	
– Tack Paper						
Embossed	52-400	182.0	280.0	60	30	Mixed output with other Paper Types is possible when using the speed for 221 to 400 gsm above.
		280.1	431.8	40	20	
		431.9	488.0	36.9	18.4	
Transparency	-	182.0	280.0	60	N/A	Same operation as for Embossed 1 Sided
		280.1	431.8	40		
		431.9	488.0	36.9		

NOTE: *Aside from Cast Coated-White, Mixed Paper Type Mode 1 does not include Film-Clear and Metallic paper.*

- Mixed Paper Type Mode 1: MBT Feed (Maximum weight is 400 gsm)

Table 6

Type	Weight (gsm)	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
		or longer	or shorter	Simplex	2 Sided	
Plain Paper (Uncoated, Coated, Matte Coated, Cast-coated-white)	52-220	146.0	181.9	68.57	N/A	*: Same number of photo-receptor drum rotations as that of Tray feeding is used for both sides.
		182.0	216.0	68.57	60*	
		216.1	280.0	60	48*	
		280.1	364.0	48	30*	
		364.1	431.8	44	30*	
		431.9	488.0	40	24*	
	221-400	146.0	181.9	60	30	-
		182.0	280.0	60	30	Fusing Unit speed will decelerate to 320 mm/s
		280.1	431.8	40	20	
		431.9	488.0	36.9	18.4	

NOTE:

– *Aside from Cast Coated-White, Mixed Paper Type Mode 1 does not include Film-Clear and Metallic paper.*

– *For Coated paper, MBT Feed is by individual sheets.*

- Mixed Paper Type Mode 1: MBT Feed (Maximum weight is 360 gsm)/Postcard, Embossed, Transparency

Table 7

Type	Weight (gsm)	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
		or longer	or shorter	Simplex	2 Sided	
– Plain Paper (Uncoated, Coated, Matte Coated, Cast-coated) – Recycled – Labels	52-220	146.0	181.9	68.57	N/A	*: Same number of photo-receptor drum rotations as that of Tray feeding is used for both sides.
		182.0	216.0	68.57	60*	
		216.1	280.0	60	48*	
		280.1	364.0	48	30*	
		364.1	431.8	44	30*	
		431.9	488.0	40	24*	
– Transparency - Other than Transparent – Transfer Paper – Tack Paper	221-400	146.0	181.9	60	30	-
		182.0	280.0	60	30	Fusing Unit speed will decelerate to 320 mm/s
		280.1	431.8	40	20	
		431.9	488.0	36.9	18.4	

Table 7

Type	Weight (gsm)	Paper Size (mm) Length in SS Direction		ppm (sheets/ minute)		Remarks
		or longer	or shorter	Simplex	2 Sided	
Embossed	52-400	182.0	280.0	60	30	-
		280.1	431.8	40	20	
		431.9	488.0	36.9	18.4	
Transparency	-	182.0	280.0	60	N/A	Same operation as for Embossed 1 Sided
		280.1	431.8	40		
		431.9	488.0	36.9		

NOTE:

– *Aside from Cast Coated-White, Mixed Paper Type Mode 1 does not include Film-Clear and Metallic paper.*

– *For Coated paper, MBT Feed is by individual sheets.*

6.1.11 Resolution

- 2400 x 2400 dot/25.4 mm (Max Print Resolution)
- 1200 x 1200 dot/25.4 mm (Print Server Interface)

6.1.12 Tone Characteristics

Possessing of 10 bit/1024 value color depth per 1 dot

6.1.13 Printable/Print Guaranteed Area

The area where the image quality is guaranteed is referred to as Printable/Print Guaranteed Area.

- Maximum printable area: 326.0mm wide x 1190.0mm long
- Maximum print guaranteed area (paper length of 488.0 mm and below): 317.0 mm wide x 484.0 mm long
- Maximum print guaranteed area (paper length of at least 488.1 mm and not exceeding 660.4 mm): width 317.0 mm x length 656.0 mm
- Maximum print guaranteed area (paper length of at least 660.5 mm and not exceeding 729 mm): width 317.0 mm x length 725.0 mm
- Maximum print guaranteed area (paper length of at least 729.1 mm and not exceeding 1200.0 mm): width 317.0 mm x length 1190.0 mm

However, the following border areas (margins) also exist for each paper size.

Table 1

Paper Type	Weight	Margin relative to paper feed direction	
		Near lead edge	Near left/right and trail edge
Plain	52 gsm or heavier but lighter than 55 gsm	5 mm or wider*	Left/right: 2.1 mm or wider From trail edge: 5 mm or wider
	55 gsm or heavier but lighter than 400 gsm	2 mm or wider*	2.1 mm or wider
Coated	52 gsm or heavier but lighter than 55 gsm	5 mm or wider*	Left/right: 2.1 mm or wider From trail edge: 5 mm or wider
	55 gsm or heavier but lighter than 73 gsm	4 mm or wider*	Left/right: 2.1 mm or wider From trail edge: 4 mm or wider
	73 gsm or heavier but lighter than 120 gsm	3 mm or wider*	2.1 mm or wider
	120 gsm or heavier but lighter than 400 gsm	2 mm or wider*	2.1 mm or wider

*: When the paper length is 729.1 mm or above, use 8.0 mm and above

6.1.14 Paper Classifications and Functions

- The following indicates the paper type, weight, 2-sided feed/reverse feed propriety of the paper that can be fed from the Paper Tray.
- Perform the paper setting from the PC-UI.

  OK: Feed setting possible (but feed is not guaranteed)

  NA: Feed not possible (cannot be set)

Classifications and Functions (Tray1/Tray2)

Table 1

Tray	UI Paper Classification	Weight (gsm)	Feature				
			Paper Size		Automatic 2 Sided Print	Output (OCT)	
			Standard:	Custom Size		Face Up	Face Down
Built-in Tray Tray 1 Tray 2	Uncoated	52-400	OK	OK	Applied within range of 52 to 360 gsm	OK	Applied within range of 52 to 360 gsm
	Uncoated (Side 2)	52-400	OK	OK		OK	
	Coated	52-400	OK	OK		OK	
	Coated (Side 2)	52-400	OK	OK		OK	
	Cast Coated	52-400	OK	OK		OK	
	Matte Coated	52-400	OK	OK	Applied within range of 52 to 360 gsm	OK	Applied within range of 52 to 360 gsm
	Embossed	52-400	OK	OK		OK	
	Film*1	52-400	OK	OK	NA	OK	NA
	Transfer Paper	52-400	OK	OK	NA	OK	NA
	Tab Stock*2	52-400	OK	OK	NA	OK	Applied within range of 52 to 360 gsm
	Labels	52-400	OK	OK	NA	OK	NA
	Tack Paper	-	OK	OK	NA	OK	NA
	Postcard (100 x 148)*3	52-400	OK	OK	NA	OK	NA
	Recycled	52-400	OK	OK	Applied within range of 52 to 360 gsm	OK	Applied within range of 52 to 360 gsm
	Transparency	-	OK	NA	NA	OK	NA
	Metallic Paper	52-400	OK	OK	NA	OK	NA

NOTE:

**1: When loading paper in the Tray, there may be cases that require thorough paper fanning or feeding it 1 sheet at a time.*

**2: Load with the tab section positioned as the trail edge of paper feed. The paper size is handled as the size which includes the tab section.*

**3: Postcard Kit is required. By making Custom Settings when Postcard Kit is installed, paper with length of 98.0 to 181.9 mm in fast scan direction can be fed.*

Classifications and Functions (MBT/Paper Length 488.0mm or less)

Table 2

Tray	UI Paper Classification	Weight (gsm)	Feature				
			Paper Size		Automatic 2 Sided Print	Output (OCT)	
			Standard:	Custom Size		Face Up	Face Down
MBT Standard size (Paper Length 488.0mm or less)	Uncoated	52-300	OK	OK	Applied within range of 52 to 300 gsm	OK	Applied within range of 52 to 300 gsm
	Uncoated (Side 2)		OK	OK		OK	
	Coated		OK	OK		OK	
	Coated (Side 2)		OK	OK		OK	
	Cast Coated		OK	OK		OK	
	Matte Coated		OK	OK		OK	
	Embossed		OK	OK		OK	
	Film*1		OK	OK	NA	OK	NA
	Transfer Paper		OK	OK	NA	OK	NA
	Tab Stock*2		OK	OK	NA	OK	Applied within range of 52 to 300 gsm
	Labels		OK	OK	NA	OK	NA
	Tack Paper		OK	OK	NA	OK	NA
	Postcard (100 x 148)*3		OK	OK	NA	OK	NA
	Recycled		OK	OK	Applied within range of 52 to 300 gsm	OK	Applied within range of 52 to 300 gsm
	Transparency	-	OK	NA	NA	OK	NA
	Metallic Paper	52-300	OK	OK	NA	OK	NA

NOTE:

**1: When loading paper in the Tray, there may be cases that require thorough paper fanning or feeding it 1 sheet at a time.*

**2: Load with the tab section positioned as the trail edge of paper feed. The paper size is handled as the size which includes the tab section.*

**3: Postcard Kit is required. By making Custom Settings when Postcard Kit is installed, paper with length of 98.0 to 181.9 mm in fast scan direction can be fed.*

NOTE: *When loading paper in MBT, load only the number of sheets to be used, and avoid leaving paper in it.*

Classifications and Functions (MBT-Long Paper)

Table 3

Tray	UI Paper Classification	Weight (gsm)	Feature				
			Paper Size		Automatic 2 Sided Print	1 Sided Print	
			Standard	Custom Size		Face Up	Face Down
MBT (Paper Length 488.1-729.0 mm)	Uncoated Coated Paper / Matte Coated Excludes Cast Coated-White Transparency - Other than Transparent	52-300	NA	OK	OK	OK	NA
	Recycled, Embossed						
MBT (Paper Length 729.1-1200.0 mm)	Uncoated Coated Paper / Matte Coated Excludes Cast Coated-White Transparency - Other than Transparent		NA	OK	NA	OK	NA
	Recycled, Embossed						

NOTE:

- *It is necessary to install a High Capacity Feeder A3 for printing on long paper.*
- *For long length, when 488.1 mm or more in the Slow Scan direction is specified by the non-standard setting from MBT, you can apply the paper type [Uncoated/Coated/Cast-coated/Recycled], and weight corresponding to the each paper type described in the above table.*
- *Only Finisher Top Tray, HCS Top Tray, LCT can be specified as output destinations.*
- *Weight of long paper not indicated in the above table is not prohibited.*
- *Unable to set 2 or more sheets of Coated/Matte Coated or Cast Coated paper in the MBT. When printing, feed individual sheets manually.*
- *Recycled paper is not dependent on Coated, Uncoated, Cast-coated.*
- *When loading paper in MBT, load only the number of sheets to be used, and avoid leaving paper in it.*

6.1.15 Paper Tray (Supported Paper Sizes)

Each paper size can be changed by user settings.

Paper Sizes that Can be Transported

- The minimum and maximum paper sizes that can be transported in the Main Unit are as follows:

Table 1

Paper Supply		Width	Length
Built-in Tray (Tray 1, Tray 2)	Min	182.0 mm	148.0 mm
	Max	330.2 mm	488.0 mm
When Built-in Tray, Post Card Kit is installed (Tray 1, Tray 2)	Min	98.0 mm	148.0 mm
	Max	182.0 mm	182.0 mm
MBT Feed (HCF A3 or Air Suction Feeder A3 is required)	Min	98.0 mm	148.0 mm
	Max	330.2 mm	1200.0 mm

Applicable Paper Sizes

- Standard paper size

Table 2

Size	Orientation (SEF/LEF)	Tray		
		Built-in Tray (Tray 1, Tray 2)	HCF A3/2nd HCF A3	MBT
A6	SEF	NA	NA	OK
	LEF	No	No	No
A5	SEF	NA	NA	OK
	LEF	NA	NA	OK
A4	SEF	OK	OK	OK
	LEF	OK	OK	OK
A3	SEF	OK	OK	OK
B6	SEF	NA	NA	OK
	LEF	No	No	No
B5	SEF	OK	OK	OK
	LEF	OK	OK	OK
B4	SEF	OK	OK	OK
7.25 x 10.5 (Executive)	SEF	NA	NA	OK
	LEF	OK	OK	OK
8 x 10	SEF	NA	NA	OK
	LEF	OK	OK	OK
8.5 x 11 (Letter)	SEF	OK	OK	OK
	LEF	OK	OK	OK

Table 2

Size	Orientation (SEF/LEF)	Tray		
		Built-in Tray (Tray 1, Tray 2)	HCF A3/2nd HCF A3	MBT
8.5 x 13 (Foolscap)	SEF	OK	OK	OK
	LEF	NA	NA	OK
8.5 x 14 (Legal)	SEF	OK	OK	OK
11 x 17 (Tabloid/ Ledger)	SEF	OK	OK	OK
DT Special A3	SEF	OK	OK	OK
SR A3	SEF	OK	OK	OK
12 x 18	SEF	OK	OK	OK
12.6 x 19.2	SEF	OK	OK	OK
13 x 18	SEF	OK	OK	OK
13 x 19	SEF	OK	OK	OK
DT Special A4	SEF	OK	OK	OK
	LEF	OK	OK	OK
16 K	SEF	NA	NA	OK
	LEF	OK	OK	OK
8 K	SEF	OK	OK	OK
Kiku 159 x 234	SEF	NA	NA	NA
	SEF	NA	NA	NA
Kiku 234 x 318	SEF	NA	NA	NA
	SEF	OK	OK	NA
Kiku 318 x 469	SEF	NA	NA	NA
Shiroku 197 x 272	SEF	NA	NA	NA
	SEF	NA	NA	NA
Shiroku 272 x 394	SEF	NA	NA	NA
Postcard	SEF	OK	OK	OK
	LEF	No	No	No
Post Card (4 x 6)	SEF	OK	OK	OK
	LEF	No	No	No
C5 (6.4 x 9)	SEF	NA	NA	NA
	LEF	NA	NA	NA
C4 (9.0 x 12.8)	SEF	NA	NA	NA
	LEF	NA	NA	NA

NOTE: *OK: Detects standard sizes, NA: Does not detect standard sizes, NO: Can not be set*

- Custom paper size

You can switch to the custom mode at the UI. The possible dimensions are as follows.

Table 3

Paper Supply		Tray			
		Built-in Tray (Tray 1, Tray 2)	HCF A3/2nd HCF A3	Air Suction Feeder A3/Chained Air Suction Feeder A3	MBT
Fast Scan Width FS	Min	98.0 mm	98.0 mm	98.0 mm	98.0 mm
	Max	330.2 mm	330.2 mm	330.2 mm	330.2 mm
Sub Scan Length SS (feed direction)	Min	148.0 mm	148.0 mm	148.0 mm	148.0 mm
	Max	488.0 mm	488.0 mm	488.0 mm	488.0 mm
	Max (Long Length)	488.0 mm	488.0 mm	1200.0 mm	1200.0 mm

6.1.16 Paper Tray Capacity

Storage number of sheets for each Tray: 2000 sheets (reference: 2100 sheets (J Paper))

2 Built-in High Capacity Trays are installed as standard.

Additional options are available.

6.1.17 OCT (Offset Catch Tray: Option)

The performance of the OCT is shown below.

- Paper width for operation: 98 mm or more, 330.2 mm or less
- Paper length for operation: 148 mm or more, 488.0 mm or less
- Supported output weight: 52 to 400 gsm
- Supported offset weight: 52 to 300 gsm
- Offset amount: +/-20 mm)
- Capacity: 500 sheets (J paper 82 gsm)
- Full Stack detection: On
- Accommodation ability: Can easily sort without folding or messing up the order.

NOTE: *If the Rear/Front Position Sensor is damaged when using the OCT, it is recognized as LCT instead of Fail. It becomes irrelevant when automatic recognition is not selected.*

6.1.18 LCT (Long Catch Tray: Option)

The performance of the LCT is shown below.

- Long paper width: 98.0 1 to 330.2 mm*1
- Long paper length: 148.0 to 1200.0 mm
- Supported output weight: 52 to 400 gsm
- Offset feature: Off
- Capacity (Paper length 488.1 to 729.0 mm or less (OS coated paper W: 127 gsm)): 100 sheets*2
- Capacity (Paper length more than 729.0 mm (OS coated paper W: 127 gsm)): 10 sheets
- Capacity (Paper length 488.0 mm or less (J paper A3: 82 gsm)): 300 sheets
- Long paper loading size: 210.0 x 488.1 mm to 330.0 x 1200.0 mm (Heavyweight paper), 256.0 x 488.1 mm to 330.0 x 1200.0 mm (Lightweight paper*3)
- Full Stack detection: None
- Capacity: Stored paper does not fall.

*1: Long paper with a length of 148.0 mm or more and less than 1200.0 mm may require Extension Wire of Long Catch Tray to prevent drooping and fall.

*2: Number of sheets without Corrugation Wire of Long Catch Tray

*3: Lightweight paper is applied to Uncoated of 82 gsm or more, Coated of 127 gsm or less. When using long paper that is Lightweight and other than the above loading size, it is recommended to use Corrugation Wire of Long Catch Tray.

NOTE: *Be careful not to exceed the capacity because it is the cause of paper jams.*

6.1.19 Print Consistency (Alignment) (488 mm or less)

The result of measurements at the measurement points of the following grid pattern (A3, 11 x 17 inch) are listed below.

NOTE: *The alignment specifications for the following types of paper are not guaranteed.*

- *When Paper Type is set to Transparency or Tack Film*
- *When PC-UI attribute has been set to [Punched] or [Index]*
- *Paper length less than 182.0 mm in the main scanning direction*
- *Color paper (including black paper)*
- *Clear Film*
- *Pre-Printed paper*
- *Metallic paper*

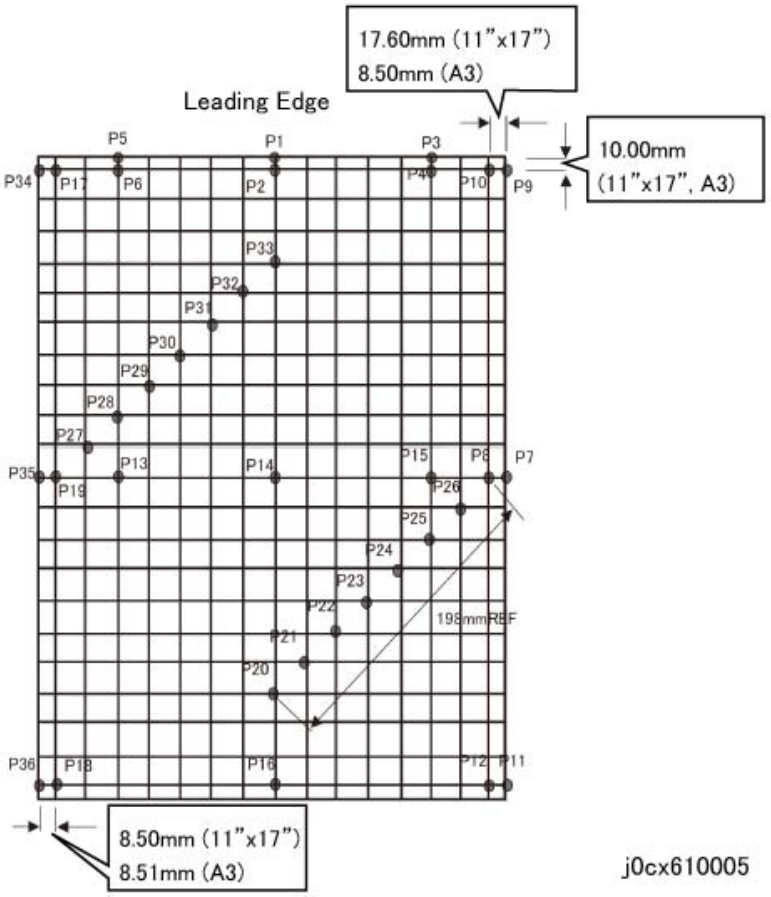


Figure 1 j0cx610005

Table 1

Item	Measurement Points	Spec
Lead Regi	Between P1 and P2	[+/-]0.5 mm (Side1/2*2)
Side Registration	Between P35 and P19	[+/-]0.5 mm (Side1/2*2)
Side Skew (400 mm)*1	(Between P34 and P17) - (Between P36 and P18)	[+/-]0.4 mm (Side1/2*2)
Trapezoid Correction	(Between P10 and P12) - (Between P17 and P18)	[+/-]0.4 mm (Side1/2*2)
Perpendicularity	P6 to P4, P2 to P16	[+/-]0.3 mm (Side1/2*2)

Table 1

Item	Measurement Points	Spec
Linearity	Vertical 400 mm: P17 to 19, P18 to P17 Horizontal 200 mm: P4 to P6 Diagonal 200 mm: P8 to P20, P19 to P33	[+/-]0.3 mm (Side1/2*2)
Vertical Reduce/Enlarge Precision	[A 3, 11x17" Common] ((P2 to P16) -400.02)/ 400.02: STDP923000 ((P2 to P16) - 399.640) / 399.640: built-in pattern	[+/-]0.3% (Side1/2*2)
Horizontal Reduce/Enlarge Precision	[A3] ((P8 to P19) -280.04)/ 280.04: STDP923000 ((P8 to P19) - 279.748) / 279.748: built-in pattern [11 x 17"] ((P8 to P19) -260.02)/ 260.02: STDP923000 ((P8 to P19) - 259.766) / 259.766: built-in pattern	[+/-]0.3% (Side1/2*2)
Side 1/Side 2 Regi Precision (Both Lead/Side Directions)	At each point, measure the Side 1 & Side 2 skews for the Lead and Side Regi. ***NOTE:*** *If the image length is not symmetrical relative to the paper, correct the skew logically.*	0.5 mm or less (Leas/Side Direction) 0.7 mm or less (Leas/Side Direction) (J, JD paper only)
Overprint Precision	-	[+/-]1.5 mm (Side1) [+/-]1.5 mm (Side2)

NOTE:

**1: If the paper length is shorter than 400 mm, the value that is matched to the paper length is taken as the actual side skew value, while the 400 mm conversion value is treated as the value for adjustment.*

**2: Value of Side 2 is the reference value. When adjusting the Side 1 and Side 2 registration, it is adjusted according to Side 1 and it fluctuates.*

6.1.20 Print Consistency (Alignment) (488.1 mm or more Long Paper)

The result of measurements at the measurement points of the following grid pattern (Long 660 x 330 mm, 729 x 330 mm, 1089 x 330 mm) are listed below.

NOTE: *The alignment specifications for the following types of paper are not guaranteed.*

- *When Paper Type is set to Transparency or Tack Film*
- *When PC-UI attribute has been set to [Punched] or [Index]*
- *Paper length less than 182.0 mm in the main scanning direction*
- *Color paper (including black paper)*
- *Clear Film*
- *Pre-Printed paper*
- *Metallic paper*

[Long Paper (Typical Sizes): 660 x 330 mm, 729 x 330 mm]

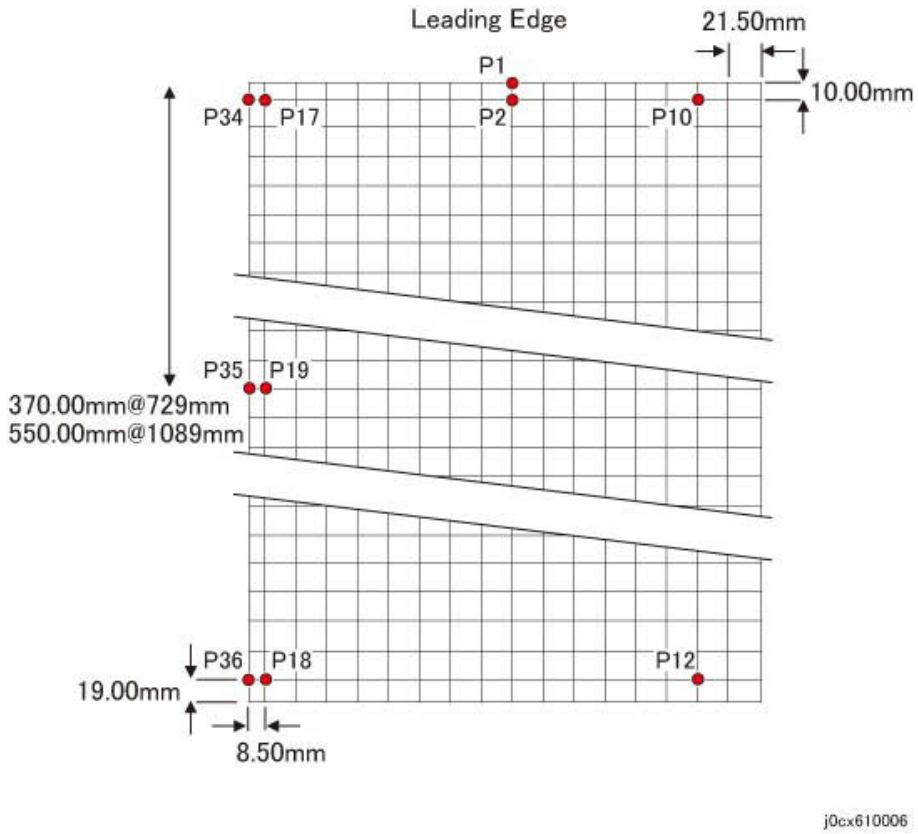


Figure 1 j0cx610006

Table 1

Item	Measurement Points	Spec (488.1 - 660 mm)	Spec*2 (660.1 - 729 mm)	Spec*2 (729.1 - 1200 mm)
Lead Regi (Reference value)	Between P1 and P2	[+/-]1 mm (Side1/2*3)	[+/-]1 mm (Side1/2*3)	[+/-]2 mm (Side1)
Side Registration (Reference value)	Between P35 and P19	[+/-]1 mm (Side1/2*3)	[+/-]1.5 mm (Side1/2*3)	[+/-]2 mm (Side1)

Table 1

Item	Measurement Points	Spec (488.1 - 660 mm)	Spec*2 (660.1 - 729 mm)	Spec*2 (729.1 - 1200 mm)
Side Skew (Reference value)	(Between P34 and P17) - (Between P36 and P18)	[+/-]1 mm (Side1/2*3)	[+/-]1.5 mm (Side1/2*3)	[+/-]2 mm (Side1)
Side 1/Side 2 Regi Precision (Both Lead/Side Directions) (Reference value)	At each point in the following, measure the Side 1 & Side 2 skews for the Lead and Side Regi. • Applies to 4 places on P17, P10, P18, P12. • For convenience, if it is not possible to measure the right side (P10 and P18), the center (P2 and P16) can be measured instead. ***NOTE:*** *If the image length is not symmetrical relative to the paper length, correct the skew logically.*	1 mm or less (Leas/Side Direction)	3 mm or less (Leas/Side Direction)	Not defined.

NOTE:

**1: If the paper length is shorter than 400 mm, the value that is matched to the paper length is taken as the actual side skew value, while the 400 mm conversion value is treated as the value for adjustment.*

**2: Long paper alignment specifications are specified by the following paper.*

- *OK Top Coat 127 gsm (OS coated paper W 127 gsm equivalent 330.0 x 729.0 mm/330.0 x 1089.0 mm)*

**3: Value of Side 2 is the reference value. When adjusting the Side 1 and Side 2 registration, it is adjusted according to Side 1 and it fluctuates.*

[Long Paper (Typical Sizes): 1089 x 330 mm]

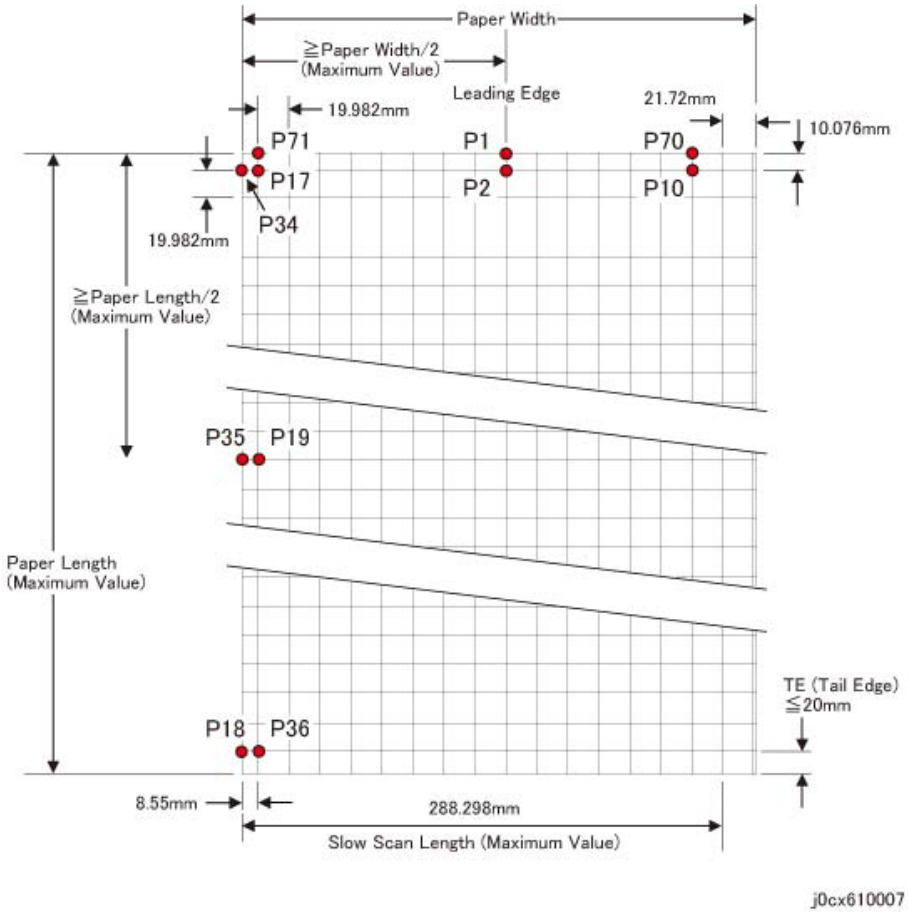


Figure 2 j0cx610007

Table 2

Item	Measurement Points	Spec (488.1 - 660 mm)	Spec*2 (660.1 - 729 mm)	Spec*2 (729.1 - 1200 mm)
Lead Regi (Reference value)	Between P1 and P2	[+/-]1 mm (Side1/2*3)	[+/-]1 mm (Side1/2*3)	[+/-]2 mm (Side1)
Side Registration (Reference value)	Between P35 and P19	[+/-]1 mm (Side1/2*3)	[+/-]1.5 mm (Side1/2*3)	[+/-]2 mm (Side1)

Table 2

Item	Measurement Points	Spec (488.1 - 660 mm)	Spec*2 (660.1 - 729 mm)	Spec*2 (729.1 - 1200 mm)
Side Skew (Reference value)	(Between P34 and P17) - (Between P36 and P18)	[+/-]1 mm (Side1/2*3)	[+/-]1.5 mm (Side1/2*3)	[+/-]2 mm (Side1)

NOTE:

**1: If the paper length is shorter than 400 mm, the value that is matched to the paper length is taken as the actual side skew value, while the 400 mm conversion value is treated as the value for adjustment.*

**2: Long paper alignment specifications are specified by the following paper.*

- *OK Top Coat 127 gsm (OS coated paper W 127 gsm equivalent 330.0 x 729.0 mm/330.0 x 1089.0 mm)*

**3: Value of Side 2 is the reference value. When adjusting the Side 1 and Side 2 registration, it is adjusted according to Side 1 and it fluctuates.*

6.1.21 CMYK Toner IOT Image Quality Spec

Print Quality Guarantee Conditions

Image quality is guaranteed based on the following conditions.

Table 1

Condition Items	Contents
Environmental Condition	Temperature: 10 to 28 degrees Humidity: 15% RH to 85% RH (however, when humidity is 85%, temperature is 28 degrees)
Guaranteed Paper	Guaranteed for standard paper
Paper Condition	Use fresh paper immediately after the packing is opened
Machine Status	Not in error, directly after normal and proper maintenance has been performed
Image Quality Guaranteed Area	Same as the area indicated in [6.1.13 Printable/Print Guaranteed Area]
Judgment Reference	Depending on whether an adjustment was performed directly before the evaluation, the above image quality specifications should fulfill the following confidence interval . Normal usage: 90% confidence interval Directly after adjustment: 95% confidence interval

Notes on IOT Image Quality Specifications

NOTE:

1. *The performance specifications listed in the table are applicable to the side of [paper with image] during 1 Sided Print.*
2. *Output the sample for evaluation using 4C mode. When using other color modes, specify the evaluation method from the table.*
3. *"After adjustment" refers to the state after an adjustment operation was made via the PC-UI menu.*
4. *"Normal Usage" is applicable for 90% of the samples including the environment and change over time.*
5. *The number of digits for measurement value is rounded to the nearest value according to the number of digits in the table.*
6. *For the SIR evaluation or grade sample measurement value, use the value assigned to the reference image that is closest in appearance compared to the measured item.*
7. *"Equivalent" in the evaluation method refers to the measuring instrument that performed the calibration.*

CMYK Toner Image Quality

*: Applies to 4C (CMYK) Mode.

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
1	Solid Density	Total Chart --- J Paper 82 gsm --- 200 Cluster	YMCK Cin 100%	X-Rite938	Density	Y Cin100%: 1.61[+/-]0.16 M Cin100%: 1.56[+/-]0.16 C Cin100%: 1.52[+/-]0.16 K Cin100%: 1.77[+/-]0.16
		Total Chart --- OSCW 127 gsm --- 200 Cluster	YMCK Cin 100%	Same as above	Same as above	Y Cin100% 1.88[+/-]0.16 M Cin100% 1.82[+/-]0.16 C Cin100% 1.79[+/-]0.16 K Cin100% 2.06[+/-]0.16
2	Background	C3 Gloss max240-4C Total Chart --- OSCW 127 gsm --- 200 Cluster	Non-image print area	SIR	Grade	G2 or lower (other than Az) G3 or lower (Az)
3	Color Registration	Total Chart or SDTP957A3S600 --- J Paper 82 gsm --- 600 dpi	YMCK Cin 100%	1) Measurement standard: C52-10032 Obtain 6 relative distances d between 2 colors in 4 YMCK colors. 2) Visual	1) Distance (Micro-m) 2) Visual Evaluation	1) d < = 70 Micro-m (95% confidence interval) 2) The outer side of the in-between line cannot go beyond the outer side of the 2 lines
4	Uniformity	Smile FS 1&2 Chart --- J Paper 82 gsm --- 200 Cluster	YMCK, RGB Cin 60% 3C Cin 20%	Scanner	Delta-E (95%)	After adjustment, [4] or lower
5	Line Width	Total Line 4C --- J Paper 82 gsm --- 600 dpi	K 1/2 dots line vertical/ horizontal	Scanner	Line width d	42 < = d < = 121 Micro-m (1 dot) 84 < = d < = 166 Micro-m (2 dots)

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
6	Line Density	Total Line 4C --- J Paper 82 gsm --- 200 Cluster	K 1/2 dots Line Vertical/ horizontal Top, Center, Bottom average value	Scanner	Line Density	1 dot: 0.3 or more 2 dot: 0.5 or more
7	Halftone Grainines	ATCN 0100 4C --- J Paper 82 gsm --- 200 Cluster	MCK Cin 80%	Scanner	Color Noise	M color: 4.0 or lower (other than Az) 4.0 or lower (other than Az) C color: 3.7 or lower (other than Az) 4.0 or lower (other than Az) K color: 4.9 or lower (other than Az) 5.1 or lower (Az)
		ATCN 0100 4C --- OSCW 127gsm --- 200 Cluster	MCK Cin 80%	Scanner	Color Noise	M color: 4.2 or lower (other than Az) 4.3 or lower (Az) C color: 4.0 or lower (other than Az) 4.3 or lower (Az) K color: 5.3 or lower (other than Az) 5.7 or lower (Az)
8	Halftone Mottle	Mottle 10 steps V1-2 --- J Paper 82 gsm --- 200 Cluster	MCK Cin 80%	Scanner	LFN	M color: 3.7 or lower (other than Az) 3.7 or lower (Az) C color: 3.2 or lower (other than Az) 3.3 or lower (Az) K color: 4.7 or lower (other than Az) 4.8 or lower (Az)

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
9	Solid Mottle	Mottle 10 steps V1-2 --- J Paper 82 gsm --- 200 Cluster	MCK,GB Cin 100%	Scanner	LFN	M color: 3.2 or lower (other than Az) 3.2 or lower (Az) C color 3.5 or lower (other than Az) 3.5 or lower (Az) K color 4.1 or lower (other than Az) 4.1 or lower (Az) G color 3.6 or lower (other than Az) 3.8 or lower (Az) B color 4.3 or lower (other than Cz) 3.7 or lower (Cz)
10	TED	TED CMK A3 IQAF Total Chart --- J Paper 82 gsm --- 200 Cluster	MCK Cin25%	SIR	Grade	G2 or lower
11	Starvation	STV CMK A3 IQAF Total Chart --- J Paper 82 gsm --- 200 Cluster	MCK Cin 25%	SIR	Grade	G4 or lower
12	Blur	Total Line 4C Total Chart --- J Paper 82 gsm --- 600 dpi	3C Cin 80% R/G Cin 100% 8 dot Line of each color	SIR	Grade	3C Color: G2 or less R/G Color: G1 or less
13	Hollow Character	Total Line 4C Total Chart --- J Paper 82 gsm --- 200 Cluster	K/R color 8 pt Mincho Kanji	SIR	Grade	K Color: G2 or less R Color: G2 or less

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
14	Ghost	Ghost Chart Total Chart --- J Paper 82 gsm --- 200 Cluster	MCK Ghost pattern	SIR	Grade	G1 or lower (other than Az) G3 or lower (Az)
15	Color Spots	HT 4C0 HT M60 HT C60 HT K60 HT G60 --- OSCW 127 gsm --- 200 Cluster	A3 size paper, inspect whole area	SIR	Grade	On white paper, diameter of 150 to 500 Micro-m: 3 pax or less/A3. Diameter 501 Micro-m or more: No color spots 501 Micro-m or more in diameter at 60% HT: No color spots
16	White Spots	HT M60 HT C60 HT K60 HT G60 --- J Paper 82 gsm --- 200 Cluster	A3 size paper, inspect whole area	SIR	Grade	Diameter of 150 to 500 Micro-m: 3 pax or less/A3. Diameter 501 Micro-m or more: No white spots
17	White Streaks	HT M25 HT C25 HT K25 HT G25 --- J Paper 82 gsm --- 200 Cluster	A3 size, inspect whole area	SIR	Grade	G1 or lower
18	Color Streaks	HT M25 HT C25 HT K25 HT G25 --- J Paper 82 gsm --- 200 Cluster	A3 size, inspect whole area	SIR	Grade	G1 or lower

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
19	Banding	HT M50 HT C50 HT K50 --- J Paper 82 gsm OK Prince Bond (209.3 gsm) --- 200 Cluster	MCK 0.5 to 32 mm Pitch Banding	Scanner	Banding Grade	P: Pitch [mm] Wavelength 32 mm or shorter <K color> Bz, Jz, Cz • [0.500 <P <= 9.633], BG 3.35 or less • [9.633 <P <= 11.823], BG 3.20 or less • [11.823 <P <= 15.299], BG 3.00 or less • [15.299 <P <= 26.010], BG 2.80 or less • [26.010 <P <= 32.000], BG 3.00 or less <Az> • [0.500 <P <= 32.000], BG 4.00 or less <C color> Bz, Jz, Cz • [0.500 <P <= 1.093], BG 2.15 or less • [1.093 <P <= 2.956], BG 2.55 or less

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
19	Banding	HT M50 HT C50 HT K50 --- J Paper 82 gsm OK Prince Bond (209.3 gsm) --- 200 Cluster	MCK 0.5 to 32 mm Pitch Banding	Scanner	Banding Grade	• [2.956 <P <= 32.000], BG 2.15 or less <Az> • [0.500 <P <= 32.000], BG 3.00 or less <M color> Bz, Jz, Cz • [0.500 <P <= 1.093], BG 2.45 or less • [1.093 <P <= 2.956], BG 2.55 or less • [2.956 <P <= 32.000], BG 2.45 or less <Az> • [0.500 <P <= 32.000], BG 3.00 or less
19	Banding	HT M50 HT C50 HT K50 --- J Paper 82 gsm OK Prince Bond (209.3 gsm) --- 200 Cluster	MCK Long cycle uneven density 25 mm Pitch or more	Scanner	Delta-E	P: Pitch [mm] Wavelength 25 mm or longer <K color> • [25.000 <P <= 49.542], Delta-E 1.0 or less • [49.542 <P <= 92.118], Delta-E 1.2 or less • [P=52.019], Delta-E 1.0 or lower • [92.118 <P <= 195.072], Delta-E 1.5 or less <Az> • [25.000 <P <= 195.072], Delta-E 3.5 or less

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
19	Banding	HT M50 HT C50 HT K50 --- J Paper 82 gsm OK Prince Bond (209.3 gsm) --- 200 Cluster	MCK Long cycle uneven density 25 mm Pitch or more	Scanner	Delta-E	<C color> • [25.000 <P <= 49.542], Delta-E 0.9 or less • [49.542 <P <= 92.118], Delta-E 1.2 or less • [P=52.019], Delta-E 1.0 or lower • [92.118 <P <= 195.072], Delta-E 1.4 or less <Az> • [25.000 <P <= 195.072], Delta-E 3.5 or less
19	Banding	HT M50 HT C50 HT K50 --- J Paper 82 gsm OK Prince Bond (209.3 gsm) --- 200 Cluster	MCK Long cycle uneven density 25 mm Pitch or more	Scanner	Delta-E	<M color> • [25.000 <P <= 49.542], Delta-E 1.00 or less • [49.542 <P <= 92.118], Delta-E 1.6 or less • [P = 52.019], Delta-E 1.0 or less • [92.118 <P <= 195.072], Delta-E 1.8 or less <Az> • [25.000 <P <= 195.072], Delta-E 3.5 or less *: Wavelength 52.019 mm: Magroll Pitch Banding
20	Resolution	Total Line 4C Total Chart --- J Paper 82 gsm --- 600 dpi	K color Line 2 on 2 off	Use a loupe	Distance	The lines should not be separated by 2/3 of that thickness or further away

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
21	Level of Fusing	C3 Gloss max240 4C --- J Paper 82 gsm --- 200 Cluster	4C Cin 60% or K Cin 100%	SIR	Grade	80 or lighter
22	Gloss	C3 Gloss max 240-4C --- J Paper 82 gsm --- OSCW 127 gsm --- 200 Cluster	YMCK, RGB Cin 100% 3C Cin80%	Micro-TRI-Gloss: C52-10040 60 degrees Measure gloss using each sample (11th, 12th, 13th sheet) taken from a 13-sheets continuous print Evaluate the average value of each measurement value on the Patch at the In/Center/Out positions of each color.	60 degrees Gloss: g60	[J Paper] Y: 21[+/-]12 M: 16[+/-]12 C: 14[+/-]12 K: 18[+/-]12 R: 26[+/-]15 G: 25[+/-]15 B: 22[+/-]15 3C: 22[+/-]15 [OSCW] Y: 44[+/-]12 M: 35[+/-]12 C: 35[+/-]12 K: 44[+/-] 12 R: 42[+/-]15 G: 44[+/-]15 B: 38[+/-]15 3C: 35[+/-]15
23	Gloss Differential	C3 Gloss max240-4C --- J Paper 82 gsm --- OSCW 127 gsm --- 200 Cluster	YMCK Cin100% 3C Cin80% Chart Lead side Inboard/ Center/Outboard	Micro-TRI-Gloss: C52-10040 60 degrees Gloss Gloss Difference = 3C80%InCentOut average value - YMCK Cin100%InCentOut average value of 4 colors	60 degrees Gloss: g60	[J Paper] g60 < = 20 [OSCW] g60 < = 25
24	Color stability (page to page)	Color Stability Chart NK K2 --- J Paper 82 gsm --- 200 Cluster	YMCK, RGB, PK Cin60% --- YMCK, RGB, PK Cin20%	Konica Minolta-FD9	Delta-E	3.0 or less (95% confidence interval) --- 2.5 or less (95% confidence interval)

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value*
25	Color stability (Job to Job)	Color Stability Chart NK K2 --- J Paper 82 gsm --- 200 Cluster	YMCK, RGB, PK Cin60% --- YMCK, RGB, PK Cin 20%	Konica Minolta-FD9	Delta-E	3.0 or less (95% confidence interval)

6.1.22 Gold & Silver Toner IOT Image Quality Spec (GLD/SLV Toner)

Indicates the IOT image quality spec during single color printing with Gold and Silver Toner.

The values when outputting in Color Mode with the settings in the following table will be applied.

When there are multiple options for the Color Mode, select any 1 of them to perform the measurement.

Table 1

Engine Configuration	Color Mode	Output Color
5C (a)	5C#1	CMYK + GLD or SLV
5C (b)	5C#6	CMYK + GLD or SLV

Single color image quality of gold and silver toner

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
1	Flop Index (Metallic Sheen Feel)	Metallic Go+M A3 #1 5C Metallic Go+M A3 #6 5C --- J paper (82 gsm) OS Coated W (127 gsm) --- 200 Cluster	Cin 100% Patch Measure the sample (10th sheet) taken from a continuous print.	BYK-mac	Flop Index	Not defined.
2	Solid Patch Density	Metallic Go+M A3 #1 5C Metallic Go+M A3 #6 5C --- J paper --- 200 Cluster	Cin 100% Patch	X-Rite938	Density	Not defined.
3	Color Registration	SDTP 957 A3 S600 #1 5C SDTP 957 A3 S600 #6 5C --- J paper (82 gsm) --- 600 dpi		Scanner	Distance	Not defined.

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
4	Uniformity	Metallic HT60 #1 5C Metallic HT60 #6 5C --- J paper --- 200 Cluster	Perform measurements at the 9 intersections that are created by the 3 straight lines (positioned in parallel 30 mm and 210 mm from the paper lead edge and 30 mm from the trail edge) and the 3 straight lines (positioned in parallel 30 mm and 150 mm from the paper Inboard side and 30 mm from the Outboard side)	Scanner	Delta-E	Not defined.
5	TED	TEDS A3 #1 5C TEDS A3 #6 5C --- J paper (82 gsm) --- 200 Cluster	[GLD] Cin 19% Cin 13% [SLV] Cin 40% Cin 48% Cin 56%	SIR	Grade	Not defined.
6	Starvation	TEDS A3 #1 5C TEDS A3 #6 5C --- J paper (82 gsm) --- 200 Cluster	Cin 19% or Cin 13%	SIR	Grade	Not defined.
7	Blur	Total Chart2 Chamonix #1 5C Total Chart2 Chamonix #6 5C --- J paper (82 gsm) --- 200 Cluster		SIR	Grade	Not defined.
8	Hollow Character	Total Chart Line #1 5C Total Chart Line #6 5C --- J paper (82 gsm) --- 200 Cluster		SIR	Grade	Not defined.

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
9	White Streaks	Metallic HT20 #1 5C Metallic HT20 #6 5C --- J paper (82 gsm) --- 200 Cluster	The worst section within the surface	SIR	Grade	Not defined.
10	White Spots	Metallic HT20 #1 5C Metallic HT20 #6 5C --- J paper (82 gsm) --- 200 Cluster	A3, whole area	SIR	Diameter (Micro-m) and number	Not defined.
11	Single Black Spot/ Color Spot on White Background	Metallic HT0 #1 5C Metallic HT0 #6 5C --- OSCW (127 gsm) --- 200 Cluster	A3, whole area	SIR	Diameter (Micro-m) and number	Not defined.
12	Ghost	Ghost A3 #1 5C Ghost A3 #6 5C --- J paper (82 gsm) --- 200 Cluster		SIR	Grade	Not defined.
13	Background	Metallic HT0 #1 5C Metallic HT0 #6 5C --- J paper (82 gsm) --- 200 Cluster	Background Area	SIR	Grade	Not defined.
14	Live Width	Total Chart Line #1 5C Total Chart Line #6 5C --- J paper (82 gsm) --- 200 Cluster	4 dot line	Scanner	Width (Micro-m)	Not defined.

6.1.23 Metallic Color IOT Image Quality Spec

Table 1

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
1	Metallic Color Density	Meltaiic Color #6 5C --- OS Coated (127 gsm) --- 200 Cluster	Patch overlaid with SLV Cin100% and YMC Cin100%	X-Rite938	Density	-

6.1.24 Clear Toner

Other than the 4 colors YMCK, this Spot Color can be added as an option.

Values are defined under the same conditions as the [Print Quality Guarantee Conditions of 6.1.21 CMYK Toner IOT Image Quality Spec].

Table 1

No	Evaluation Items	Image Output Condition Image Evaluation Paper Screen Resolution Color Mode	Evaluation Method	Target Value
1	Partial Gloss	C3 Gloss max240 CT max20100 #1 5C --- J paper (82 gsm) --- 200 Cluster --- 5C#1	micro-TRI-gloss: C52-10040 60 degrees Gloss	Gloss Differential: 29 [+/-] 24 (CT 100% - Paper)
2	Color Difference due to CT Availability	C3 Gloss max240 CT max20100 #1 5C --- J paper (82 gsm) OS Coated W (127 gsm) --- 200 Cluster --- 5C#1	X-Rite938 Average value of 2 locations	[Uncoated] CT availability Delta E < = 7.5 [Coated] CT availability Delta E < = 11.2 M 100%/C 100%/K 100%/R 200%/G 200%/B 200%/PK 240%
3	Watermark Text	C3 Gloss max240 CT max20100 #1 5C --- J paper (82 gsm) --- 200 Cluster --- 5C#1	micro-TRI-gloss: C52-10040 60 degrees Gloss	Gloss Differential: 15 [+/-] 10 4C 200% + CT60% - 4C 200%
4	Blur	Total Chart2 Chamonix #1 5C --- J pape (82 gsm) --- 200 Cluster --- 5C#1	SIR	CT100/ Y30/ M30/ K100 < = G3

6.1.25 White Toner IOT Image Quality Spec (WHT Toner)

Indicates the IOT image quality spec during single color printing with White Toner and WHT Toner overlap (white lining, underlay).

NOTE: *White lining refers to the use of mirror image on a Transparency (transparent), and images are observed through the Transparency. Underlay refers to the formation with SLV/GLD/WHT of the toner layer closest to the paper, and a 4C image is superimposed thereon.*

The values when outputting in Color Mode with the settings in the following table will be applied.

When there are multiple options for the Color Mode, select any 1 of them to perform the measurement.

*: Lightness rises for 1C compared to other color modes.

Table 1

Engine Configuration	Color Mode	Output Color
1C*	1C#1 or 1C#6	Single Color WHT
5C (a)	5C#1	CMYK + WHT
5C (b)	5C#6	CMYK + WHT

White Toner Single Color Image Quality

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
1	Brightness	TotalChart WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Cin 100% Patch	X-Rite 938	L*	-
2	Uniformity	Mottle 10 steps V1-2 WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Cin 100% Patch	Scanner	LFN	-

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
3	Mottle axis direction difference	Mottle 10 steps V1-2 WT100 #16 1C --- Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Cin 100% Patch IN/CENT/OUT	Scanner X-Rite 938	LFN L* Measure LFN and L* of the first patch. IN L*: L_IN, OUT L*: L_OUT, IN-CENT LFN difference: Delta LFN_IN, CENT-OUT LFN difference: Delta LFN_OUT is calculated.	-
4	Tone Reproduction	TotalChart WT #16 1C --- Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Cin 100%, Cin80%, Cin25%	X-Rite938	Density	-
5	Line Density	TotalChart Line K1 WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 600 dpi	WHT 1/2 dots Line Vertical/Horizontal Average Value of Top, Center, Bottom	Scanner	Line Density	-
6	TED	TED A3-IQAF WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	Cin25%	SIR	Grade	-
7	Starvation	STV A3-IQAF WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	Cin25%	SIR	Grade	-

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
8	Blank Spot	HT WT100 #16 --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	A3 size paper, inspect whole area	SIR	Diameter (Micro-m) and number	-
9	White spot	HT WT0 #16 --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	A3 size paper, inspect whole area	SIR	Diameter (Micro-m) and number	-
10	White Streaks	HT WT100 #16 --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	A3 size paper, inspect whole area	SIR	Grade	-
11	Color Streaks	HT WT0 #16 --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	A3 size paper, inspect whole area	SIR	Grade	-
12	Blur	TotalChart Line K1 WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 600 dpi	8 dotLine	SIR	Grade	-

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
13	Hollow Character	TotalChart Line K1 WT #16 1C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	Mincho 8 Points	SIR	Grade	-
14	Uniformity	HT WT100 #16 --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Entire Surface Cin 100%	Scanner	Delta-E (95%)	-

White Toner and YMCK Overlay Image Quality

Table 3

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
1	Uniformity	Mottle 10 steps V1-2 WT #16 5C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Cin 100% Multiplex of CMKBG Cin100%	Scanner	LFN	-
2	Tone Reproduction	TotalChart WT #16 --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	WHT Cin 100% Multiple sections of YMC Cin 100%	X-Rite938	Density	-
3	Line Density	TotalChart WT #16 5C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 600 dpi	K on WHT 2 -dot Line Vertical/ Horizontal	Scanner	Width (Micro-m)	-
4	Blur	TotalChart WT #16 5C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 600 dpi	W+3C 8 dotLine	SIR	Grade	-
5	Hollow Character	TotalChart WT #16 5C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	W+Blue Mincho 8 Points	SIR	Grade	-

Table 3

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
6	Background	TotalChart Line_K1 WT #16 5C --- • Kishu Color Bond Extra Heavyweight (124 gsm) --- 200 Cluster	Non-image print area	SIR	Grade	-

6.1.26 Long Paper IOT Image Quality Spec

Long/4C Image Quality

Table 1

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
1	Density	330 x 729 IQ Chart --- OK Top Coat 127 gsm (330.0 x 729.0 mm) --- 200 Cluster	Cin100% Y/M/C/K	X-Rite938	Density	-
2	Background	330 x 729 IQ Chart --- OK Top Coat 127 gsm (330.0 x 729.0 mm) --- 200 Cluster	Non-image print area	SIR	Grade	-
3	Gloss	330 x 729 IQ Chart --- OK Top Coat 127 gsm (330.0 x 729.0 mm) --- 200 Cluster	Y/M/C/K/R/G/B Cin100% 3C Cin80%	Micro-TRI-Gloss Measure 60 degrees Gloss using each sample (11th, 12th, 13th sheet) taken from a 13-sheets continuous print. Evaluate the average value of each measurement value on the Patch at the In/Center/Out positions of each color.	60 degrees Gloss	-

Long/Spot Color Quality

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
1	FI	330 x 729 IQ Chart --- OK Top Coat 127 gsm (330.0 x 729.0 mm) --- 200 Cluster	Cin 100% Gold/Silver Single Color Patch	BYK-mac Average value of the lead and trail edges	Flop Index	-

Table 2

No	Evaluation Items	Image Evaluation Paper Screen Resolution	Evaluation Target	Evaluation Method	Measured Variable	Target Value
2	Brightness	330 x 729 IQ Chart --- Kishu Color Bond Heavyweight (124 gsm) (330.0 x 729.0 mm) --- 200 Cluster	Cin 100% White Single Color Patch	X-Rite 938	L*	-

6.1.27 In Line Sensor (ILS)

The ILS is a color image scanning device that is installed within the paper transport mechanism (in IOT-R) and, when instructed from the IOT-UI and Print Server, it works by scanning the adjustment chart printout to automatically correct the image quality.

Table 1

Selected Application	Correction Spec
Calibration (CTRACS)	Repeatability: Delta Epp 95% 3 (Cin20%, Cin60% after CTRACS execution) Adjustment time: within 5 minutes
Density Uniformity Correction (Smile Correction)	Delta E < = 4 (IOT image quality specification standard) However, paper cutting error, etc. has to be adjusted manually Adjustment time: within 5 minutes
Alignment Correction (Dual Registration Correction)	0.5 mm or smaller (IOT performance specification standard) Adjustment time: within 5 minutes

NOTE:

The above values are the values directly after an adjustment, when the IOT (Main Unit) is in a state that satisfies its performance specification.

"Adjustment time" refers to the time required for an adjustment Job to complete after [Start] is selected.

6.2.1 Tools

Table 1

Tool Name	Parts No.
Step Tool (Step Ladder)	Local procurement (recommended size : L 750mm, W 350mm, H 500mm)
5.5 mm Box Driver	0TD499T01423/
Screw Driver (+) 100 mm	0TD499T00355/

NOTE: *For others, the CE Basic Tool can be used to remove/install spare parts and perform maintenance operation.*

6.2.2 Service Consumables

Table 1

Name	Usage	Remarks
MOLYKOTE Grease (EM-50L) 200 ml	Abnormal noise from Plastic Parts	Local procurement
MOLYKOTE Grease (EM-30L) 5075/U-800	Lubricant for Plastic Bearing and Shaft	Local procurement
LOCTITE243	Prevents screws and nuts from getting loose	Local procurement

The above are used in the paper transportation system.

This product do not have any unique service consumables. Any separate requirements will be expanded in the technical information, etc.

6.2.3 Consumables

Table 1

Consumables	Product Code	Remarks
Drum Unit	BP-DU120	For LIFE, refer to HFSI (6.3.3 DC135 HFSI List)
Corotron	BP-PS13	Approximately 1600 k prints (A4 impressions)
Toner Cartridge (Black)	BP-NT120BA	Approximately 69 k prints*1
Toner Cartridge (Cyan)	BP-NT120CA	Approximately 82 k prints*1
Toner Cartridge (Magenta)	BP-NT120MA	Approximately 82 k prints*1
Toner Cartridge (Yellow)	BP-NT120YA	Approximately 82 k prints*1
Toner Cartridge (Clear)	BP-NT120LA	Approximately 55 k prints*1
Toner Cartridge (Gold)	BP-NT120GA	Approximately 55 k prints*2
Toner Cartridge (Silver)	BP-NT120SA	Approximately 55 k prints*2
Toner Cartridge (White)	BP-NT120WA	Approximately 42 k prints*1
Toner Cartridge (Textured Paper)	BP-NT120TA	Approximately 55 k prints*1
Toner Cartridge (Pink)	BP-NT120PA	Approximately 54.6 k prints*1
Developer (Black)	BP-NV120BA	Approximately 4000 k prints
Developer (Cyan)	BP-NV120CA	Approximately 4000 k prints
Developer (Magenta)	BP-NV120MA	Approximately 4000 k prints
Developer (Yellow)	BP-NV120YA	Approximately 4000 k prints
Developer (Clear)	BP-NV120LA	Approximately 4000 k prints
Developer (Gold)	BP-NV120GA	Approximately 4000 k prints
Developer (Silver)	BP-NV120SA	Approximately 4000 k prints
Developer (White)	BP-NV120WA	Approximately 4000 k prints
Developer (Textured Paper)	BP-NV120TA	Approximately 4000 k prints
Developer (Pink)	BP-NV120PA	Approximately 4000 k prints
Waste Toner Bottle	BP-PS11	Approximately 140 k prints*1 LIFE changes according to Area Coverage
Fusing Web	BP-PS12	For LIFE, refer to HFSI (6.3.3 DC135 HFSI List)
Fuser Web (Sepciality media)	BP-PS10	Same as above
Staple Cartridge	BP-PS14	For Side Stitch in Finisher • For 100 sheets • Staples Cut Type • 5,000 Staples x4 sets/box • Staple Waste Container x1
Staple Cartridge	MX-SCX1	For Saddle Stitch in Finisher • For 50 sheets • 5000 Staples x 3 sets/Box

*1: When Area Coverage (AC) 7.5%, A4 Job Size: 250.

NOTE: *Job Size: Continuous print quantity in one print (per Job).*

*2: When Area Coverage (AC) 5.0%, A4 Job Size: 250.

6.2.4 Modification

For this machine, Mod (Tag) numbers cannot be registered by using the NVM.

6.2.4.1 Terms and Symbols

Modifications that differ from the original specifications will be indicated with following symbols.

Table 1

Item	Description
[Models with 5V]	Indicates the Code applies to machines that have undergone the 5V modification.
[Models without 5V]	Indicates the Code applies to machines that the 5V modification has not been introduced.
Figure 1 5005	This symbol indicates the configuration of the part after a modification with the number shown in the symbol is introduced.
Figure 2 5006	This symbol indicates the configuration of the part before a modification with the number shown in the symbol is introduced.

6.3.1.1 DC330 Component Check List (Drive)

Table 1 DC330 Component Check List (Drive)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
004-001	Drum Motor #1	Rotates/stops Drum Motor #1.		O	-	004-002~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		PWM	DRIVE
004-002	Drum Motor #2	Rotates/stops Drum Motor Y (#2).		O	-	004-001, 004-003~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X			DRIVE
004-003	Drum Motor #3	Rotates/stops Drum Motor M (#3).		O	-	004-001, 004-002, 004-004~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X			DRIVE
004-004	Drum Motor #4	Rotates/stops Drum Motor C (#4).		O	-	004-001~004-003, 004-005~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X			DRIVE
004-005	Drum Motor #5	Rotates/stops Drum Motor K (#5).		O	-	004-001~004-004, 004-006~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-006	Drum Motor #6	Rotates/stops Drum Motor #6.		O	-	004-001~004-005, 004-007~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-007	Drum Motor All	Rotates/stops the Drum Motor simultaneously for all colors.		O	-	004-001~004-006, 004-008~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-008	IBT Drive Motor Forward	Rotates/stops the IBT Drive Motor and starts the Active Steering Drive Control after the IBT Drive Motor operation has stabilized (= 400 ms after Motor On). (Walk Control Mode) When the Motor stops, the Steering Drive Control also stops at the same time.		O	100 [s]	004-001~004-007, 004-009~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-009	IBT Drive Motor Reverse	IBT Belt Cleaner paper dust removal operation; operates in the order of reverse/forward rotation according to the profile; Active Steering Drive Control is not performed.		O	400 [ms]	004-001~004-008, 004-010~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X			DRIVE
004-010	IBT Belt Check 6C	IBT Belt Check-6C Starts the Active Steering Drive Control after the IBT Drive Motor operation has stabilized (= 400 ms and later after Motor On). (Walk Control Mode) When the Motor stops, the Steering Drive Control also stops at the same time.		O	100 [s]	004-001~004-009, 004-011~004-017, 004-030, 004-031, 009-023~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-011	IBT Belt Check 5C #1	IBT Belt Check-5C #1 Same as above for Active Steering.		O	100 [s]	004-001~004-010, 004-012~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE

Table 1 DC330 Component Check List (Drive)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
004-012	IBT Belt Check 5C #6	IBT Belt Check-5C #6 Same as above for Active Steering.		O	100 [s]	004-001~004-011, 004-013~009-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-013	IBT Belt Check 4C	IBT Belt Check-4C Same as above for Active Steering.		O	100 [s]	004-001~004-012, 004-014~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-014	IBT Belt Check 2C	IBT Belt Check-2C Same as above for Active Steering.		O	100 [s]	004-001~004-013, 004-015~004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-015	IBT Belt Check 1C #6	IBT Belt Check-1C #6 Same as above for Active Steering.		O	100 [s]	004-001~004-014, 004-016, 004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X		Open	DRIVE
004-016	IBT Belt Check 1C #5	IBT Belt Check-1C #5 Same as above for Active Steering.		O	100 [s]	004-001~004-015, 004-017, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X			DRIVE
004-017	IBT Belt Check 1C #1	IBT Belt Check-1C #1 Same as above for Active Steering.		O	100 [s]	004-001~004-016, 004-030, 004-031, 009-025~009-030, 009-431~009-438, 009-446~009-449	X			DRIVE
004-030	Steering Cam Initialize	The initialize operation for Steering Cam.		O	-	009-431~009-441, 009-446~009-449, 004-001~004-017, 004-031	X	-		DRIVE
004-031	Steering Cam Down	The operation to move Steering Cam to the lowest point.		O	-	009-431~009-441, 009-446~009-449, 004-001~004-017, 004-030	X	-	T.B.D	DRIVE
004-033	Edge Sensor #1 and #3 LED	Turns ON the Belt Edge Sensor LED 1 and 3.		O	-	-	X	-	T.B.D	DRIVE
004-035	LV FAN	Operates LVPS FAN 1 to 4.		O	-	-	X		T.B.D	NOHAD
004-036	Fusing FAN	Operates TRIAC FAN.		O	-	-	X		T.B.D	NOHAD
004-037	LVPS FAN	Operates LVPS FAN.		O	-	-	X		T.B.D	NOHAD
004-040	FAN ASSY CC_1 High	ON: CC FAN 1 high speed rotation OFF: CC FAN 1 stop		O	-	004-041	X	T.B.D	T.B.D	NOHAD
004-041	FAN ASSY CC_1 Low	ON: CC FAN 1 low speed rotation OFF: CC FAN 1 stop		O	-	004-040	X	T.B.D	T.B.D	NOHAD
004-042	FAN ASSY CC_2 High	ON: CC FAN 2 high speed rotation OFF: CC FAN 2 stop		O	-	004-043	X	T.B.D	T.B.D	NOHAD
004-043	FAN ASSY CC_2 Low	ON: CC FAN 2 low speed rotation OFF: CC FAN 2 stop		O	-	004-042	X	T.B.D	T.B.D	NOHAD
004-044	FAN ASSY CC_3 High	ON: CC FAN 3 high speed rotation OFF: CC FAN 3 stop		O	-	004-045	X	T.B.D	T.B.D	NOHAD
004-045	FAN ASSY CC_3 Low	ON: CC FAN 3 low speed rotation OFF: CC FAN 3 stop		O	-	004-044	X	T.B.D	T.B.D	NOHAD
004-046	FAN ASSY CC_4 High	ON: CC FAN 4 high speed rotation OFF: CC FAN 4 stop		O	-	004-047	X	T.B.D	T.B.D	NOHAD
004-047	FAN ASSY CC_4 Low	ON: CC FAN 4 low speed rotation OFF: CC FAN 4 stop		O	-	004-046	X	T.B.D	T.B.D	NOHAD

Table 1 DC330 Component Check List (Drive)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
004-048	FAN ASSY CC_5 High	ON: CC FAN 5 high speed rotation OFF: CC FAN 5 stop		O	-	004-049	X	T.B.D	T.B.D	NOHAD
004-049	FAN ASSY CC_5 Low	ON: CC FAN 5 low speed rotation OFF: CC FAN 5 stop		O	-	004-048	X	T.B.D	T.B.D	NOHAD
004-050	FAN ASSY CC_6 High	ON: CC FAN 6 high speed rotation OFF: CC FAN 6 stop		O	-	004-051	X	T.B.D	T.B.D	NOHAD
004-051	FAN ASSY CC_6 Low	ON: CC FAN 6 low speed rotation OFF: CC FAN 6 stop		O	-	004-050	X	T.B.D	T.B.D	NOHAD
004-060	FAN ASSY REAR COOLING_9	ON: REAR COOLING FAN 9 rotation OFF: REAR COOLING FAN 9 stop		O	-	-	X	T.B.D	T.B.D	NOHAD
004-061	FAN ASSY REAR COOLING_10	ON: REAR COOLING FAN 10 rotation OFF: REAR COOLING FAN 10 stop		O	-	-	X	T.B.D	T.B.D	NOHAD
004-062	FAN ASSY ROS_1	ON: ROS FAN 1 rotation OFF: ROS FAN 1 stop		O	-	-	X	T.B.D	T.B.D	NOHAD
004-064	FAN ASSY BLOWER_1 High	ON: BLOWER FAN 1 high speed rotation OFF: BLOWER FAN 1 stop		O	-	004-065	X	T.B.D	T.B.D	NOHAD
004-065	FAN ASSY BLOWER_1 Low	ON: BLOWER FAN 1 low speed rotation OFF: BLOWER FAN 1 stop		O	-	004-064	X	T.B.D	T.B.D	NOHAD
004-066	FAN ASSY BLOWER_2 High	ON: BLOWER FAN 2 high speed rotation OFF: BLOWER FAN 2 stop		O	-	004-067	X	T.B.D		NOHAD
004-067	FAN ASSY BLOWER_2 Low	ON: BLOWER FAN 2 low speed rotation OFF: BLOWER FAN 2 stop		O	-	004-066	X	T.B.D		NOHAD
004-068	FAN ASSY BLOWER_3 High	ON: BLOWER FAN 3 high speed rotation OFF: BLOWER FAN 3 stop		O	-	004-069	X	T.B.D		NOHAD
004-069	FAN ASSY BLOWER_3 Low	ON: BLOWER FAN 3 low speed rotation OFF: BLOWER FAN 3 stop		O	-	004-068	X	T.B.D		NOHAD
004-070	FAN ASSY BLOWER_4 High	ON: BLOWER FAN 4 high speed rotation OFF: BLOWER FAN 4 stop		O	-	004-071	X	T.B.D		NOHAD
004-071	FAN ASSY BLOWER_4 Low	ON: BLOWER FAN 4 low speed rotation OFF: BLOWER FAN 4 stop		O	-	004-070	X	T.B.D		NOHAD
004-072	FAN ASSY BLOWER_5 High	ON: BLOWER FAN 5 high speed rotation OFF: BLOWER FAN 5 stop		O	-	004-073	X	T.B.D		NOHAD
004-073	FAN ASSY BLOWER_5 Low	ON: BLOWER FAN 5 low speed rotation OFF: BLOWER FAN 5 stop		O	-	004-072	X	T.B.D		NOHAD
004-074	FAN ASSY BLOWER_6 High	ON: BLOWER FAN 6 high speed rotation OFF: BLOWER FAN 6 stop		O	-	004-075	X	T.B.D		NOHAD
004-075	FAN ASSY BLOWER_6 Low	ON: BLOWER FAN 6 low speed rotation OFF: BLOWER FAN 6 stop		O	-	004-074	X	T.B.D		NOHAD
004-077	FAN ASSY REAR DRIVE_1	ON: REAR DRIVE COOLING FAN 1 rotation OFF: REAR DRIVE COOLING FAN 1 stop		O	-	-	X	T.B.D		NOHAD
004-078	FAN ASSY REAR DRIVE_2	ON: REAR DRIVE COOLING FAN 2 rotation OFF: REAR DRIVE COOLING FAN 2 stop		O	-	-	X	T.B.D		NOHAD
004-079	FAN ASSY REAR DRIVE_3	ON: REAR DRIVE COOLING FAN 3 rotation OFF: REAR DRIVE COOLING FAN 3 stop		O	-	-	X	T.B.D		NOHAD

Table 1 DC330 Component Check List (Drive)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
004-080	FAN ASSY REAR DRIVE_4	ON: REAR DRIVE COOLING FAN 4 rotation OFF: REAR DRIVE COOLING FAN 4 stop		O	-	-	X	T.B.D	Open	NOHAD
004-081	FAN ASSY REAR DRIVE_5	ON: REAR DRIVE COOLING FAN 5 rotation OFF: REAR DRIVE COOLING FAN 5 stop		O	-	-	X	T.B.D		NOHAD
004-082	FAN ASSY REAR DRIVE_6	ON: REAR DRIVE COOLING FAN 6 rotation OFF: REAR DRIVE COOLING FAN 6 stop		O	-	-	X	T.B.D		NOHAD
004-083	FAN ASSY FUSING EXHAUST 1_2 HIGH	Rotates FUSING EXHAUST FAN 1 and 2 normally (not in Condensation mode) in high speed.		O	-	004-084 to 004-088	X			NOHAD
004-084	FAN ASSY FUSING EXHAUST 1_2 LOW	Rotates FUSING EXHAUST FAN 1 and 2 normally (not in Condensation mode) in low speed.		O	-	004-083, 004-085~004-088	X			NOHAD
004-085	FAN ASSY FUSING EXHAUST 1 HIGH	Rotates FUSING EXHAUST FAN 1 normally (not in Condensation mode) in high speed.		O	-	004-083, 004-084, 004-086	X			NOHAD
004-086	FAN ASSY FUSING EXHAUST 1 LOW	Rotates FUSING EXHAUST FAN 1 normally (not in Condensation mode) in low speed.		O	-	004-083 to 004-085	X			NOHAD
004-087	FAN ASSY FUSING EXHAUST 2 HIGH	Rotates FUSING EXHAUST FAN 2 normally (not in Condensation mode) in high speed.		O	-	004-083, 004-084, 004-088	X			NOHAD
004-088	FAN ASSY FUSING EXHAUST 2 LOW	Rotates FUSING EXHAUST FAN 2 normally (not in Condensation mode) in low speed.		O	-	004-083, 004-084, 004-087	X			NOHAD
004-089	FAN ASSY CLG 1_2 HIGH	Rotates HEAT SINK FAN 1 and 2 in high speed.		O	-	004-090	X			NOHAD
004-090	FAN ASSY CLG 1_2 LOW	Rotates HEAT SINK FAN 1 and 2 in low speed.		O	-	004-089	X			NOHAD
004-091	FAN ASSY REAR COOLING IOT-R HIGH	Rotates IOT-R REAR COOLING FAN in high speed.		O	-	004-092	X			NOHAD
004-092	FAN ASSY REAR COOLING IOT-R LOW	Rotates IOT-R REAR COOLING FAN in low speed.		O	-	004-091	X			NOHAD
004-093	FAN ASSY WASTE HIGH	Rotates FUSING WASTE FAN when NVM 764-186 [IOTR FAN Control Switch] is '0' (during ON/OFF Control). Rotates FUSING WASTE FAN in high speed when NVM 764-186 [IOTR FAN Control Switch] is '1' (during PWM Control).		O	-	004-097	X			NOHAD
004-095	FAN ASSY FUSING LOWER	Rotates FUSING LOWER FAN in high speed.		O	-	-	X			NOHAD
004-097	FAN ASSY WASTE LOW	Prevents rotation of FUSING WASTE FAN when NVM 764-186 [IOTR FAN Control Switch] is '0' (during ON/OFF Control). Rotates FUSING WASTE FAN in low speed when NVM 764-186 [IOTR FAN Control Switch] is '1' (during PWM Control).		O	-	004-093	X			NOHAD
004-300	IOT L Front Cover Interlock	Detects the IOT-L Front Cover Interlock On/Off.	O		-	-	X	High	T.B.D	ELEC
004-301	IOT R Front Cover Interlock	Detects the IOT-R Front Cover Interlock On/Off.	O		-	-	X	High	T.B.D	FUSING
004-302	IOT LR Front Cover Interlock A	Detects the IOT-L/R Front Cover Interlock On/Off.	O		-	-	X	High	T.B.D	FUSING
004-303	IOT LR Front Cover Interlock A HL	Detects the IOT-L/R Front Cover Interlock On/Off.	O		-	-	X	High	T.B.D	ELEC
004-304	IOT LR Front Cover Interlock B	Detects the IOT-L/R Front Cover Interlock On/Off.	O		-	-	X		T.B.D	ELEC
004-305	IOT LR Front Cover Interlock B HL EPG	Detects the IOT-L/R Front Cover Interlock On/Off.	O		-	-	X	High	T.B.D	ELEC

Table 1 DC330 Component Check List (Drive)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
004-306	IOT LR Front Cover Interlock B HL PH	Detects the IOT-L/R Front Cover Interlock On/Off.	O		-	-	X	High		REGI
004-307	Big Module Interlock	Detects the Big Module Interlock On/Off.	O		-	-	X	High	T.B.D	ELEC
004-308	Fusing Drawer Interlock	Detects the Fusing Drawer Interlock On/Off.	O		-	-	X	High	T.B.D	FUSING
004-309	Exit Drawer Interlock	Detects the Exit Drawer Interlock On/Off.	O		-	-	X	High	T.B.D	EXIT
004-310	Service Interlock	Detects the Service Interlock Switch On/Off.	O		-	-	X	High	T.B.D	ELEC
004-311	Laser Interlock	Detects the Laser Interlock On/Off.	O		-	-	X	High	T.B.D	ELEC

6.3.1.2 DC330 Component Check List (Optics_ROS)

Table 1 DC330 Component Check List (Optics_ROS)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State	
								Connector Level	Meaning
006-001	PolygonMotorStart #1	Rotates/stops ROS Motor #1.		O	-	006-007	X	Low	
006-002	PolygonMotorStart #2	Rotates/stops ROS Motor #2.		O	-	006-008	X	Low	
006-003	PolygonMotorStart #3	Rotates/stops ROS Motor #3.		O	-	006-009	X	Low	
006-004	PolygonMotorStart #4	Rotates/stops ROS Motor #4.		O	-	006-010	X	Low	
006-005	PolygonMotorStart #5	Rotates/stops ROS Motor #5.		O	-	006-011	X	Low	
006-006	PolygonMotorStart #6	Rotates/stops ROS Motor #6.		O	-	006-012	X	Low	
006-007	ROS LD #1	Laser (VCSEL) #1 On/Off 1. When the ROS LD #1 is turned ON, the ROS MOTOR Start #1 is also turned ON automatically. *ON sequence. Motor -> LD 2. When the ROS LD #1 is turned OFF, the ROS MOTOR Start #1 is also turned OFF automatically. *OFF sequence. LD -> Motor 3. Interlock should be closed during the Check.		O	60 [s]	006-001	X	High	
006-008	ROS LD #2	Laser (VCSEL) #2 On/Off		O	60 [s]	006-002	X	High	
006-009	ROS LD #3	Laser (VCSEL) #3 On/Off		O	60 [s]	006-003	X	High	
006-010	ROS LD #4	Laser (VCSEL) #4 On/Off		O	60 [s]	006-004	X	High	
006-011	ROS LD #5	Laser (VCSEL) #5 On/Off		O	60 [s]	006-005	X	High	
006-012	ROS LD #6	Laser (VCSEL) #6 On/Off		O	60 [s]	006-006	X	High	
006-100	PolygonMotorReadyCheckFail #1	Acquires the Ready (M_READY Signal) state of ROS MOTOR #1.	O		-	-	X	Low	
006-101	PolygonMotorReadyCheckFail #2	Acquires the Ready (M_READY Signal) state of ROS MOTOR #2.	O		-	-	X	Low	
006-102	PolygonMotorReadyCheckFail #3	Acquires the Ready (M_READY Signal) state of ROS MOTOR #3.	O		-	-	X	Low	
006-103	PolygonMotorReadyCheckFail #4	Acquires the Ready (M_READY Signal) state of ROS MOTOR #4.	O		-	-	X	Low	
006-104	PolygonMotorReadyCheckFail #5	Acquires the Ready (M_READY Signal) state of ROS MOTOR #5.	O		-	-	X	Low	
006-105	PolygonMotorReadyCheckFail #6	Acquires the Ready (M_READY Signal) state of ROS MOTOR #6.	O		-	-	X	Low	
006-106	No SOS Fail #1	Acquires the No SOS Fail state of ROS #1.	O		-	-	X	High	
006-107	No SOS Fail #2	Acquires the No SOS Fail state of ROS #2.	O		-	-	X	High	
006-108	No SOS Fail #3	Acquires the No SOS Fail state of ROS #3.	O		-	-	X	High	
006-109	No SOS Fail #4	Acquires the No SOS Fail state of ROS #4.	O		-	-	X	High	
006-110	No SOS Fail #5	Acquires the No SOS Fail state of ROS #5.	O		-	-	X	High	
006-111	No SOS Fail #6	Acquires the No SOS Fail state of ROS #6.	O		-	-	X	High	

Table 1 DC330 Component Check List (Optics_ROS)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State	
								Connector Level	Meaning
006-112	SOS Long Fail #1	Acquires the SOS Long Fail state of ROS #1. Occurs when SOS is detected at the timing the SOS Signal generation interval is -10% or lower.	O		-	-	X	High	
006-113	SOS Long Fail #2	Acquires the SOS Long Fail state of ROS #2.	O		-	-	X	High	
006-114	SOS Long Fail #3	Acquires the SOS Long Fail state of ROS #3.	O		-	-	X	High	
006-115	SOS Long Fail #4	Acquires the SOS Long Fail state of ROS #4.	O		-	-	X	High	
006-116	SOS Long Fail #5	Acquires the SOS Long Fail state of ROS #5.	O		-	-	X	High	
006-117	SOS Long Fail #6	Acquires the SOS Long Fail state of ROS #6.	O		-	-	X	High	
006-118	SOS Short Fail #1	Acquires the SOS Short Fail state of ROS #1. Occurs when SOS is detected at the timing the SOS Signal generation interval is +10% or lower.	O		-	-	X	High	
006-119	SOS Short Fail #2	Acquires the SOS Short Fail state of ROS #2.	O		-	-	X	High	
006-120	SOS Short Fail #3	Acquires the SOS Short Fail state of ROS #3.	O		-	-	X	High	
006-121	SOS Short Fail #4	Acquires the SOS Short Fail state of ROS #4.	O		-	-	X	High	
006-122	SOS Short Fail #5	Acquires the SOS Short Fail state of ROS #5.	O		-	-	X	High	
006-123	SOS Short Fail #6	Acquires the SOS Short Fail state of ROS #6.	O		-	-	X	High	
006-124	SOS Stop Fail #1	Acquires the SOS Stop Fail state of ROS #1.	O		-	-	X	High	
006-125	SOS Stop Fail #2	Acquires the SOS Stop Fail state of ROS #2.	O		-	-	X	High	
006-126	SOS Stop Fail #3	Acquires the SOS Stop Fail state of ROS #3.	O		-	-	X	High	
006-127	SOS Stop Fail #4	Acquires the SOS Stop Fail state of ROS #4.	O		-	-	X	High	
006-128	SOS Stop Fail #5	Acquires the SOS Stop Fail state of ROS #5.	O		-	-	X	High	
006-129	SOS Stop Fail #6	Acquires the SOS Stop Fail state of ROS #6.	O		-	-	X	High	
006-130	LD ALM #1	Acquires the LD ALM Signal of ROS #1. This is detected when a malfunction has occurred at any 1 Beam of the VCSEL.	O		-	-	X	High	
006-131	LD ALM #2	Acquires the LD ALM Signal of ROS #2.	O		-	-	X	High	
006-132	LD ALM #3	Acquires the LD ALM Signal of ROS #3.	O		-	-	X	High	
006-133	LD ALM #4	Acquires the LD ALM Signal of ROS #4.	O		-	-	X	High	
006-134	LD ALM #5	Acquires the LD ALM Signal of ROS #5.	O		-	-	X	High	
006-135	LD ALM #6	Acquires the LD ALM Signal of ROS #6.	O		-	-	X	High	

6.3.1.3 DC330 Component Check List (Paper Supply)

Table 1 DC330 Component Check List (Paper Supply)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
007-001	Tray 1 LIFT Motor	Drives the TRAY 1 LIFT MOTOR after the TRAY 1 NUDGER SOLENOID turns ON. When the Nudger Level Sensor (On -> Off) is detected, TRAY 1 LIFT MOTOR stops and TRAY 1 NUDGER SOLENOID turns OFF.		O	25 [s]	007-002	X			Paper Supply
007-002	Tray 1 Nudger Solenoid	Turns ON the TRAY 1 NUDGER SOLENOID with strong current to lower the Nudger Roll and then switches to weak current after 80 ms has passed.		O	2 [s]	007-001	X			Paper Supply
007-003	Tray 1 Feed Motor (233)	Drives the TRAY 1 FEED MOTOR with weak current (233 mm/s).		O		007-004 to 007-006	X			Paper Supply
007-004	Tray 1 Feed Motor (400)	Drives the TRAY 1 FEED MOTOR with weak current (400 mm/s).		O		007-003, 007-005, 007-006	X			Paper Supply
007-005	Tray 1 Feed Motor (516)	Drives the TRAY 1 FEED MOTOR with weak current (516 mm/s).		O		007-003, 007-004, 007-006	X			Paper Supply
007-006	Tray 1 Feed Motor (700)	Drives the TRAY 1 FEED MOTOR with weak current (700 mm/s).		O		007-003 to 007-005	X			Paper Supply
007-007	Tray 1 Lead Shutter Motor P1	Drives the TRAY 1 LEAD SHUTTER MOTOR in operation profile 1 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-008, 007-009	O			Paper Supply
007-008	Tray 1 Lead Shutter Motor P2	Drives the TRAY 1 LEAD SHUTTER MOTOR in operation profile 2 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-007, 007-009	O			Paper Supply
007-009	Tray 1 Lead Shutter Motor Initialize	Initializes the TRAY 1 LEAD SHUTTER MOTOR.		O		007-007, 007-008	X			Paper Supply
007-010	Tray 1 End Shutter Motor P1	Drives the TRAY 1 END SHUTTER MOTOR in operation profile 1 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-011, 007-012	O			Paper Supply
007-011	Tray 1 End Shutter Motor P2	Drives the TRAY 1 END SHUTTER MOTOR in operation profile 2 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-010, 007-012	O			Paper Supply
007-012	Tray 1 End Shutter Motor Initialize	Initializes the TRAY 1 END SHUTTER MOTOR.		O		007-010, 007-011	X			Paper Supply
007-013	Tray 1 Lead Blower (Hi)	Drives the TRAY 1 LEAD BLOWER FAN in high speed rotation.		O		007-014, 007-015	X			Paper Supply

Table 1 DC330 Component Check List (Paper Supply)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
007-014	Tray 1 Lead Blower (Mid)	Drives the TRAY 1 LEAD BLOWER FAN in medium speed rotation.		O		007-013, 007-015	X			Paper Supply
007-015	Tray 1 Lead Blower (Low)	Drives the TRAY 1 LEAD BLOWER FAN in low speed rotation.		O		007-013, 007-014	X			Paper Supply
007-016	Tray 1 End Blower (Hi)	Drives the TRAY 1 END BLOWER FAN in high speed rotation.		O		007-017, 007-018	X			Paper Supply
007-017	Tray 1 End Blower (Mid)	Drives the TRAY 1 END BLOWER FAN in medium speed rotation.		O		007-016, 007-018	X			Paper Supply
007-018	Tray 1 End Blower (Low)	Drives the TRAY 1 END BLOWER FAN in low speed rotation.		O		007-016, 007-017	X			Paper Supply
007-019	Tray 1 Front Blower (Hi)	Drives the TRAY 1 FRONT BLOWER FAN in high speed rotation.		O		007-020, 007-021	X			Paper Supply
007-020	Tray 1 Front Blower (Mid)	Drives the TRAY 1 FRONT BLOWER FAN in medium speed rotation.		O		007-019, 007-021	X			Paper Supply
007-021	Tray 1 Front Blower (Low)	Drives the TRAY 1 FRONT BLOWER FAN in low speed rotation.		O		007-019, 007-020	X			Paper Supply
007-022	Tray 1 Rear Blower (Hi)	Drives the TRAY 1 REAR BLOWER FAN in high speed rotation.		O		007-023, 007-024	X			Paper Supply
007-023	Tray 1 Rear Blower (Mid)	Drives the TRAY 1 REAR BLOWER FAN in medium speed rotation.		O		007-022, 007-024	X			Paper Supply
007-024	Tray 1 Rear Blower (Low)	Drives the TRAY 1 REAR BLOWER FAN in low speed rotation.		O		007-022, 007-023	X			Paper Supply
007-025	Tray 1 Shift Motor CW	Drives the TRAY 1 SHIFT MOTOR in OUT (CW) direction and stops when Tray 1 Shift Limit Sensor F On is detected.		O		007-026, 007-027	X			Paper Supply
007-026	Tray 1 Shift Motor CCW	Drives the TRAY 1 SHIFT MOTOR in IN (CCW) direction and stops when Tray 1 Shift Limit Sensor R On is detected.		O		007-025, 007-027	X			Paper Supply
007-027	Tray 1 Shift Motor Initialize	Initializes the TRAY 1 SHIFT MOTOR and turns OFF the Shift Motor upon completing the Initialize operation.		O		007-025, 007-026	X			Paper Supply
007-028	Tray 1 T/A Motor	Drives the TRAY 1 T/A MOTOR.		O			X			Paper Supply
007-029	Tray 2 LIFT Motor	Drives the TRAY 2 LIFT MOTOR after the TRAY 2 NUDGER SOLENOID turns ON. When the Nudger Level Sensor (On -> Off) is detected, TRAY 2 LIFT MOTOR stops and TRAY 2 NUDGER SOLENOID turns OFF.		O	25 [s]	007-030	X			Paper Supply
007-030	Tray 2 Nudger Solenoid	Turns ON the TRAY 2 NUDGER SOLENOID with strong current to lower the Nudger Roll and then switches to weak current after 80 ms has passed.		O	2 [s]	007-029	X			Paper Supply
007-031	Tray 2 Feed Motor (233)	Drives the TRAY 2 FEED MOTOR with weak current (233 mm/s).		O		007-032 to 007-034	X			Paper Supply
007-032	Tray 2 Feed Motor (400)	Drives the TRAY 2 FEED MOTOR with weak current (400 mm/s).		O		007-031, 007-033, 007-034	X			Paper Supply
007-033	Tray 2 Feed Motor (516)	Drives the TRAY 2 FEED MOTOR with weak current (516 mm/s).		O		007-031, 007-032, 007-034	X			Paper Supply

Table 1 DC330 Component Check List (Paper Supply)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
007-034	Tray 2 Feed Motor (700)	Drives the TRAY 2 FEED MOTOR with weak current (700 mm/s).		O		007-031 to 007-033	X			Paper Supply
007-035	Tray 2 Lead Shutter Motor P1	Drives the TRAY 2 LEAD SHUTTER MOTOR in operation profile 1 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-036, 007-037	O			Paper Supply
007-036	Tray 2 Lead Shutter Motor P2	Drives the TRAY 2 LEAD SHUTTER MOTOR in operation profile 2 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-035, 007-037	O			Paper Supply
007-037	Tray 2 Lead Shutter Motor Initialize	Initializes the TRAY 2 LEAD SHUTTER MOTOR.		O		007-035, 007-036	X			Paper Supply
007-038	Tray 2 End Shutter Motor P1	Drives the TRAY 2 END SHUTTER MOTOR in operation profile 1 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-039, 007-040	O			Paper Supply
007-039	Tray 2 End Shutter Motor P2	Drives the TRAY 2 END SHUTTER MOTOR in operation profile 2 until Stop is pressed (after Stop is pressed, the Shutter Motor stops immediately). This operation is performed after performing the Shutter Initialize operation.		O		007-038, 007-040	O			Paper Supply
007-040	Tray 2 End Shutter Motor Initialize	Initializes the TRAY 2 END SHUTTER MOTOR.		O		007-038, 007-039	X			Paper Supply
007-041	Tray 2 Lead Blower (Hi)	Drives the TRAY 2 LEAD BLOWER FAN in high speed rotation.		O		007-042, 007-043	X			Paper Supply
007-042	Tray 2 Lead Blower (Mid)	Drives the TRAY 2 LEAD BLOWER FAN in medium speed rotation.		O		007-041, 007-043	X			Paper Supply
007-043	Tray 2 Lead Blower (Low)	Drives the TRAY 2 LEAD BLOWER FAN in low speed rotation.		O		007-041, 007-042	X			Paper Supply
007-044	Tray 2 End Blower (Hi)	Drives the TRAY 2 END BLOWER FAN in high speed rotation.		O		007-045, 007-046	X			Paper Supply
007-045	Tray 2 End Blower (Mid)	Drives the TRAY 2 END BLOWER FAN in medium speed rotation.		O		007-044, 007-046	X			Paper Supply
007-046	Tray 2 End Blower (Low)	Drives the TRAY 2 END BLOWER FAN in low speed rotation.		O		007-044, 007-045	X			Paper Supply
007-047	Tray 2 Front Blower (Hi)	Drives the TRAY 2 FRONT BLOWER FAN in high speed rotation.		O		007-048, 007-049	X			Paper Supply
007-048	Tray 2 Front Blower (Mid)	Drives the TRAY 2 FRONT BLOWER FAN in medium speed rotation.		O		007-047, 007-049	X			Paper Supply
007-049	Tray 2 Front Blower (Low)	Drives the TRAY 2 FRONT BLOWER FAN in low speed rotation.		O		007-047, 007-048	X			Paper Supply

Table 1 DC330 Component Check List (Paper Supply)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
007-050	Tray 2 Rear Blower (Hi)	Drives the TRAY 2 REAR BLOWER FAN in high speed rotation.		O		007-051, 007-052	X			Paper Supply
007-051	Tray 2 Rear Blower (Mid)	Drives the TRAY 2 REAR BLOWER FAN in medium speed rotation.		O		007-050, 007-052	X			Paper Supply
007-052	Tray 2 Rear Blower (Low)	Drives the TRAY 2 REAR BLOWER FAN in low speed rotation.		O		007-050, 007-051	X			Paper Supply
007-053	Tray 2 Shift Motor CW	Drives the TRAY 2 SHIFT MOTOR in OUT (CW) direction and stops when Tray 2 Shift Limit Sensor F On is detected.		O		007-054, 007-055	X			Paper Supply
007-054	Tray 2 Shift Motor CCW	Drives the TRAY 2 SHIFT MOTOR in IN (CCW) direction and stops when Tray 2 Shift Limit Sensor R On is detected.		O		007-053, 007-055	X			Paper Supply
007-055	Tray 2 Shift Motor Initialize	Initializes the TRAY 2 SHIFT MOTOR and turns OFF the Shift Motor upon completing the Initialize operation.		O		007-053, 007-054	X			Paper Supply
007-056	Tray 2 T/A Motor	Drives the TRAY 2 T/A MOTOR.		O			X			Paper Supply
007-100	Tray 1 Upper No Paper Sensor	Detects the TRAY 1 UPPER NO PAPER SENSOR On/Off.	O				X	High	No paper in Tray	Paper Supply
007-101	Tray 1 Nudger Level Sensor	Detects the TRAY 1 LEVEL SENSOR On/Off.	O				X	Low	The Nudger is lowered	Paper Supply
007-102	Tray 1 Pre Feed Sensor	Detects the TRAY 1 PRE FEED SENSOR On/Off.	O				X	Low	Paper Detected	Paper Supply
007-103	Tray 1 Feed Out Sensor	Detects the TRAY 1 FEED OUT SENSOR On/Off.	O				X	Low	Paper Detected	Paper Supply
007-104	Tray 1 Lower No Paper Sensor	Detects the TRAY 1 LOWER NO PAPER SENSOR On/Off.	O				X	High	No paper in Tray	Paper Supply
007-105	Tray 1 Size Sensor 0	Detects the TRAY 1 SIZE SENSOR 0 On/Off.	O				X	High	Detects the paper size from the output of 7 sensors ***NOTE:*** *Levels are reversed at the connector end and port end*	Paper Supply
007-106	Tray 1 Size Sensor 1	Detects the TRAY 1 SIZE SENSOR 1 On/Off.	O				X	High	Same as above	Paper Supply
007-107	Tray 1 Size Sensor 2	Detects the TRAY 1 SIZE SENSOR 2 On/Off.	O				X	High	Same as above	Paper Supply
007-108	Tray 1 Size Sensor 3	Detects the TRAY 1 SIZE SENSOR 3 On/Off.	O				X	High	Same as above	Paper Supply
007-109	Tray 1 Size Sensor 4	Detects the TRAY 1 SIZE SENSOR 4 On/Off.	O				X	High	Same as above	Paper Supply
007-110	Tray 1 Size Sensor 5	Detects the TRAY 1 SIZE SENSOR 5 On/Off.	O				X	High	Same as above	Paper Supply
007-111	Tray 1 Size Sensor 6	Detects the TRAY 1 SIZE SENSOR 6 On/Off.	O				X	High	Same as above	Paper Supply
007-112	Tray 1 Front Miss Set Sensor	Detects the TRAY 1 FRONT MISSET SENSOR On/Off.	O				X	High	Paper detected	Paper Supply
007-113	Tray 1 In Sensor	Detects the TRAY 1 INTLK SWITCH On/Off.	O				X	High	Open	Paper Supply
007-114	Tray 1 Lead Shutter Home Sensor	Detects the TRAY 1 LEAD SHUTTER HOME SENSOR On/Off.	O				X	High	Home detected	Paper Supply
007-115	Tray 1 End Shutter Home Sensor	Detects the TRAY 1 END SHUTTER HOME SENSOR On/Off.	O				X	High	Home detected	Paper Supply

Table 1 DC330 Component Check List (Paper Supply)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
007-116	Tray 1 Lead Blowe Funr Fail	Detects the TRAY 1 LEAD BLOWER FAN Fail On/Off.	O				X	High	Failure States	Paper Supply
007-117	Tray 1 End Blower Fun Fail	Detects the TRAY 1 END BLOWER FAN Fun Fail On/Off.	O				X	High	Failure States	Paper Supply
007-118	Tray 1 Front Blower Fun Fail	Detects the TRAY 1 FRONT BLOWER FAN Fun Fail On/Off.	O				X	High	Failure States	Paper Supply
007-119	Tray 1 Rear Blower Fun Fail	Detects the TRAY 1 REAR BLOWER FAN Fun Fail On/Off.	O				X	High	Failure States	Paper Supply
007-120	Tray 1 Shift Home Sensor	Detects the TRAY 1 SHIFT HOME SENSOR On/Off.	O				X	High	Home detected	Paper Supply
007-121	Tray 1 Shift Front Limit Sensor	Detects the TRAY 1 SHIFT FRONT LIMIT SENSOR On/Off.	O				X	High	Overrun detected	Paper Supply
007-122	Tray 1 Shift Rear Limit Sensor	Detects the TRAY 1 SHIFT REAR LIMIT SENSOR On/Off.	O				X	High	Overrun detected	Paper Supply
007-123	Tray 2 Ueppr No Paper Sensor	Detects the TRAY 2 UPPER NO PAPER SENSOR On/Off.	O				X	High	No paper in Tray	Paper Supply
007-124	Tray 2 Nudger Level Sensor	Detects the TRAY 2 LEVEL SENSOR On/Off.	O				X	Low	The Nudger is lowered	Paper Supply
007-125	Tray 2 Pre Feed Sensor	Detects the TRAY 2 PRE FEED SENSOR On/Off.	O				X	Low	Paper Detected	Paper Supply
007-126	Tray 2 Feed Out Sensor	Detects the TRAY 2 FEED OUT SENSOR On/Off.	O				X	Low	Paper Detected	Paper Supply
007-127	Tray 2 Lower No Paper Sensor	Detects the TRAY 2 LOWER NO PAPER SENSOR On/Off.	O				X	High	No paper in Tray	Paper Supply
007-128	Tray 2 Size Sensor 0	Detects the TRAY 2 SIZE SENSOR 0 On/Off.	O				X	High	Detects the paper size from the output of 7 sensors ***NOTE:*** *Levels are reversed at the connector end and port end*	Paper Supply
007-129	Tray 2 Size Sensor 1	Detects the TRAY 2 SIZE SENSOR 1 On/Off.	O				X	High	Detects the paper size from the output of 7 sensors ***NOTE:*** *Levels are reversed at the connector end and port end*	Paper Supply
007-130	Tray 2 Size Sensor 2	Detects the TRAY 2 SIZE SENSOR 2 On/Off.	O				X	High	Same as above	Paper Supply
007-131	Tray 2 Size Sensor 3	Detects the TRAY 2 SIZE SENSOR 3 On/Off.	O				X	High	Same as above	Paper Supply
007-132	Tray 2 Size Sensor 4	Detects the TRAY 2 SIZE SENSOR 4 On/Off.	O				X	High	Same as above	Paper Supply
007-133	Tray 2 Size Sensor 5	Detects the TRAY 2 SIZE SENSOR 5 On/Off.	O				X	High	Same as above	Paper Supply
007-134	Tray 2 Size Sensor 6	Detects the TRAY 2 SIZE SENSOR 6 On/Off.	O				X	High	Same as above	Paper Supply
007-135	Tray 2 Front MissSet Sensor	Detects the TRAY 2 FRONT MISSET SENSOR On/Off.	O				X	High	Paper detected	Paper Supply
007-136	Tray 2 In Sensor	Detects the TRAY 2 INTLK SWITCH On/Off.	O				X	High	Open	Paper Supply
007-137	Tray 2 Lead Shutter Home Sensor	Detects the TRAY 2 LEAD SHUTTER HOME SENSOR On/Off.	O				X	High	Home detected	Paper Supply

Table 1 DC330 Component Check List (Paper Supply)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
007-138	Tray 2 End Shutter Home Sensor	Detects the TRAY 2 END SHUTTER HOME SENSOR On/Off.	O				X	High	Home detected	Paper Supply
007-139	Tray 2 Lead Blower Fail	Detects the TRAY 2 LEAD BLOWER FAN Fail On/Off.	O				X	High	Failure States	Paper Supply
007-140	Tray 2 End Blower Fail	Detects the TRAY 2 END BLOWER FAN Fail On/Off.	O				X	High	Failure States	Paper Supply
007-141	Tray 2 Front Blower Fail	Detects the TRAY 2 FRONT BLOWER FAN Fail On/Off.	O				X	High	Failure States	Paper Supply
007-142	Tray 2 Rear Blower Fail	Detects the TRAY 2 REAR BLOWER FAN Fail On/Off.	O				X	High	Failure States	Paper Supply
007-143	Tray 2 Shift Home Sensor	Detects the TRAY 2 SHIFT HOME SENSOR On/Off.	O				X	High	Home detected	Paper Supply
007-144	Tray 2 Shift Front Limit Sensor	Detects the TRAY 2 SHIFT FRONT LIMIT SENSOR On/Off.	O				X	High	Overrun detected	Paper Supply
007-145	Tray 2 Shift Rear Limit Sensor	Detects the TRAY 2 SHIFT REAR LIMIT SENSOR On/Off.	O				X	High	Overrun detected	Paper Supply

6.3.1.4 DC330 Component Check List (Paper Feed_Transport)

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-001	OCT Motor CW	Turns ON the OCT OFFSET MOTOR in rear direction (CW). When performing another check, move it in the opposite direction before the operation.		O	200 [ms]	008-002	X	ON in CW direction		Paper Feed_Transport
008-002	OCT Motor CCW	Turns ON the OCT OFFSET MOTOR in front direction (CCW). When performing another check, move it in the opposite direction before the operation.		O	200 [ms]	008-001	X	ON in CCW direction		Paper Feed_Transport
008-003	Invert Entrance Motor [204 mm/s] [Decurler Transport Speed 4]	Drives the INVERT ENTRANCE MOTOR at 204 mm/s Decurler Transport Speed 4.		O	-	008-004~008-008, 008-424	X			Paper Feed_Transport
008-004	Invert Entrance Motor [326 mm/s] [Decurler Transport Speed 3]	Drives the INVERT ENTRANCE MOTOR at 326 mm/s Decurler Transport Speed 3.		O	-	008-003, 008-005~008-008, 008-424	X			Paper Feed_Transport
008-005	Invert Entrance Motor [544 mm/s] [Decurler Transport Speed 1]	Drives the INVERT ENTRANCE MOTOR at 544 mm/s Decurler Transport Speed 1.		O	-	008-003, 008-004, 008-006~008-008, 008-424	X			Paper Feed_Transport
008-006	Invert Entrance Motor [445 mm/s] [Decurler Transport Speed 2]	Drives the INVERT ENTRANCE MOTOR at 445 mm/s Decurler Transport Speed 2.		O	-	008-003 to 008-005, 008-007, 008-008, 008-424	X			Paper Feed_Transport
008-007	Invert Entrance Motor [1000 mm/s]	Drives the INVERT ENTRANCE MOTOR at 1000 mm/s.		O	-	008-003, 008-004, 008-005, 008-006, 008-008, 008-424	X			Paper Feed_Transport
008-008	Invert Entrance Motor [1100 mm/s]	Drives the INVERT ENTRANCE MOTOR at 1100 mm/s.		O	-	008-003~008-007, 008-424	X			Paper Feed_Transport
008-009	Invert Upper Motor (Forward Rotation) [204 mm/s] [Decurler Transport Speed 4]	Drives the INVERT UPPER MOTOR at 204 mm/s Decurler Transport Speed 4 in forward rotation (CCW).		O	-	008-010~008-013, 008-038	X			Paper Feed_Transport
008-010	Invert Upper Motor (Forward Rotation) [326 mm/s] [Decurler Transport Speed 3]	Drives the INVERT UPPER MOTOR at 326 mm/s Decurler Transport Speed 3 in forward rotation (CCW).		O	-	008-009, 008-011~008-013, 008-038	X			Paper Feed_Transport
008-011	Invert Upper Motor (Forward Rotation) [544 mm/s] [Decurler Transport Speed 1]	Drives the INVERT UPPER MOTOR at 544 mm/s Decurler Transport Speed 1 in forward rotation (CCW).		O	-	008-009, 008-010, 008-012, 008-013, 008-038	X			Paper Feed_Transport
008-012	Invert Upper Motor (Forward Rotation) [445 mm/s] [Decurler Transport Speed 2]	Drives the INVERT UPPER MOTOR at 445 mm/s Decurler Transport Speed 2 in forward rotation (CCW).		O	-	008-009~008-011, 008-013, 008-038	X			Paper Feed_Transport
008-013	Invert Upper Motor (Forward Rotation) [1000 mm/s]	Drives the INVERT UPPER MOTOR at 1000 mm/s in forward rotation (CCW).		O	-	008-009~008-012, 008-038	X			Paper Feed_Transport
008-014	Exit Motor [204 mm/s] [Decurler Transport Speed 4]	Drives the IOT EXIT MOTOR at 204 mm/s Decurler Transport Speed 4.		O	-	008-015 to 008-019	X			Paper Feed_Transport
008-015	Exit Motor [326 mm/s] [Decurler Transport Speed 3]	Drives the IOT EXIT MOTOR at 326 mm/s Decurler Transport Speed 3.		O	-	008-014, 008-016~008-019	X			Paper Feed_Transport
008-016	Exit Motor [350 mm/s]	Drives the IOT EXIT MOTOR at 350 mm/s.		O	-	008-014, 008-015, 008-017 to 008-019	X			Paper Feed_Transport
008-017	Exit Motor [544 mm/s] [Decurler Transport Speed 1]	Drives the IOT EXIT MOTOR at 544 mm/s Decurler Transport Speed 1.		O	-	008-014~008-016, 008-018, 008-019	X			Paper Feed_Transport
008-018	Exit Motor [445 mm/s] [Decurler Transport Speed 2]	Drives the IOT EXIT MOTOR at 445 mm/s Decurler Transport Speed 2.		O	-	008-014~008-017, 008-019	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-019	Exit Motor [1000 mm/s]	Drives the IOT EXIT MOTOR at 1000 mm/s.		O	-	008-014 to 008-018	X			Paper Feed_Transport
008-020	Invert In Motor [326 mm/s] [Decurler Transport Speed 3]	Drives the INVERT IN MOTOR at 326 mm/s Decurler Transport Speed 3. Starts up with strong current.		O	-	008-021~008-023, 008-421, 008-425	X			Paper Feed_Transport
008-021	Invert In Motor [544 mm/s] [Decurler Transport Speed 1]	Drives the INVERT IN MOTOR at 544 mm/s Decurler Transport Speed 1. Starts up with strong current.		O	-	008-020, 008-022, 008-023, 008-421, 008-425	X			Paper Feed_Transport
008-022	Invert In Motor [445 mm/s] [Decurler Transport Speed 2]	Drives the INVERT IN MOTOR at 445 mm/s Decurler Transport Speed 2. Starts up with strong current.		O	-	008-020~008-023, 008-421, 008-425	X			Paper Feed_Transport
008-023	Invert In Motor [1100 mm/s]	Drives the INVERT IN MOTOR at 1100 mm/s. Starts up with strong current.		O	-	008-020~008-022, 008-421, 008-425	X			Paper Feed_Transport
008-024	Invert Motor (Forward Rotation) [326 mm/s] [Decurler Transport Speed 3]	Drives the INVERT MOTOR at 326 mm/s Decurler Transport Speed 3 in forward rotation (CW). Starts up with strong current.		O	-	008-025~008-028, 008-422, 008-426	X			Paper Feed_Transport
008-025	Invert Motor (Forward Rotation) [544 mm/s] [Decurler Transport Speed 1]	Drives the INVERT MOTOR at 544 mm/s Decurler Transport Speed 1 in forward rotation (CW). Starts up with strong current.		O	-	008-024, 008-026~008-028, 008-422, 008-426	X			Paper Feed_Transport
008-026	Invert Motor (Forward Rotation) [445 mm/s] [Decurler Transport Speed 2]	Drives the INVERT MOTOR at 445 mm/s Decurler Transport Speed 2 in forward rotation (CW). Starts up with strong current.		O	-	008-024, 008-025, 008-027, 008-028, 008-422, 008-426	X			Paper Feed_Transport
008-027	Invert Motor (Forward Rotation) [1100 mm/s]	Drives the INVERT UPPER MOTOR at 1100 mm/s in forward rotation (CW). Starts up with strong current. Step 220 -> Step Up at Step 163.		O	-	008-024~008-028, 008-422, 008-426	X			Paper Feed_Transport
008-028	Invert Motor (Reverse Rotation) [1000 mm/s]	Drives the INVERT MOTOR at 1000 mm/s in reverse rotation (CCW). Starts up with strong current. Step 220 -> Step Up at Step 173.		O	-	008-024~008-027, 008-422, 008-426	X			Paper Feed_Transport
008-029	Invert Path Motor (Forward Rotation) [326 mm/s] [Decurler Transport Speed 3]	Drives the INVERT PATH MOTOR at 326 mm/s Decurler Transport Speed 3 in forward rotation (CCW). Starts up with strong current. Performs 1 pulse output at Pre-excitation.		O	-	008-030~008-033, 008-423, 008-427	X			Paper Feed_Transport
008-030	Invert Path Motor (Forward Rotation) [544 mm/s] [Decurler Transport Speed 1]	Drives the INVERT PATH MOTOR at 544 mm/s Decurler Transport Speed 1 in forward rotation (CCW). Starts up with strong current. Performs 1 pulse output at Pre-excitation.		O	-	008-029, 008-031~008-033, 008-423, 008-427	X			Paper Feed_Transport
008-031	Invert Path Motor (Forward Rotation) [445 mm/s] [Decurler Transport Speed 2]	Drives the INVERT PATH MOTOR at 445 mm/s Decurler Transport Speed 2 in forward rotation (CCW). Starts up with strong current. Performs 1 pulse output at Pre-excitation.		O	-	008-029, 008-030, 008-032, 008-033, 008-423, 008-427	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-032	Invert Path Motor (Forward Rotation) [1100 mm/s]	Drives the INVERT PATH MOTOR at 1100 mm/s in forward rotation (CCW). Starts up with strong current. Performs 1 pulse output at Pre-excitation. Step 220 -> Step Up at Step 163.		O	-	008-029 to 008-031, 008-033, 008-423, 008-427	X			Paper Feed_Transport
008-033	Invert Path Motor (Reverse Rotation) [1000 mm/s]	Drives the INVERT PATH MOTOR at 1000 mm/s in reverse rotation (CW). Starts up with strong current. Performs 1 pulse output at Pre-excitation. Step 220 -> Step Up at Step 173.		O	-	008-029~008-032, 008-423, 008-427	X			Paper Feed_Transport
008-034	Invert In Gate Motor (Exit)	Drives the INVERT GATE MOTOR to switch the Invert In Gate position to the Exit side. Stops the INVERT GATE MOTOR when 20 ms had passed after the detection of Invert Gate Sensor falling (ON -> OFF).		O	200 [ms]	008-035	X			Paper Feed_Transport
008-035	Invert In Gate Motor (Invert)	Drives the INVERT GATE MOTOR to switch the Invert In Gate position to the Invert side. Stops the INVERT GATE MOTOR when 20 ms had passed after the detection of Invert Gate Sensor rising (OFF -> ON).		O	200 [ms]	008-034	X			Paper Feed_Transport
008-036	Invert N/R Motor (Roll Nip)	Drives the INVERT N/R MOTOR to Nip the Invert Roll. Stops the Invert N/R Motor when 20 ms had passed after the detection of Invert N/R Sensor falling (ON -> OFF).		O	200 [ms]	008-037	X			Paper Feed_Transport
008-037	Invert N/R Motor (Roll Release)	Drives the INVERT N/R MOTOR to Release the Invert Roll. Stops the Invert N/R Motor when 20 ms had passed after the detection of Invert N/R Sensor rising (OFF -> ON).		O	200 [ms]	008-036	X			Paper Feed_Transport
008-038	Invert Upper Motor (Reverse Rotation) [1000 mm/s]	Drives the INVERT UPPER MOTOR at 1000 mm/s in reverse rotation (CW).		O	-	008-009 to 008-013	X			Paper Feed_Transport
008-039	J-Tra 1 Motor	Drives the J-TRA 1 MOTOR at 1100 mm/s.		O	-	-	X			Paper Feed_Transport
008-040	J-Tra 2 Motor	Drives the J-TRA 2 MOTOR at 1100 mm/s.		O	-	-	X			Paper Feed_Transport
008-041	H_Tra 1 Motor 1 [1100 mm/s]	Drives the H-TRA 1 MOTOR 1 at 1100 mm/s.		O	-	008-042	X			Paper Feed_Transport
008-042	H_Tra 1 Motor 1 [600 mm/s]	Drives the H-TRA 1 MOTOR 1 at 600 mm/s.		O	-	008-041	X			Paper Feed_Transport
008-043	H-Tra 1 Motor 2	Drives the H-TRA 1 MOTOR 2 at 1100 mm/s.		O	-	-	X			Paper Feed_Transport
008-044	H-Tra 1 Clutch	Turns ON the H-TRA 1 CLUTCH.		O	-	-	X			Paper Feed_Transport
008-045	H-Tra 2 In Motor	Drives the H-TRA 2 IN MOTOR at 1100 mm/s.		O	-	-	X			Paper Feed_Transport
008-047	I_Tra Motor [1100 mm/s]	Drives the I-TRA MOTOR at 1100 mm/s.		O	-	008-048, 008-428, 008-429	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-048	I_Tra Motor [600 mm/s]	Drives the I-TRA MOTOR at 600 mm/s.		O	-	008-047, 008-428, 008-429	X			Paper Feed_Transport
008-049	Transport Motor [1100 mm/s]	Drives the TRANSPORT MOTOR at 1100 mm/s.		O	-	008-050, 008-430, 008-431	X			Paper Feed_Transport
008-050	Transport Motor [600 mm/s]	Drives the TRANSPORT MOTOR at 600 mm/s.		O	-	008-049, 008-430, 008-431	X			Paper Feed_Transport
008-051	Pre Regi 1 Motor [1100 mm/s]	Drives the PRE REGI MOTOR 1 at 1100 mm/s.		O	-	008-052, 008-413, 008-432	X			Paper Feed_Transport
008-052	Pre Regi 1 Motor [600 mm/s]	Drives the PRE REGI MOTOR 1 at 600 mm/s.		O	-	008-051, 008-413, 008-432	X			Paper Feed_Transport
008-053	Pre Regi 2 Motor [1100 mm/s]	Drives the PRE REGI MOTOR 2 at 1100 mm/s.		O	-	008-054, 008-414, 008-433	X			Paper Feed_Transport
008-054	Pre Regi 2 Motor [600 mm/s]	Drives the PRE REGI MOTOR 2 at 600 mm/s.		O	-	008-053, 008-414, 008-433	X			Paper Feed_Transport
008-055	Pre Regi 1 N/R Motor (Release)	Drives the P-REGI ROLL 1 N/R MOTOR to perform Release operation. The excitation switches to weak current when the Motor stops and it will stop 1000 ms after that. Apply Pre Regi 1 Nip/Release Fail for abnormality detection.		O	-	008-056, 008-057	X			Paper Feed_Transport
008-056	Pre Regi 1 N/R Motor (Nip)	Drives the P-REGI ROLL 1 N/R MOTOR to perform Nip operation. Apply Pre Regi 1 Nip/Release Fail for abnormality detection.		O	-	008-055, 008-057	X			Paper Feed_Transport
008-057	Pre Regi 1 N/R Motor (Cyclic)	Drives the P-REGI ROLL 1 N/R MOTOR to perform Initialize operation. After the completion of Initialize operation, the above mentioned Release operation and Nip operation are repeated alternately in 300 ms intervals. Apply Pre Regi 1 Nip/Release Fail for abnormality detection.		O	-	008-055, 008-056	O			Paper Feed_Transport
008-058	Pre Regi 2 N/R Motor (Release)	Drives the P-REGI ROLL 2 N/R MOTOR to perform Release operation. The excitation switches to weak current when the Motor stops and it will stop 1000 ms after that. Apply Pre Regi 1 Nip/Release Fail for abnormality detection.		O	-	008-059, 008-060	X			Paper Feed_Transport
008-059	Pre Regi 2 N/R Motor (Nip)	Drives the P-REGI ROLL 2 N/R MOTOR to perform Nip operation. Apply Pre Regi 1 Nip/Release Fail for abnormality detection.		O	-	008-058, 008-060	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-060	Pre Regi 2 N/R Motor (Cyclic)	Drives the P-REGI ROLL 2 N/R MOTOR to perform Initialize operation. After the completion of Initialize operation, the above mentioned Release operation and Nip operation are repeated alternately in 300 ms intervals. Apply Pre Regi 1 Nip/Release Fail for abnormality detection.		O	-	008-058, 008-059	O			Paper Feed_Transport
008-061	D-Tra Motor 1	Drives the D-TRA MOTOR 1 at 1100 mm/s. Performs 1 pulse output at Pre-excitation.		O	-	-	X			Paper Feed_Transport
008-062	D-Tra Motor 2	Drives the D-TRA MOTOR 2 at 1100 mm/s. Performs 1 pulse output at Pre-excitation.		O	-	-	X			Paper Feed_Transport
008-063	Duplex Invert Motor (Forward Rotation, 1100 mm/s).	Drives the DUP INVERT MOTOR at 1100 mm/s in forward rotation (CW). (Both excitation and operation are with strong current)		O	-	008-064, 008-065	X			Paper Feed_Transport
008-064	Duplex Invert Motor (Reverse Rotation, 1100 mm/s)	Drives the DUP INVERT MOTOR at 1100 mm/s in reverse rotation (CCW). (Both excitation and operation are with strong current)		O	-	008-063, 008-065	X			Paper Feed_Transport
008-065	Duplex Invert Motor (Reverse Rotation, 300 mm/s)	Drives the DUP INVERT MOTOR at 300 mm/s in reverse rotation (CCW). (Both excitation and operation are with strong current)		O	-	008-063, 008-064	X			Paper Feed_Transport
008-066	Dup Motor (1100 mm/s)	Drives the DUPLEX MOTOR at 1100 mm/s in forward rotation. Performs 1 pulse output at Pre-excitation.		O	-	008-067	X			Paper Feed_Transport
008-067	Dup Motor (300 mm/s)	Drives the DUPLEX MOTOR at 300 mm/s in forward rotation. Performs 1 pulse output at Pre-excitation.		O	-	008-066	X			Paper Feed_Transport
008-068	Dup Out Motor (1100 mm/s)	Drives the DUP OUT MOTOR at 1100 mm/s in forward rotation. Performs 1 pulse output at Pre-excitation.		O	-	008-069	X			Paper Feed_Transport
008-069	Dup Out Motor (300 mm/s)	Drives the DUP OUT MOTOR at 300 mm/s in forward rotation. Performs 1 pulse output at Pre-excitation.		O	-	008-068	X			Paper Feed_Transport
008-070	Aligner Crossed N_R Motor 1 (Initialize)	Drives the ALIGNER CROSSED N/R MOTOR #1 to perform Initialize operation. Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-073, 008-076	X			Paper Feed_Transport
008-071	Aligner Crossed N_R Motor 2 (Initialize)	Drives the ALIGNER CROSSED N/R MOTOR #2 to perform Initialize operation. Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-074, 008-077	X			Paper Feed_Transport
008-072	Aligner Crossed N_R Motor 3 (Initialize)	Drives the ALIGNER CROSSED N/R MOTOR #3 to perform Initialize operation. Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-075, 008-078	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-073	Aligner Crossed N_R Motor 1 (Nip Min)	Drives the ALIGNER CROSSED N/R MOTOR #1 to perform Nip operation. Pulse count of Nip operation P = 10 Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-070, 008-076	X			Paper Feed_Transport
008-074	Aligner Crossed N_R Motor 2 (Nip Min)	Drives the ALIGNER CROSSED N/R MOTOR #2 to perform Nip operation. Pulse count of Nip operation P = 10 Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-071, 008-077	X			Paper Feed_Transport
008-075	Aligner Crossed N_R Motor 3 (Nip Min)	Drives the ALIGNER CROSSED N/R MOTOR #3 to perform Nip operation. Pulse count of Nip operation P = 10 Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-072, 008-078	X			Paper Feed_Transport
008-076	Aligner Crossed N_R Motor 1 (Nip Max)	Drives the ALIGNER CROSSED N/R MOTOR #1 to perform Nip operation. Pulse count of Nip operation P = 90 Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-070, 008-073	X			Paper Feed_Transport
008-077	Aligner Crossed N_R Motor 2 (Nip Max)	Drives the ALIGNER CROSSED N/R MOTOR #2 to perform Nip operation. Pulse count of Nip operation P = 90 Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-071, 008-074	X			Paper Feed_Transport
008-078	Aligner Crossed N_R Motor 3 (Nip Max)	Drives the ALIGNER CROSSED N/R MOTOR #3 to perform Nip operation. Pulse count of Nip operation P = 90 Apply Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-072, 008-075	X			Paper Feed_Transport
008-079	Aligner Drive Motor [600 mm/s]	Drives the ALIGNER DRIVE MOTOR at 600 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-415	X			Paper Feed_Transport
008-080	Pre Aligner Drive Motor [600 mm/s]	Drives the PRE ALIGNER DRIVE MOTOR REAR at 600 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-416	X			Paper Feed_Transport
008-081	Pre Aligner N_R Motor (Initialize)	Drives the PRE ALIGNER N/R MOTOR to perform Initialize operation. Apply Pre Aligner Nip/Release Fail for abnormality detection.		O	-	008-082 to 008-084	X			Paper Feed_Transport
008-082	Pre Aligner N_R Motor (Release)	Drives the PRE ALIGNER N/R MOTOR to perform Release operation. Apply Pre Aligner Nip/Release Fail for abnormality detection.		O	5 [s]	008-081, 008-083, 008-084	X			Paper Feed_Transport
008-083	Pre Aligner N_R Motor (Nip)	Drives the PRE ALIGNER N/R MOTOR to perform Nip operation. Apply Pre Aligner Nip/Release Fail for abnormality detection.		O	-	008-081, 008-082, 008-084	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-084	Pre Aligner N_R Motor (Cyclic)	Drives the PRE ALIGNER N/R MOTOR to perform Initialize operation. After the completion of Initialize operation, the above mentioned Release operation and Nip operation are repeated alternately in 300 ms intervals. Apply Pre Aligner Nip/Release Fail for abnormality detection.		O	-	008-081 to 008-083	O			Paper Feed_Transport
008-085	Aligner Unit Skew Motor	Drives the ALIGNER UNIT SKEW MOTOR to perform Unit Skew operation. Apply Unit Skew Fail for abnormality detection.		O	-	-	X			Paper Feed_Transport
008-086	Aligner Shift Motor (Initialize)	Drives the ALIGNER SHIFT MOTOR to perform Initialize operation. Apply Aligner Shift Fail for abnormality detection.		O	-	008-087, 008-088	X			Paper Feed_Transport
008-087	Aligner Shift Motor (Shift Min)	Drives the ALIGNER SHIFT MOTOR to perform Initialize operation. After the Initialize operation has completed, Shift operation will be performed. Number of pulses for Shift operation X = 239 Apply Aligner Shift Fail for abnormality detection.		O	-	008-086, 008-088	X			Paper Feed_Transport
008-088	Aligner Shift Motor (Shift Max)	Drives the ALIGNER SHIFT MOTOR to perform Initialize operation. After the Initialize operation has completed, Shift operation will be performed. Number of pulses for Shift operation X = 10703 Apply Aligner Shift Fail for abnormality detection.		O	-	008-086, 008-087	X			Paper Feed_Transport
008-089	Regi Motor [600 mm/s]	Drives the Regi Roll at 600 mm/s.		O	-	008-090, 008-091, 008-420	X			Paper Feed_Transport
008-090	Regi Motor [440.472 mm/s]	Drives the Regi Roll at 440.472 mm/s.		O	-	008-089, 008-091, 008-420	X			Paper Feed_Transport
008-091	Regi Motor [379 mm/s]	Drives the Regi Roll at 379 mm/s.		O	-	008-089, 008-090, 008-420	X			Paper Feed_Transport
008-092	Side Shift Motor (Rear)	Drives the REGI SIDE SHIFT MOTOR at 136 mm/s in reverse rotation (CCW) to move the Regi Roll from the front to the rear. This operation is allowed if the REGI SIDE SHIFT HOME SENSOR is in blocked state at the start of the operation. Once the REGI SIDE SHIFT HOME SENSOR is exposed to light, Step Down will start. Before performing this operation, drive the Regi Motor at 440.472 mm/s.		O	250 [ms]	008-093, 008-094	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-093	Side Shift Motor (Front)	Drives the REGI SIDE SHIFT MOTOR at 136 mm/s in forward rotation (CW) to move the Regi Roll from the rear to the front. This operation is allowed if the REGI SIDE SHIFT HOME SENSOR is in exposed state at the start of the operation. Once the REGI SIDE SHIFT HOME SENSOR is blocked from light, Step Down will start. Before performing this operation, drive the Regi Motor at 440.472 mm/s.		O	250 [ms]	008-092, 008-094	X			Paper Feed_Transport
008-094	Side Shift Motor (Rear_Front)	First, performs Initialize operation of Side Registration Control. And then, cyclic operation is performed at 300 ms intervals for Side Shift operation pattern 1 and Roll Return operation. Apply Side Shift Home Fail for abnormality detection. Before performing this operation, drive the Regi Motor at 440.472 mm/s.		O	-	008-092, 008-093	O			Paper Feed_Transport
008-095	Regi N_R Motor (Up)	Drives the REGI N/R MOTOR to change the Regi Roll from the Nip state to the Release state. This operation is allowed if the REGI N/R HOME SENSOR is in exposed state at the start of the operation. Once the REGI N/R HOME SENSOR is blocked from light, the Step Down will start and the operation will stop. If the Sensor becomes blocked within 83 ms after the operation had started, the operation will continue without the Step Down. Instead, the Step Down will start and the operation will stop at the next time the Sensor is blocked.		O	400 [ms]	008-096, 008-097	X			Paper Feed_Transport
008-096	Regi N_R Motor (Down)	Drives the REGI N/R MOTOR to change the Regi Roll from the Release state to the Nip state. This operation is allowed if the REGI N/R HOME SENSOR is in blocked state at the start of the operation. The initialization operation for the Regi N/R Control is performed.		O	200 [ms]	008-095, 008-097	X			Paper Feed_Transport
008-097	Regi N_R Motor (Up_Down)	First, the initialization operation for the Regi N/R Control is performed. And then, cyclic operation is performed at 200 ms intervals for the above-mentioned REGI N/R MOTOR (Release) operation and the REGI N/R MOTOR (Nip) operation to repetitively switch between the Release state and the Nip state. If the state of REGI N/R HOME SENSOR did not change within 200 ms after the drive for the Motor has started, the drive for REGI N/R MOTOR will be stopped.		O	-	008-095, 008-096	O			Paper Feed_Transport
008-098	V_Tra Motor 1	• Drives the selected V-Tra. • Stop with the Stop Key.		O	-	-	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-099	V_Tra Motor 2	• Drives the selected V-Tra. • Stop with the Stop Key.		O	-	-	X			Paper Feed_Transport
008-100	Front Position Sensor	Detects the FRONT POSITION SENSOR On/Off.	O		-	-	X	Front Detection		Paper Feed_Transport
008-101	Rear Position Sensor	Detects the REAR POSITION SENSOR On/Off.	O		-	-	X	Rear Detection		Paper Feed_Transport
008-102	Full Stack Sensor	Detects the OCT FULL STACK SENSOR On/Off.	O		-	-	X	Full Detection		Paper Feed_Transport
008-103	OCT Detect	Detects for the presence of OCT.	O		-	-	X	With OCT		Paper Feed_Transport
008-104	Invert Upper Sensor	Detects the INVERT UPPER SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-105	IOT Exit Sensor	Detects the IOT EXIT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-106	Invert In Sensor	Detects the INVERT IN SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-107	Invert Sensor	Detects the INVERT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-108	Invert Path Sensor	Detects the INVERT PATH SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-109	Invert End Sensor	Detects the INVERT END SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-110	Invert Out Sensor	Detects the INVERT OUT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-111	Invert Gate Sensor	Detects the Exit/Invert direction state of Invert Gate.	O		-	-	X	Exit Direction		Paper Feed_Transport
008-112	Invert N/R Sensor	Detects the Nip/Release state of Invert Roll.	O		-	-	X	Nip		Paper Feed_Transport
008-113	Feed Out Sensor 1	Detects the J-TRA 1 FEED OUT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-114	Feed Out Sensor 2	Detects the J-TRA 2 FEED OUT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-115	H-Tra Path Sensor 1	Detects the H-TRA PATH SENSOR 1 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-116	H-Tra Path Sensor 2	Detects the H-TRA PATH SENSOR 2 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-117	H-Tra Path Sensor 3	Detects the H-TRA PATH SENSOR 3 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-119	H-Tra Path Sensor 5	Detects the H-TRA PATH SENSOR 5 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-120	HCF In Sensor	Detects the HCF IN SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-121	Pre Regi In Sensor	Detects the PRE REGI IN SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-122	Pre Regi Path Sensor	Detects the PRE REGI PATH SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-123	Pre Regi Out Sensor	Detects the PRE REGI OUT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-125	Pre Regi 1 N/R Sensor	Detects the Nip/Release state of Pre Regi Roll 1 N/R Sensor.	O		-	-	X	Home Position		Paper Feed_Transport
008-126	Pre Regi 2 N/R Sensor	Detects the Nip/Release state of Pre Regi Roll 2 N/R Sensor.	O		-	-	X	Home Position		Paper Feed_Transport
008-127	J-Tra 1 Chute Open Sensor	Detects the Open/Close state of J-Tra 1 Chute.	O		-	-	X	Open		Paper Feed_Transport
008-128	J-Tra 2 Chute Open Sensor	Detects the Open/Close state of J-Tra 2 Chute.	O		-	-	X	Open		Paper Feed_Transport
008-129	I-Tra Chute Open Sensor	Detects the Open/Close state of I-Tra Chute.	O		-	-	X	Open		Paper Feed_Transport
008-130	D-Tra Sensor 1	Detects the D-TRA SENSOR 1 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-131	D-Tra Sensor 3	Detects the D-TRA SENSOR 3 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-132	Dup Inv Sensor	Detects the DUP INVERT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-133	Dup Path Sensor	Detects the DUP PATH SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-134	Dup In Sensor	Detects the DUP IN SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-135	Dup Out Sensor	Detects the DUP OUT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-136	Aligner Path Sensor 1 R	Detects the ALIGNER PATH SENSOR 1 On/Off.	O		-		X	Paper Detected		Paper Feed_Transport
008-137	Aligner Path Sensor 2	Detects the ALIGNER PATH SENSOR 2 On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-139	Aligner Crossed N_R Sensor 1	Detects the ALIGNER CROSSED N/R SENSOR 1 On/Off.	O		-	-	X	Home Position		Paper Feed_Transport
008-140	Aligner Crossed N_R Sensor 2	Detects the ALIGNER CROSSED N/R SENSOR 2 On/Off.	O		-	-	X	Home Position		Paper Feed_Transport
008-141	Aligner Crossed N_R Sensor 3	Detects the ALIGNER CROSSED N/R SENSOR 3 On/Off.	O		-	-	X	Home Position		Paper Feed_Transport
008-142	Aligner Unit Home Sensor	Detects the ALIGNER UNIT HOME SENSOR On/Off.	O		-	-	X	Home Position		Paper Feed_Transport
008-143	Aligner Shift Home Sensor	Detects the ALIGNER SHIFT HOME SENSOR On/Off.	O		-	-	X	Home Position		Paper Feed_Transport
008-145	Aligner Shift Limit Sensor R	Detects the ALIGNER SHIFT REAR LIMIT SENSOR On/Off.	O		-	-	X	Limit Position		Paper Feed_Transport
008-146	Pre Aligner N_R Sensor	Detects the P-ALIGNER N/R SENSOR On/Off.	O		-	-	X	Home Position		Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-147	Regi In Sensor	Detects the REGI IN SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-148	Regi Out Sensor	Detects the REGI OUT SENSOR On/Off.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-149	Side Shift Home Sensor	Detects the REGI SIDE SHIFT HOME SENSOR On/Off.	O		-	-	X	RegiRoll Rear		Paper Feed_Transport
008-150	Regi N_R Home Sensor	Detects the REGI N/R HOME SENSOR On/Off.	O		-	-	X	Nip		Paper Feed_Transport
008-151	V_Tra Sensor 1	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-152	V_Tra Sensor 2	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-153	V_Tra Sensor 3	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-154	V_Tra Sensor 4	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-155	V_Tra Sensor 5	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-156	V_Tra Sensor 6	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-157	V_Tra Sensor 7	Detects for paper. Low when paper is detected.	O		-	-	X	Paper Detected		Paper Feed_Transport
008-400	V_Tra Motor 3	• Drives the selected V-Tra. • Stop with the Stop Key.		O	-	-	X			Paper Feed_Transport
008-401	V_Tra Motor 4	• Drives the selected V-Tra. • Stop with the Stop Key.		O	-	-	X			Paper Feed_Transport
008-402	V_Tra Fan 1 High	• Operates the selected V-Tra Fan in high speed. • Stop with the Stop Key.		O	-	008-403	X			Paper Feed_Transport
008-403	V_Tra Fan 1 Low	• Operates the selected V-Tra Fan in low speed. • Stop with the Stop Key.		O	-	008-402	X			Paper Feed_Transport
008-404	V_Tra Fan 2 High	• Operates the selected V-Tra Fan in high speed. • Stop with the Stop Key.		O	-	008-405	X			Paper Feed_Transport
008-405	V_Tra Fan 2 Low	• Operates the selected V-Tra Fan in low speed. • Stop with the Stop Key.		O	-	008-404	X			Paper Feed_Transport
008-406	V_Tra Fan 3 High	• Operates the selected V-Tra Fan in high speed. • Stop with the Stop Key.		O	-	008-407	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-407	V_Tra Fan 3 Low	• Operates the selected V-Tra Fan in low speed. • Stop with the Stop Key.		O	-	008-406	X			Paper Feed_Transport
008-410	V_Tra Led Light	• Turns ON the LED Light. • Turn OFF with the Stop key.		O	-	-	X			Paper Feed_Transport
008-411	CIS Led Light	• Turns ON the LED Light. • Turn OFF with the Stop key.		O	-	-	X			Paper Feed_Transport
008-412	H-Tra 2 Out Motor	Drives the H-TRA 2 OUT MOTOR at 1100 mm/s.		O	-	-	X			Paper Feed_Transport
008-413	Pre Regi 1 Motor [300 mm/s]	Drives the PRE REGI MOTOR 1 at 300 mm/s.		O	-	008-051, 008-052, 008-432	X			Paper Feed_Transport
008-414	Pre Regi 2 Motor [300 mm/s]	Drives the PRE REGI MOTOR 2 at 300 mm/s.		O	-	008-053, 008-054, 008-433	X			Paper Feed_Transport
008-415	Aligner Drive Motor [300 mm/s]	Drives the ALIGNER DRIVE MOTOR at 300 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-079	X			Paper Feed_Transport
008-416	Pre Aligner Drive R Motor [300 mm/s]	Drives the PRE ALIGNER DRIVE MOTOR REAR at 300 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-080	X			Paper Feed_Transport
008-417	Pre Aligner Drive F Motor [600 mm/s]	Drives the PRE ALIGNER DRIVE MOTOR FRONT at 600 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-418, 008-419	X			Paper Feed_Transport
008-418	Pre Aligner Drive F Motor [570 mm/s]	Drives the PRE ALIGNER DRIVE MOTOR FRONT at 570 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-417, 008-419	X			Paper Feed_Transport
008-419	Pre Aligner Drive F Motor [300 mm/s]	Drives the PRE ALIGNER DRIVE MOTOR FRONT at 300 mm/s. (Pre-excitation: weak current, rotation: medium current)		O	-	008-417, 008-418	X			Paper Feed_Transport
008-420	Regi Motor [528 mm/s]	Drives the Regi Roll at 528 mm/s.		O	-	008-089, 008-090, 008-091	X			Paper Feed_Transport
008-421	Invert In Motor [1200 mm/s]	Drives the INVERT IN MOTOR at 1200 mm/s. Starts up with strong current.		O	-	008-020~008-023, 008-425	X			Paper Feed_Transport
008-422	Invert Motor (Forward Rotation) [1200 mm/s]	Drives the INVERT MOTOR at 1200 mm/s in forward rotation (CW). Starts up with strong current. Step 255 -> Step Up at Step 187.		O	-	008-024~008-028, 008-426	X			Paper Feed_Transport
008-423	Invert Path Motor (Forward Rotation) [1200 mm/s]	Drives the INVERT PATH MOTOR at 1200 mm/s in forward rotation (CCW). Starts up with strong current. Performs 1 pulse output at Pre-excitation. Step 255 -> Step Up at Step 187.		O	-	008-029~008-033, 008-427	X			Paper Feed_Transport
008-424	Invert Entrance Motor [1200 mm/s]	Drives the INVERT ENTRANCE MOTOR at 1200 mm/s.		O	-	008-003 to 008-008	X			Paper Feed_Transport

Table 1 DC330 Component Check List (Paper Feed_Transport)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
008-425	Invert In Motor [204 mm/s] [Decurler Transport Speed 4]	Drives the INVERT IN MOTOR at 204 mm/s Decurler Transport Speed 4. Starts up with strong current.		O	-	008-020~008-023, 008-421	X			Paper Feed_Transport
008-426	Invert Motor (Forward Rotation) [204 mm/s] [Decurler Transport Speed 4]	Drives the INVERT MOTOR at 204 mm/s Decurler Transport Speed 4 in forward rotation (CW). Starts up with strong current.		O	-	008-024~008-028, 008-422	X			Paper Feed_Transport
008-427	Invert Path Motor (Forward Rotation) [204 mm/s] [Decurler Transport Speed 4]	Drives the INVERT PATH MOTOR at 204 mm/s Decurler Transport Speed 4 in forward rotation (CCW). Starts up with strong current. Performs 1 pulse output at Pre-excitation.		O	-	008-029~008-033, 008-423	X			Paper Feed_Transport
008-428	I_Tra Motor [640 mm/s]	Drives the I-TRA MOTOR at 640 mm/s.		O	-	008-047, 008-048, 008-429	X			Paper Feed_Transport
008-429	I_Tra Motor [300 mm/s]	Drives the I-TRA MOTOR at 300 mm/s (Step 4).		O	-	008-047, 008-048, 008-428	X			Paper Feed_Transport
008-430	Transport Motor [640 mm/s]	Drives the TRANSPORT MOTOR at 640 mm/s.		O	-	008-049, 008-050, 008-431	X			Paper Feed_Transport
008-431	Transport Motor [300 mm/s]	Drives the TRANSPORT MOTOR at 300 mm/s.		O	-	008-049, 008-050, 008-430	X			Paper Feed_Transport
008-432	Pre Regi 1 Motor [640 mm/s]	Drives the PRE REGI MOTOR 1 at 640 mm/s.		O	-	008-051, 008-052, 008-413	X			Paper Feed_Transport
008-433	Pre Regi 2 Motor [640 mm/s]	Drives the PRE REGI MOTOR 2 at 640 mm/s.		O	-	008-053, 008-054, 008-414	X			Paper Feed_Transport

6.3.1.5 DC330 Component Check List (EPG)

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-001	Deve Bias DC #1	Outputs the Deve Bias DC #1. The DC output value for the applied Bias can be changed using the Procon NVM.		O			X	-	PWM	DEVE
009-002	Deve Bias DC #2	Outputs the Deve Bias DC #2. The DC output value for the applied Bias can be changed using the Procon NVM.		O			X	-	PWM	DEVE
009-003	Deve Bias DC #3	Outputs the Deve Bias DC #3. The DC output value for the applied Bias can be changed using the Procon NVM.		O			X	-	PWM	DEVE
009-004	Deve Bias DC #4	Outputs the Deve Bias DC #4. The DC output value for the applied Bias can be changed using the Procon NVM.		O			X	-	PWM	DEVE
009-005	Deve Bias DC #5	Outputs the Deve Bias DC #5. The DC output value for the applied Bias can be changed using the Procon NVM.		O			X	-	PWM	DEVE
009-006	Deve Bias DC #6	Outputs the Deve Bias DC #6. The DC output value for the applied Bias can be changed using the Procon NVM.		O			X	-	PWM	DEVE
009-007	Deve Bias AC #1	Outputs the Deve Bias AC #1. The AC output value of the applied Bias is the same as during normal Print. (Can be changed using the Deve NVM)		O			X	-	PWM	DEVE
009-008	Deve Bias AC #2	Outputs the Deve Bias AC #2. The AC output value of the applied Bias is the same as during normal Print. (Can be changed using the Deve NVM)		O			X	-	PWM	DEVE
009-009	Deve Bias AC #3	Outputs the Deve Bias AC #3. The AC output value of the applied Bias is the same as during normal Print. (Can be changed using the Deve NVM)		O			X	-	PWM	DEVE
009-010	Deve Bias AC #4	Outputs the Deve Bias AC #4. The AC output value of the applied Bias is the same as during normal Print. (Can be changed using the Deve NVM)		O			X	-	PWM	DEVE
009-011	Deve Bias AC #5	Outputs the Deve Bias AC #5. The AC output value of the applied Bias is the same as during normal Print. (Can be changed using the Deve NVM)		O			X	-	PWM	DEVE
009-012	Deve Bias AC #6	Outputs the Deve Bias AC #6. The AC output value of the applied Bias is the same as during normal Print. (Can be changed using the Deve NVM)		O			X	-	PWM	DEVE
009-013	Toner Cartridge Motor #1	Drives the Toner Cartridge Motor #1.		O	2 [s]		X	Low	ON State	DEVE
009-014	Toner Cartridge Motor #2	Drives the Toner Cartridge Motor #2.		O	2 [s]		X	Low	ON State	DEVE
009-015	Toner Cartridge Motor #3	Drives the Toner Cartridge Motor #3.		O	2 [s]		X	Low	ON State	DEVE
009-016	Toner Cartridge Motor #4	Drives the Toner Cartridge Motor #4.		O	2 [s]		X	Low	ON State	DEVE

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-017	Toner Cartridge Motor #5	Drives the Toner Cartridge Motor #5.		O	2 [s]		X	Low	ON State	DEVE
009-018	Toner Cartridge Motor #6	Drives the Toner Cartridge Motor #6.		O	2 [s]		X	Low	ON State	DEVE
009-019	Dispense Motor #1	Drives the Dispense Motor #1.		O	2 [s]		X	Low	ON State	DEVE
009-020	Dispense Motor #2	Drives the Dispense Motor #2.		O	2 [s]		X	Low	ON State	DEVE
009-021	Dispense Motor #3	Drives the Dispense Motor #3.		O	2 [s]		X	Low	ON State	DEVE
009-022	Dispense Motor #4	Drives the Dispense Motor #4.		O	2 [s]		X	Low	ON State	DEVE
009-023	Dispense Motor #5	Drives the Dispense Motor #5.		O	2 [s]		X	Low	ON State	DEVE
009-024	Dispense Motor #6	Drives the Dispense Motor #6.		O	2 [s]		X	Low	ON State	DEVE
009-025	Deve Motor #1	Always lower the IBT Module before performing this operation. Simultaneously turns ON Deve Motor #1 and Drum Motor #1. After 1.6 s, the Deve Motor turns OFF and then (after a total of 2 s) the Drum Motor turns OFF.		O		004-001~004-017, 009-026 to 009-030	X	Low	ON State	DEVE
009-026	Deve Motor #2	Always lower the IBT Module before performing this operation. Simultaneously turns ON Deve Motor #2 and Drum Motor Y (#2). After 1.6 s, the Deve Motor turns OFF and then (after a total of 2 s) the Drum Motor turns OFF.		O		004-001~004-017, 009-025, 009-027~009-030	X	Low	ON State	DEVE
009-027	Deve Motor #3	Always lower the IBT Module before performing this operation. Simultaneously turns ON Deve Motor #3 and Drum Motor M (#3). After 1.6 s, the Deve Motor turns OFF and then (after a total of 2 s) the Drum Motor turns OFF.		O		004-001~004-017, 009-025, 009-026, 009-028~009-030	X	Low	ON State	DEVE
009-028	Deve Motor #4	Always lower the IBT Module before performing this operation. Simultaneously turns ON Deve Motor #4 and Drum Motor C (#4). After 1.6 s, the Deve Motor turns OFF and then (after a total of 2 s) the Drum Motor turns OFF.		O		004-001~004-017, 009-025~009-027, 009-029, 009-030	X	Low	ON State	DEVE
009-029	Deve Motor #5	Always lower the IBT Module before performing this operation. Simultaneously turns ON Deve Motor #5 and Drum Motor K (#5). After 1.6 s, the Deve Motor turns OFF and then (after a total of 2 s) the Drum Motor turns OFF.		O		004-001~004-017, 009-025~009-028, 009-030	X	Low	ON State	DEVE
009-030	Deve Motor #6	Always lower the IBT Module before performing this operation. Simultaneously turns ON Deve Motor #6 and Drum Motor #6. After 1.6 s, the Deve Motor turns OFF and then (after a total of 2 s) the Drum Motor turns OFF.		O		004-001~004-017, 009-025 to 009-029	X	Low	ON State	DEVE
009-040	#1 CC	CC Grid, CC Wire 1, and CC Wire 2 output in #1 CC		O	-	009-071	X	-	PWM	EPG/CLN
009-041	#2 CC	CC Grid, CC Wire 1, and CC Wire 2 output in #2 CC		O	-	009-072	X	-	PWM	EPG/CLN

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-042	#3 CC	CC Grid, CC Wire 1, and CC Wire 2 output in #3 CC		O	-	009-073	X	-	PWM	EPG/CLN
009-043	#4 CC	CC Grid, CC Wire 1, and CC Wire 2 output in #4 CC		O	-	009-074	X	-	PWM	EPG/CLN
009-044	#5 CC	CC Grid, CC Wire 1, and CC Wire 2 output in #5 CC		O	-	009-075	X	-	PWM	EPG/CLN
009-045	#6 CC	CC Grid, CC Wire 1, and CC Wire 2 output in #6 CC		O	-	009-076	X	-	PWM	EPG/CLN
009-046	#1 PCC	PCC AC/DC outputs in #1 PCC		O	-		X	-	PWM	EPG/CLN
009-047	#2 PCC	PCC AC/DC outputs in #2 PCC		O	-		X	-	PWM	EPG/CLN
009-048	#3 PCC	PCC AC/DC outputs in #3 PCC		O	-		X	-	PWM	EPG/CLN
009-049	#4 PCC	PCC AC/DC outputs in #4 PCC		O	-		X	-	PWM	EPG/CLN
009-050	#5 PCC	PCC AC/DC outputs in #5 PCC		O	-		X	-	PWM	EPG/CLN
009-051	#6 PCC	PCC AC/DC outputs in #6 PCC		O	-		X	-	PWM	EPG/CLN
009-052	PCC AC Clock	Outputs the #1 to #6 PCC AC frequencies.		O	-		X	-	PWM	EPG/CLN
009-053	#1 Brush AC/DC	Brush Bias AC/DC outputs in #1 Brush		O	-		X	-	Clock	EPG/CLN
009-054	#2 Brush AC/DC	Brush Bias AC/DC outputs in #2 Brush		O	-		X	-	PWM	EPG/CLN
009-055	#3 Brush AC/DC	Brush Bias AC/DC outputs in #3 Brush		O	-		X	-	PWM	EPG/CLN
009-056	#4 Brush AC/DC	Brush Bias AC/DC outputs in #4 Brush		O	-		X	-	PWM	EPG/CLN
009-057	#5 Brush AC/DC	Brush Bias AC/DC outputs in #5 Brush		O	-		X	-	PWM	EPG/CLN
009-058	#6 Brush AC/DC	Brush Bias AC/DC outputs in #6 Brush		O	-		X	-	PWM	EPG/CLN
009-059	#1 Erase Lamp	Turns ON/OFF the ERASE LAMP #1		O	-		X	Low	ON State	EPG/CLN
009-060	#2 Erase Lamp	Turns ON/OFF the ERASE LAMP #2		O	-		X	Low	ON State	EPG/CLN
009-061	#3 Erase Lamp	Turns ON/OFF the ERASE LAMP #3		O	-		X	Low	ON State	EPG/CLN
009-062	#4 Erase Lamp	Turns ON/OFF the ERASE LAMP #4		O	-		X	Low	ON State	EPG/CLN
009-063	#5 Erase Lamp	Turns ON/OFF the ERASE LAMP #5		O	-		X	Low	ON State	EPG/CLN
009-064	#6 Erase Lamp	Turns ON/OFF the ERASE LAMP #6		O	-		X	Low	ON State	EPG/CLN
009-065	#1 Cleaner Motor	Rotates the CLEANER MOTOR #1 (Drum Clean Brush)		O	-		X	-	ON State	EPG/CLN
009-066	#2 Cleaner Motor	Rotates the CLEANER MOTOR #2 (Drum Clean Brush)		O	-		X	-	ON State	EPG/CLN
009-067	#3 Cleaner Motor	Rotates the CLEANER MOTOR #3 (Drum Clean Brush)		O	-		X	-	ON State	EPG/CLN
009-068	#4 Cleaner Motor	Rotates the CLEANER MOTOR #4 (Drum Clean Brush)		O	-		X	-	ON State	EPG/CLN
009-069	#5 Cleaner Motor	Rotates the CLEANER MOTOR #5 (Drum Clean Brush)		O	-		X	-	ON State	EPG/CLN
009-070	#6 Cleaner Motor	Rotates the CLEANER MOTOR #6 (Drum Clean Brush)		O	-		X	-	ON State	EPG/CLN
009-071	#1 CC Cleaner (Auto Cleaning)	Cleaning operation of #1 CC		O	-	009-040, 009-077	X	-	ON State	EPG/CLN

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-072	#2 CC Cleaner (Auto Cleaning)	Cleaning operation of #2 CC		O	-	009-041, 009-078	X	-	ON State	EPG/CLN
009-073	#3 CC Cleaner (Auto Cleaning)	Cleaning operation of #3 CC		O	-	009-042, 009-079	X	-	ON State	EPG/CLN
009-074	#4 CC Cleaner (Auto Cleaning)	Cleaning operation of #4 CC		O	-	009-043, 009-080	X	-	ON State	EPG/CLN
009-075	#5 CC Cleaner (Auto Cleaning)	Cleaning operation of #5 CC		O	-	009-044, 009-081	X	-	ON State	EPG/CLN
009-076	#6 CC Cleaner (Auto Cleaning)	Cleaning operation of #6 CC		O	-	009-045, 009-082	X	-	ON State	EPG/CLN
009-077	#1 CC Cleaner (Home Position)	Home Position operation of #1 CC Cleaner		O	-	009-071	X	-	ON State	EPG/CLN
009-078	#2 CC Cleaner (Home Position)	Home Position operation of #2 CC Cleaner		O	-	009-072	X	-	ON State	EPG/CLN
009-079	#3 CC Cleaner (Home Position)	Home Position operation of #3 CC Cleaner		O	-	009-073	X	-	ON State	EPG/CLN
009-080	#4 CC Cleaner (Home Position)	Home Position operation of #4 CC Cleaner		O	-	009-074	X	-	ON State	EPG/CLN
009-081	#5 CC Cleaner (Home Position)	Home Position operation of #5 CC Cleaner		O	-	009-075	X	-	ON State	EPG/CLN
009-082	#6 CC Cleaner (Home Position)	Home Position operation of #6 CC Cleaner		O	-	009-076	X	-	ON State	EPG/CLN
009-083	Auger Motor #1	Operates the AUGER MOTOR 1		O	-		X	-	ON State	EPG/CLN
009-084	Auger Motor #2	Operates the AUGER MOTOR 2		O	-		X	-	ON State	EPG/CLN
009-085	Active Bottle Switching Motor	Rotates the Waste Bottle - 1, 2 transport switching auger.		O	-	009-086	X	-	ON State	EPG/CLN
009-086	Active Bottle Switching Motor Reverse	Rotates the Waste Bottle - 1, 2 transport switching auger.		O	-	009-085	X	-	ON State	EPG/CLN
009-087	Toner Collect Motor	Rotates the Agitator at vertical drop section.		O	-		X	-	ON State	EPG/CLN
009-100	Low Toner Sensor #1	Checks the state of Low Toner Sensor #1.	O					Low	Low Toner	DEVE
009-101	Low Toner Sensor #2	Checks the state of Low Toner Sensor #2.	O					Low	Low Toner	DEVE
009-102	Low Toner Sensor #3	Checks the state of Low Toner Sensor #3.	O					Low	Low Toner	DEVE
009-103	Low Toner Sensor #4	Checks the state of Low Toner Sensor #4.	O					Low	Low Toner	DEVE
009-104	Low Toner Sensor #5	Checks the state of Low Toner Sensor #5.	O					Low	Low Toner	DEVE
009-105	Low Toner Sensor #6	Checks the state of Low Toner Sensor #6.	O					Low	Low Toner	DEVE
009-106	Dispense Cover Sensor	Checks the state of Dispense Cover Sensor.	O					High	Open	DEVE
009-107	Lock Up Signal #1	Checks the Lock Up signal state of Deve Motor #1.	O					Low	Abnormal Motor rotation	DEVE
009-108	Lock Up Signal #2	Checks the Lock Up signal state of Deve Motor #2.	O					Low	Abnormal Motor rotation	DEVE
009-109	Lock Up Signal #3	Checks the Lock Up signal state of Deve Motor #3.	O					Low	Abnormal Motor rotation	DEVE

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-110	Lock Up Signal #4	Checks the Lock Up signal state of Deve Motor #4.	O					Low	Abnormal Motor rotation	DEVE
009-111	Lock Up Signal #5	Checks the Lock Up signal state of Deve Motor #5.	O					Low	Abnormal Motor rotation	DEVE
009-112	Lock Up Signal #6	Checks the Lock Up signal state of Deve Motor #6.	O					Low	Abnormal Motor rotation	DEVE
009-150	CC INTLK SW #1	Detects the availability of #1 CC and detects the HP of #1 CC Cleaner (used for Laser Safety as well)	O		-		X	High	Open/Not at HP	EPG/CLN
009-151	CC INTLK SW #2	Detects the availability of #2 CC and detects the HP of #2 CC Cleaner (used for Laser Safety as well)	O		-		X	High	Open/Not at HP	EPG/CLN
009-152	CC INTLK SW #3	Detects the availability of #3 CC and detects the HP of #3 CC Cleaner (used for Laser Safety as well)	O		-		X	High	Open/Not at HP	EPG/CLN
009-153	CC INTLK SW #4	Detects the availability of #4 CC and detects the HP of #4 CC Cleaner (used for Laser Safety as well)	O		-		X	High	Open/Not at HP	EPG/CLN
009-154	CC INTLK SW #5	Detects the availability of #5 CC and detects the HP of #5 CC Cleaner (used for Laser Safety as well)	O		-		X	High	Open/Not at HP	EPG/CLN
009-155	CC INTLK SW #6	Detects the availability of #6 CC and detects the HP of #6 CC Cleaner (used for Laser Safety as well)	O		-		X	High	Open/Not at HP	EPG/CLN
009-156	Waste Toner Bottle Full Sensor #1	Full Sensor detection operation of Waste Toner Bottle.	O		-		X	High	Full	EPG/CLN
009-157	Waste Toner Bottle Full Sensor #2	Full Sensor detection operation of Waste Toner Bottle.	O		-		X	High	Full	EPG/CLN
009-158	Waste Toner Bottle Sensor #1	Detects the availability of Waste Toner Bottle.	O		-		X	Low	Available	EPG/CLN
009-159	Waste Toner Bottle Sensor #2	Detects the availability of Waste Toner Bottle.	O		-		X	Low	Available	EPG/CLN
009-160	IOT-L & IOT-R Joint Sensor	Sensor detection operation at the Joint of collection path.	O		-		X	Low	Joint is normal	EPG/CLN
009-200	Belt H/P Sensor 1	High when IBT Belt mark is detected	O		-		X	High	H/P mark detected	XFER
009-201	Belt H/P Sensor 2	High when IBT Belt mark is detected	O		-		X	High	H/P mark detected	XFER
009-202	1st BTR Retract Sensor 1	High when Contact is detected (when Actuator is detected)	O		-		X	High	Contact State	XFER
009-203	1st BTR Retract Sensor YMC	High when Contact is detected (when Actuator is detected)	O		-		X	High	Contact State	XFER
009-204	1st BTR Retract Sensor K	High when Contact is detected (when Actuator is detected)	O		-		X	High	Contact State	XFER
009-205	1st BTR Retract Sensor 1	High when Contact is detected (when Actuator is detected)	O		-		X	High	Contact State	XFER
009-206	2nd BTB Retract Sensor	High when Contact is detected (when Actuator is detected)	O		-		X	Low	Retract State	XFER

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-207	Nip Adjustment Cam Home SensorIn	High when Actuator is detected.	O		-		X	High	Falling Edge detected (Port end)	XFER
009-208	Nip Adjustment Cam Home SensorOut	High when Actuator is detected.	O		-		X	High	Falling Edge detected (Port end)	XFER
009-209	Xfer Interlock Switch	High at Switch ON (Ready state)	O		-		X	High	Open	XFER
009-420	1st BTR 1 Current	Outputs the #1 Primary Transfer Current. Output is prohibited when in Retract state. The rotation for P/R Drum of selected color and IBT BELT are performed simultaneously by the Drive Component Control.		O	100 [s]	009-431, 009-432, 009-446	X	-	PWM	XFER
009-421	1st BTR Y Current	Outputs the #3 Primary Transfer Current. Output is prohibited when in Retract state. The rotation for P/R Drum of selected color and IBT BELT are performed simultaneously by the Drive Component Control.		O	100 [s]	009-433, 009-434, 009-447	X	-	PWM	XFER
009-422	1st BTR M Current	Outputs the #4 Primary Transfer Current. Output is prohibited when in Retract state. The rotation for P/R Drum of selected color and IBT BELT are performed simultaneously by the Drive Component Control.		O	100 [s]	009-433, 009-434, 009-447	X	-	PWM	XFER
009-423	1st BTR C Current	Outputs the #5 Primary Transfer Current. Output is prohibited when in Retract state. The rotation for P/R Drum of selected color and IBT BELT are performed simultaneously by the Drive Component Control.		O	100 [s]	009-433, 009-434, 009-447	X	-	PWM	XFER
009-424	1st BTR K Current	Outputs the #6 Primary Transfer Current. Output is prohibited when in Retract state. The rotation for P/R Drum of selected color and IBT BELT are performed simultaneously by the Drive Component Control.		O	100 [s]	009-435, 009-436, 009-448	X	-	PWM	XFER
009-425	1st BTR 6 Current	Outputs the #1 Primary Transfer Current. Output is prohibited when in Retract state. The rotation for P/R Drum of selected color and IBT BELT are performed simultaneously by the Drive Component Control.		O	100 [s]	009-437, 009-438, 009-449	X	-	PWM	XFER
009-426	2nd BTB Voltage	Outputs the Secondary Transfer Voltage.		O	100 [s]	009-427, 009-428, 009-439, 009-440	X	-	PWM 2nd BTB CC output is prohibited	XFER
009-427	2nd BTB Current	Outputs the resistance detection current of Secondary Transfer System. Output is prohibited when in Retract state.		O	100 [s]	009-426, 009-428, 009-439, 009-440	X	-	PWM 2nd BTB CC output is prohibited	XFER
009-428	2nd BTB Rev Voltage	Outputs the reverse Bias of Secondary Transfer.		O	100 [s]	009-426, 009-427, 009-439, 009-440	X	-	PWM 2nd BTB CC output is prohibited	XFER
009-429	2nd BTB ESB Voltage	Outputs the 2nd BTB ESB voltage (all of Brush-A, Brush-B, DTR-A, DTR-B).		O	100 [s]	009-441	X	-	PWM	XFER
009-431	1st BTR #1 Contact	Contacts the 1st BTR #1 and the Retract Roll.		O	-	009-420, 009-432, 009-446, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-432	1st BTR 1 Retract	Retracts the 1st BTR #1 and the Retract Roll.		O	-	009-420, 009-431, 009-446, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-433	1st BTR YMC Contact	Contacts the 1st BTR #2 and the Retract Roll.		O	-	009-421, 009-422, 009-423, 009-434, 009-447, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-434	1st BTR YMC Retract	Retracts the 1st BTR #2 and the Retract Roll.		O	-	009-421~009-423, 009-433, 009-447, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-435	1st BTR K Contact	Contacts the 1st BTR #3 and the Retract Roll.		O	-	009-424, 009-436, 009-448, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-436	1st BTR K Retract	Retracts the 1st BTR #3 and the Retract Roll.		O	-	009-424, 009-435, 009-448, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-437	1st BTR #6 Contact	Contacts the 1st BTR #4 and the Retract Roll.		O	-	009-425, 009-438, 009-449, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-438	1st BTR #6 Retract	Retracts the 1st BTR #4 and the Retract Roll.		O	-	009-425, 009-437, 009-449, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-439	2nd BTB Contact	Contacts the 2nd BTB. Ends immediately upon receiving an operation end instruction.		O	-	009-426, 009-427, 009-428, 009-440, 004-030, 004-031	X	-	ON State	XFER
009-440	2nd BTB Retract	Retracts the 2nd BTB. Ends immediately upon receiving an operation end instruction.		O	-	009-426, 009-427, 009-428, 009-439, 004-030, 004-031	X	-	ON State	XFER
009-441	2nd BTB Motor	Rotates the 2nd BTB in forward direction while performing cleaning by 2nd BTB ESB. The 2nd BTB ESB is in forward rotation.		O	100 [s]	009-429, 009-442, 009-443, 004-030, 004-031	X	-	ON State	XFER
009-442	2nd BTB Cleaning Motor	Rotates the 2nd BTB ESB in forward direction.		O	100 [s]	009-441, 009-443	X	-	ON State	XFER
009-443	2nd BTB Cleaning Motor Rev	Rotates the 2nd BTB ESB in reverse direction.		O	100 [s]	009-441, 009-442	X	-	ON State	XFER
009-444	IBT Belt Cleaner Motor	Rotates the IBT Belt Cleaner Brush and the auger.		O	-		X		ON State	XFER
009-445	Nip Adjustable Motor	Performs the same operation as for Cam Initialize. Ends immediately upon receiving an operation end instruction.		O	-		X	-	ON State	XFER
009-446	1st BTR 1 Half Contact	Half-contacts the 1st BTR #1 and the Retract Roll.		O	-	009-420, 009-431, 009-432, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-447	1st BTR YMC Half Contact	Half-contacts the 1st BTR #2 and the Retract Roll.		O	-	009-421~009-423, 009-433, 009-434, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER

Table 1 DC330 Component Check List (EPG)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
009-448	1st BTR K Half Contact	Half-contacts the 1st BTR #3 and the Retract Roll.		O	-	009-424, 009-435, 009-436, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-449	1st BTR 6 Half Contact	Half-contacts the 1st BTR #4 and the Retract Roll.		O	-	009-425, 009-437, 009-438, 004-001~004-017, 004-030, 004-031	X	-	ON State	XFER
009-450	IBT CLN Brush Voltage	Outputs the current that is specified by Environment No. 5.		O	100 [s]		X	-	PWM	XFER
009-480	ADC LED #1	Turns ON the LED of REAR ADC SENSOR.		O			X			PROCON
009-481	ADC LED #2	Turns ON the LED of FRONT ADC SENSOR.		O			X			PROCON

6.3.1.6 DC330 Component Check List (Fusing)

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-001	Fusing Motor	When ON, the FUSING MOTOR is driven at [BELT Low Rotation Speed] (default value: 125000 = 125.00 mm/s) and stopped when 3 [s] has passed. During this operation, the Belt Steering control and E/Roll Motor control are performed. ***NOTE:*** *When one of the following Fails has occurred during the Component Controller Check, the Start Key is not accepted.* • Fusing Belt In Limit Fail, Fusing Belt Out Limit Fail • Over Heat Fail of each Sensor • E/Roll Motor Fail		O	3 [s]	010-002~010-004, 010-007~010-024, 010-061, 010-065~010-068	X	Low	ON State	FUSING
010-002	PR Latch Motor	When ON, the P/R LATCH MOTOR is driven. If the P/R LATCH SENSOR is Inactive (Retract), the P/Roll LATCH Contact control is performed to put it in Contact state.3 [s] after it had stopped, the P/Roll LATCH Retract control is performed to put it in Retract state and the operation ends. If the P/R Latch Sensor is Active (Contact), the P/Roll LATCH Retract control is performed to put it in Retract state. 200 ms after it had stopped, the P/Roll LATCH Contact control is performed to put it in Contact state. Finally, when a further 3 [s] has passed, the P/Roll LATCH Retract control is performed and the operation ends. ***NOTE:*** *Fail detection is performed.*		O	-	010-001, 010-003, 010-004, 010-007~010-024, 010-065~010-068	X	Low	ON State	FUSING
010-003	Belt Walk Motor	Performs Initialize Operation by turning ON. If the FUSING BELT STEERING SENSOR is Low, performs the Rear Steer operation (CW rotation). When the FUSING BELT STEERING SENSOR changes from Low -> High state, the FUSING BELT WALK MOTOR is stopped after [Rear Steer Timer Value] has passed and the operation ends (the Hold current also turns OFF). If the FUSING BELT STEERING SENSOR is High, performs the Front Steer operation (CCW rotation). When the FUSING BELT STEERING SENSOR changes from High -> Low state, the FUSING BELT WALK MOTOR is stopped after [Front Steer Timer Value] has passed and the operation ends (the Hold current also turns OFF). ***NOTE:*** *Fail detection is performed.*		O	-	010-001, 010-002, 010-004, 010-007~010-024, 010-065~010-068	X	Low	ON State	FUSING
010-004	Fusing Web Motor	When ON, the FUSING WEB MOTOR is driven. When OFF, it is stopped. The Web Mot ON time is added to the accumulated time for the FUSING WEB MOTOR. ***NOTE:*** *This operation is not performed when Web CRU Not Ready (010-911) or Fusing Web End (010-910) has occurred.*		O	30 [s]	010-001~010-003, 010-007~010-024, 010-065 to 010-068	X	High	ON State	FUSING
010-005	V Tra Motor Exit	Drives the EXIT V-TRA MOTOR. When OFF, it is stopped.		O	-		X	Low	ON State	FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-006	V Tra Fan Exit	When ON, EXIT V-TRA FAN 1 CTRL 4 to 1 are driven by setting them to '1100' (Air Volume 6).		O	-		X	High	ON State	FUSING
010-007	Refresh Roll Retract Motor	When ON, the REFRESH ROLL RETRACT MOTOR is driven to perform Contact operation. However, if it is already in Contact state, nothing will happen. When OFF, the Retract operation is performed.		O	-	010-001~010-004, 010-008~010-024, 010-065 to 010-068	X	Low	ON State	FUSING
010-008	Refresh Roll Retract Motor Initialize	When ON, the REFRESH ROLL RETRACT MOTOR is driven to perform Initialize operation.		O	-	010-001~010-004, 010-007, 010-009~010-024, 010-065~010-068	X	Low	ON State	FUSING
010-009	Fusing Belt Fan 1	When ON, the Fan is driven.		O	-	010-001~010-004, 010-007, 010-008, 010-010~010-024, 010-065~010-068	X	Low	ON State	FUSING
010-010	Fusing Belt Fan 2	When ON, the Fan is driven.		O	-	010-001~010-004, 010-007~010-009, 010-011~010-024, 010-065~010-068	X	Low	ON State	FUSING
010-011	Fusing Belt Fan 3	When ON, the Fan is driven.		O	-	010-001~010-004, 010-007~010-010, 010-012~010-024, 010-065~010-068	X	Low	ON State	FUSING
010-012	Fusing PR Fan 1	When ON, the Fan is driven.		O	-	010-001~010-004, 010-007~010-011, 010-013~010-024, 010-065~010-068	X	High	ON State	FUSING
010-013	Fusing PR Fan 2	When ON, the Fan is driven.		O	-	010-001~010-004, 010-007~010-012, 010-014~010-024, 010-065~010-068	X	High	ON State	FUSING
010-014	Fusing PR Fan 3	When ON, the Fan is driven.		O	-	010-001~010-004, 010-007~010-013, 010-015~010-024, 010-065~010-068	X	High	ON State	FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-015	Fusing Lamp HR Main 1	During the Lamp test, the following processes are performed: 1. When no BRF related Component Control request (OUT)' is received during the Diagnostic Function, the same Lamp control as during FsrStandby_Ready is performed to keep each Roll at the designated temperature. 2. When a Lamp Test Start instruction is issued to each Lamp for which the Component Control request is ON, the Lamp to be checked is turned ON and when 3 [s] (timer used: [100 ms]) has passed or when the Component Control request is OFF, the Lamp is turned OFF. ***NOTE:*** *When a Lamp is turned ON during IO check, the cut-off control is not performed.* ***NOTE:*** *The Lamp Test cannot be performed for 2 or more Lamps at the same time.*		O	3 [s]	010-001~010-004, 010-007~010-014, 010-016~010-024, 010-065~010-068	X	High	ON	FUSING
010-016	Fusing Lamp ER Main 1	Same as above		O	3 [s]	010-001~010-004, 010-007~010-015, 010-017~010-024, 010-065~010-068	X	High	ON	FUSING
010-017	Fusing Lamp ER Main 2	Same as above		O	3 [s]	010-001~010-004, 010-007~010-016, 010-018~010-024, 010-065~010-068	X	High	ON	FUSING
010-018	Fusing Lamp ER Sub	Same as above		O	3 [s]	010-001~010-004, 010-007~010-017, 010-019~010-024, 010-065~010-068	X	High	ON	FUSING
010-019	Fusing Lamp IR Main 1	Same as above		O	3 [s]	010-001~010-004, 010-007~010-018, 010-020~010-024, 010-065~010-068	X	High	ON	FUSING
010-020	Fusing Lamp IR Main 2	Same as above		O	3 [s]	010-001~010-004, 010-007~010-019, 010-021~010-024, 010-065~010-068	X	High	ON	FUSING
010-021	Fusing Lamp IR Sub 1	Same as above		O	3 [s]	010-001~010-004, 010-007~010-020, 010-022~010-024, 010-065~010-068	X	High	ON	FUSING
010-022	Fusing Lamp IR Sub 2	Same as above		O	3 [s]	010-001~010-004, 010-007~010-021, 010-023, 010-024, 010-065 to 010-068	X	High	ON	FUSING
010-023	Fusing Lamp HR Main 2	Same as above		O	3 [s]	010-001~010-004, 010-007~010-022, 010-024, 010-065~010-068	X	High	ON	FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-024	Fusing Lamp HR Sub	Same as above		O	3 [s]	010-001~010-004, 010-007~010-023, 010-065 to 010-068	X	High	ON	FUSING
010-035	Clg Upper Walk Motor	Drives the Cooling Upper Walk Motor. The Lower side also operates simultaneously. Stops automatically after the operation. ***NOTE:*** *This Component Control is not performed when any of the following Fail has occurred. This is because performing it immediately after a Fail occurrence might damage the Belt.* *To perform this Component Control after a Fail has occurred and turning the Power OFF and ON, make sure to correct the Upper and Lower Belt to the proper positions before proceeding.* *Otherwise, the Belt might get damaged.* • COOLING UPPER MOTOR Fail (Chain-Link 010-350) • COOLING LOWER MOTOR Fail (Chain-Link 010-351) • Clg Upper Belt Position Sensor In Limit Fail (Chain-Link 010-352) • Clg Lower Belt Position Sensor In Limit Fail (Chain-Link 010-353) • Clg Upper Belt Position Sensor Out Limit Fail (Chain-Link 010-354) • Clg Lower Belt Position Sensor Out Limit Fail (Chain-Link 010-355) • Clg Upper Belt Position Sensor Fail (Chain-Link 010-356) • Clg Lower Belt Position Sensor Fail (Chain-Link 010-357) • COOLING UPPER WALK MOTOR Fail (Chain-Link 010-358) • COOLING LOWER WALK MOTOR Fail (Chain-Link 010-359) • COOLING UPPER STEERING POS SENSOR Fail (Chain-Link 010-367) • COOLING LOWER STEERING POS SENSOR Fail (Chain-Link 010-368)		O	-	010-036 to 010-038	X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-036	Clg Lower Walk Motor	Drives the Cooling Lower Walk Motor. The Upper side also operates simultaneously. Stops automatically after the operation. ***NOTE:*** *This Component Control is not performed when any of the following Fail has occurred. This is because performing it immediately after a Fail occurrence might damage the Belt.* *To perform this Component Control after a Fail has occurred and turning the Power OFF and ON, make sure to correct the Upper and Lower Belt to the proper positions before proceeding. Otherwise, the Belt might get damaged.* • Clg Upper Motor Fail (Chain-Link 010-350) • Clg Lower Motor Fail (Chain-Link 010-351) • Clg Upper Belt Position Sensor In Limit Fail (Chain-Link 010-352) • Clg Lower Belt Position Sensor In Limit Fail (Chain-Link 010-353) • Clg Upper Belt Position Sensor Out Limit Fail (Chain-Link 010-354) • Clg Lower Belt Position Sensor Out Limit Fail (Chain-Link 010-355) • Clg Upper Belt Position Sensor Fail (Chain-Link 010-356) • Clg Lower Belt Position Sensor Fail (Chain-Link 010-357) • Clg Upper Walk Motor Fail (Chain-Link 010-358) • Clg Lower Walk Motor Fail (Chain-Link 010-359) • Clg Upper Steering Position Sensor Fail (Chain-Link 010-367) • Clg Lower Steering Position Sensor Fail (Chain-Link 010-368)		O	-	010-035, 010-037, 010-038	X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-037	Clg Upper Motor	Drives the Cooling Upper Motor. The Lower side also operates simultaneously. ***NOTE:*** *This Component Control is not performed when any of the following Fail has occurred. This is because performing it immediately after a Fail occurrence might damage the Belt.To perform this Component Control after a Fail has occurred and turning the Power OFF and ON, make sure to correct the Upper and Lower Belt to the proper positions before proceeding. Otherwise, the Belt might get damaged.* • Clg Upper Motor Fail (Chain-Link 010-350) • Clg Lower Motor Fail (Chain-Link 010-351) • Clg Upper Belt Position Sensor In Limit Fail (Chain-Link 010-352) • Clg Lower Belt Position Sensor In Limit Fail (Chain-Link 010-353) • Clg Upper Belt Position Sensor Out Limit Fail (Chain-Link 010-354) • Clg Lower Belt Position Sensor Out Limit Fail (Chain-Link 010-355) • Clg Upper Belt Position Sensor Fail (Chain-Link 010-356) • Clg Lower Belt Position Sensor Fail (Chain-Link 010-357) • Clg Upper Walk Motor Fail (Chain-Link 010-358) • Clg Lower Walk Motor Fail (Chain-Link 010-359) • Clg Upper Steering Position Sensor Fail (Chain-Link 010-367) • Clg Lower Steering Position Sensor Fail (Chain-Link 010-368)		O	-	010-035, 010-036, 010-038	X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-038	Clg Lower Motor	Drives the Cooling Lower Motor. The Upper side also operates simultaneously. ***NOTE:*** *This Component Control is not performed when any of the following Fail has occurred. This is because performing it immediately after a Fail occurrence might damage the Belt.To perform this Component Control after a Fail has occurred and turning the Power OFF and ON, make sure to correct the Upper and Lower Belt to the proper positions before proceeding. Otherwise, the Belt might get damaged.* • Clg Upper Motor Fail (Chain-Link 010-350) • Clg Lower Motor Fail (Chain-Link 010-351) • Clg Upper Belt Position Sensor In Limit Fail (Chain-Link 010-352) • Clg Lower Belt Position Sensor In Limit Fail (Chain-Link 010-353) • Clg Upper Belt Position Sensor Out Limit Fail (Chain-Link 010-354) • Clg Lower Belt Position Sensor Out Limit Fail (Chain-Link 010-355) • Clg Upper Belt Position Sensor Fail (Chain-Link 010-356) • Clg Lower Belt Position Sensor Fail (Chain-Link 010-357) • Clg Upper Walk Motor Fail (Chain-Link 010-358) • Clg Lower Walk Motor Fail (Chain-Link 010-359) • Clg Upper Steering Position Sensor Fail (Chain-Link 010-367) • Clg Lower Steering Position Sensor Fail (Chain-Link 010-368)		O	-	010-035 to 010-037	X			FUSING
010-039	BURR_PRESS_MOTOR	Drives the BURR_PRESS_ROLL (Drive) and BURR_PRESS_TA_ROLL (Drive) at 1100 mm/s.		O	-		X			FUSING
010-040	BURR_PRESS_RETRACT_MOTOR	Performs the BURR_PRESS_ROLL (Idler) Advance/Retract operation repeatedly.		O	5 [s]		X			FUSING
010-041	BURR_PRESS_RETRACT_MOTOR Initialize	Retracts (separates) the BURR_PRESS_ROLL (Idler).		O	-		X			FUSING
010-042	BURR_PRESS_RETRACT_MOTOR Latch	Advances (contacts) the BURR_PRESS_ROLL (Idler).		O	-		X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-043	Roll Decurler Drive Motor	Drives the DECURLER ROLL DRIVE MOTOR at [Decurler Speed DIAG (default value: 445 mm/s) speed. Empty Rotation operation. As the DECURLER ROLL DRIVE MOTOR is also a part the Decurler Exit Roll drive, it will rotate at the same time. If this is not stopped within 5 seconds, it will automatically time out at 5 seconds to stop the process in order to protect the components. The Roll Decurler Drive Motor Fail detection is not performed during Diagnostic Function. This Motor only drives in CCW and hence does not perform CW.		O	5 [s]		X			FUSING
010-044	Belt Decurler Drive Motor	Drives the DECURLER ROLL DRIVE MOTOR [Decurler Speed DIAG] at (default value: 445 mm/s) speed. Empty Rotation operation. At Motor On, this Motor rotates in CW direction. If this is not stopped within 5 seconds, it will automatically time out at 5 seconds to stop the process in order to protect the components. The Belt Decurler Drive Motor Fail detection is not performed during Diagnostic Function.		O	5 [s]		X			FUSING
010-045	Roll Decurler Penetration Motor CCW	Drives the DECURLER ROLL PENE MOTOR at [Roll Decurler Pene Motor Frequency Step 15] [PPS] in CCW direction. Empty Forward Rotation operation. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll Decurler Initialize Fail detection is not performed during Diagnostic Function. Within the [RD Initialize CAM SNR ON Filtering Time] after receiving an execution request, the detection timing of DECURLER CAM ROLL SENSOR exposed -> blocked is ignored. It will be stopped at the timing of next exposed -> blocked detection and the Motor turns OFF within 1 [s].		O	60 [s]	010-046, 010-049, 010-050, 010-053~010-059, 010-064	X			FUSING
010-046	Roll Decurler Penetration Motor CW	Drives the DECURLER ROLL PENE MOTOR at [Roll Decurler Pene Motor Frequency Step 15] [PPS] in CW direction. Empty Reverse Rotation operation. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll Decurler Initialize Fail detection is not performed during Diagnostic Function. Within the [RD Initialize CAM SNR ON Filtering Time] after receiving an execution request, the detection timing of DECURLER CAM ROLL SENSOR exposed -> blocked is ignored. It will be stopped at the timing of next exposed -> blocked detection and the Motor turns OFF within 1 [s].		O	60 [s]	010-045, 010-049, 010-050, 010-053~010-059, 010-064	X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-047	Belt Decurler Penetration Motor CCW	Drives the DECURLER BELT PENE MOTOR at [Belt Decurler Pene Motor Frequency Step 15] [PPS] in CCW direction. Empty Forward Rotation operation. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Belt Decurler Initialize Fail detection is not performed during Diagnostic Function. Within the [BD Initialize CAM SNR ON Filtering Time] after receiving an execution request, the detection timing of DECURLER BELT CAM SENSOR exposed -> blocked is ignored. It will be stopped at the timing of next exposed -> blocked detection and the Motor turns OFF within 1 [s].		O	60 [s]	010-048, 010-051~010-059	X			FUSING
010-048	Belt Decurler Penetration Motor CW	Drives the DECURLER BELT PENE MOTOR at [Belt Decurler Pene Motor Frequency Step 15] [PPS] in CW direction. Empty Reverse Rotation operation. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Belt Decurler Initialize Fail detection is not performed during Diagnostic Function. Within the [BD Initialize CAM SNR ON Filtering Time] after receiving an execution request, the detection timing of DECURLER BELT CAM SENSOR exposed -> blocked is ignored. It will be stopped at the timing of next exposed -> blocked detection and the Motor turns OFF within 1 [s].		O	60 [s]	010-047, 010-051~010-059	X			FUSING
010-049	Roll Decurler Cam CCW	Operates the Decurler Roll Cam at P2 -> P3 -> P4 -> P5 -> P2 Steps in CCW direction. Stops for 5 seconds at each position and then automatically moves to the next position. (The movement from P5 -> P2 is in CW direction) During execution request, this is performed after performing the Standby operation. Upon receiving Stop request, Initialize operation is performed and the operation ends. The Roll Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	-	010-045, 010-046, 010-050, 010-053~010-059, 010-064	O			FUSING
010-050	Roll Decurler Cam CW	Operates the Decurler Roll Cam at P2 -> P5 -> P4 -> P3 -> P2 Steps in CW direction. Stops for 5 seconds at each position and then automatically moves to the next position. (The movement from P2 -> P5 is in CCW direction) During execution request, this is performed after performing the Standby operation. Upon receiving Stop request, Initialize operation is performed and the operation ends. The Roll Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	-	010-045, 010-046, 010-049, 010-053~010-059, 010-064	O			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-051	Belt Decurler Cam CCW	Operates the Decurler Belt Cam at P1 -> P2 -> P3 -> P1 Steps in CCW direction. Stops for 5 seconds at each position and then automatically moves to the next position. During execution request, this is performed after performing the Standby operation. Upon receiving Stop request, Initialize operation is performed and the operation ends. The Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	-	010-047, 010-048, 010-052 to 010-059	O			FUSING
010-052	Belt Decurler Cam CW	Operates the Decurler Belt Cam at P1 -> P3 -> P2 -> P1 Steps in CW direction. Stops for 5 seconds at each position and then automatically moves to the next position. During execution request, this is performed after performing the Standby operation. Upon receiving Stop request, Initialize operation is performed and the operation ends. The Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	-	010-047, 010-048, 010-051, 010-053~010-059	O			FUSING
010-053	Decurler Penetration #1	Sets to strong Upper curl straightening state. Roll Decurler P5, Belt Decurler P1 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045~010-052, 010-054~010-059, 010-064	X			FUSING
010-054	Decurler Penetration #2	Sets to medium Upper curl straightening state. Roll Decurler P4, Belt Decurler P1 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045~010-053, 010-055~010-059, 010-064	X			FUSING
010-055	Decurler Penetration #3	Sets to weak Upper curl straightening state. Roll Decurler P3, Belt Decurler P1 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045~010-054, 010-056~010-059, 010-064	X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-056	Decurler Penetration #4	Sets to faint Upper curl straightening state. Roll Decurler P2, Belt Decurler P1 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045~010-055, 010-057~010-059, 010-064	X			FUSING
010-057	Decurler Penetration #5	Sets to No curl straightening state. Roll Decurler P1, Belt Decurler P1 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045 to 010-056, 010-058, 010-059, 010-064	X			FUSING
010-058	Decurler Penetration #6	Sets to medium Down curl straightening state. Roll Decurler P2, Belt Decurler P2 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045~010-057, 010-059, 010-064	X			FUSING
010-059	Decurler Penetration #7	Sets to strong Down curl straightening state. Roll Decurler P2, Belt Decurler P3 During execution request, this is performed after performing the Standby operation. When this is in progress, the Penetration Motor will be in Hold state. Upon receiving Stop request or at Time Out, Initialize operation is performed and the operation ends. The Roll/Belt Decurler Initialize Fail detection is not performed during Diagnostic Function.		O	10 [s]	010-045~010-058, 010-064	X			FUSING
010-060	V_Tra Fan 4 High	When ON, the V-TRA FAN 4 ON (H) is driven. Air Volume: the value specified in NVM [106-400 PW < 257 V-TRA FAN 4 Air Volume].		O	-		X	High	ON State	FUSING
10-061	ER Motor	When ON, the E/R MOTOR is driven at [ER Low Rotation Speed] (default value: 125000 = 125.00 mm/s) and stopped when 3 [s] has passed. ***NOTE:*** *When one of the following Fails has occurred during the Component Controller Check, the Start Key is not accepted.* • Fusing Belt In Limit Fail, Fusing Belt Out Limit Fail • Over Heat Fail of each Sensor		O	3 [s]		X	Low	ON State	FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
10-062	PR IRS1 Solenoid	When the Component Control request is ON, the Solenoid is turned ON (the Shutter is closed) for 1 [s] (timer used: [100 ms]), after which the Solenoid is turned OFF (the Shutter is opened) and the operation ends. Or, the Solenoid is turned OFF (the Shutter is opened) and the operation ends when the Component Control request is OFF. Fail detection is not performed.		O	-		X	Low	Shutter Closed	FUSING
10-063	PR IRS2 Solenoid	When the Component Control request is ON, the Solenoid is turned ON (the Shutter is closed) for 1 [s] (timer used: [100 ms]), after which the Solenoid is turned OFF (the Shutter is opened) and the operation ends. Or, the Solenoid is turned OFF (the Shutter is opened) and the operation ends when the Component Control request is OFF. Fail detection is not performed.		O	-		X	Low	Shutter Closed	FUSING
010-064	Roll Decurler Cam Position Change	Operates the Decurler Roll Cam at P2 -> P3 -> P5 -> P4 -> P2 -> P4 -> P5 -> P3 -> ... Steps and repeats. Stops for 5 seconds at each position and then automatically moves to the next position. (Does not pass P1 when not moving to Initialize or Standby) During execution request, this is performed after performing the Standby operation. Upon receiving Stop request, Initialize operation is performed and the operation ends. The Roll Decurler Initialize Fail detection is not performed during Diagnostic Function.		O		010-045, 010-046, 010-049, 010-050, 010-053~010-059	O			FUSING
010-065	Fusing Idling High Speed PR Contact	With PR in Contact state, rotates the FUSING MOTOR in high speed. <Execution Condition> When conditions (1) and (2) below are both fulfilled. 1. When the Component execution request is received, the following temperature monitor values are all 100 [degrees] or higher. • HR_STS1 • IR_STS1 • ER_STS1 2. Conditions that allow Relay On are all fulfilled.		O	30 [s]	010-001~010-004, 010-007~010-024, 010-066~010-068	X			FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-066	Fusing Idling High Speed PR Retract	With PR in Retract state, rotates the FUSING MOTOR in high speed. <Execution Condition> When conditions (1) and (2) below are both fulfilled. 1. When the Component execution request is received, the following temperature monitor values are all 100 [degrees] or higher. • HR_STS1 • IR_STS1 • ER_STS1 2. Conditions that allow Relay On are all fulfilled.		O	30 [s]	010-001~010-004, 010-007~010-024, 010-065, 010-067, 010-068	X			FUSING
010-067	Fusing Idling Low Speed PR Contact	With PR in Contact state, rotates the FUSING MOTOR in low speed. <Execution Condition> When conditions (1) and (2) below are both fulfilled. 1. When the Component execution request is received, the following temperature monitor values are all 100 [degrees] or higher. • HR_STS1 • IR_STS1 • ER_STS1 2. Conditions that allow Relay On are all fulfilled.		O	30 [s]	010-001~010-004, 010-007~010-024, 010-065, 010-067, 010-068	X			FUSING
010-068	Fusing Idling Low Speed PR Retract	With PR in Retract state, rotates the FUSING MOTOR in low speed. <Execution Condition> When conditions (1) and (2) below are both fulfilled. 1. When the Component execution request is received, the following temperature monitor values are all 100 [degrees] or higher. • HR_STS1 • IR_STS1 • ER_STS1 2. Conditions that allow Relay On are all fulfilled.		O	30 [s]	010-001~010-004, 010-007~010-024, 010-065~010-067	X			FUSING
010-100	PR Latch Sensor	Low display indicates Contact state.	O		-		X	High	Latch Down	FUSING
010-101	Steering Position Sensor	Low display indicates Belt Out -> In operation. Rear Steer state in which the I/R Alignment that serves as Steering brings the Belt to the In Side.	O		-		X	High	Belt is moving from Out -> In state Rear Steer Status	FUSING

Table 1 DC330 Component Check List (Fusing)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
010-102	Belt Position Sensor In Cont	Low display indicates that Belt In Cont is detected.	O		-		X	Low	Belt edge is detected to have moved towards the In side	FUSING
010-103	Belt Position Sensor Out Cont	Low display indicates that Belt Out Cont is detected.	O		-		X	Low	Belt edge is detected to have moved towards the Out side	FUSING
010-104	Belt Position Sensor Limit	High display indicates that Limit is detected. Out Limit Fail will occur when BELT POSITION OUT CONT SENSOR becomes Low display simultaneously. In Limit Fail will occur when BELT POSITION IN CONT SENSOR becomes Low display simultaneously.	O		-		X	Low	Belt edge is detected to be out of the specified range	FUSING
010-105	Belt Speed Sensor	Low display indicates Exposed state.	O		-		X	Low	Speed Detection Signal of the Belt	FUSING
010-106	Refresh Roll Retract Sensor	High display indicates Latch On state.	O		-		X	High	Retract	FUSING
010-108	Fusing Exit Sensor	Low display indicates that paper exists.	O		-		X	Low	Paper Detected	FUSING
010-109	Clg Upper Steering Position Sensor	Detects the Steering position. Displays the current Sensor Output (High/Low) from Component Control request.	O		-		X	Low	Home Position detected	FUSING
010-110	Clg Lower Steering Position Sensor	Detects the Steering position. Displays the current Sensor Output (High/Low) from Component Control request.	O		-		X	Low	Home Position detected	FUSING
010-111	BURR_PRESS_RETRACT_SENSOR	Detects the BURR PRESS RETRACT SENSOR On/Off.	O		-		X	High	LatchUP (Retract)	FUSING
010-112	BURR_PRESS_PATH_SENSOR	Detects the BURR PRESS PATH SENSOR On/Off.	O		-		X	Low	Paper detected	FUSING
010-113	Roll Decurler Home Position Sensor	Detects the DECURLER CAM ROLL SENSOR On/Off.	O		-		X	High	ON State	FUSING
010-114	Belt Decurler Home Position Sensor	Detects the DCR BELT CAM SENSOR On/Off.	O		-		X	High	ON State	FUSING
010-115	Decurler Exit Sensor	Detects the DECURLER EXIT SENSOR On/Off.	O		-		X	Low	Paper detected	FUSING

6.3.1.7 DC330 Component Check List (ILS)

Table 1 DC330 Component Check List (ILS)

Chain-Link	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
017-001	ILS Lamp	Lamp ON Sends the Lamp_ON (Lamp, Lamp Fan Forced ON Request) to ILS-DC. 0: NVM Settings Value 1: Continuous ON is not used		O	-	017-002	X			ILS
017-002	WR-MOT	WR Motor Retract Operation Sends the Mot_ON (Motor Forced ON Request) to ILS-DC. Motor Rotation Mode. 0: Auto OFF		O	-	017-001	X			ILS

6.3.2.1 DC330 Component Check List (Attention Light)

Table 1 DC330 Component Check List (Attention Light)

Chain	Component Name	Description	IN	OUT	Time Out	Multiple Output Prohibited Items Chain-Link	Cyclic Operation	ON State		Sub Module Name
								Connector Level	Meaning	
003-001	LED Green ON	Turns ON the Attention Light LED (green).		O	-	Other LED ON/Flash	X			Attention Light
003-002	LED Green Flash	Flashes the Attention Light LED (green) in a slow cycle.		O	-	Other LED ON/Flash	X			Attention Light
003-003	LED Amber ON	Turns ON the Attention Light LED (amber).		O	-	Other LED ON/Flash	X			Attention Light
003-004	LED Amber Flash	Flashes the Attention Light LED (amber) in a fast cycle.		O	-	Other LED ON/Flash	X			Attention Light
003-010	Buzzer Near Full/Near Empty Sound Loud	Sounds the Attention Light Buzzer to simulate Near Full/Near Empty in a loud volume.		O	-	Other Buzzer	X			Attention Light
003-011	Buzzer Near Full/Near Empty Sound Medium	Sounds the Attention Light Buzzer to simulate Near Full/Near Empty in a medium volume.		O	-	Other Buzzer	X			Attention Light
003-012	Buzzer Near Full/Near Empty Sound Soft	Sounds the Attention Light Buzzer to simulate Near Full/Near Empty in a soft volume.		O	-	Other Buzzer	X			Attention Light
003-013	Buzzer Stop Trigger (Out of Paper) Sound Loud	Sounds the Attention Light Buzzer to simulate Stop Trigger (Out of Paper) in a loud volume.		O	-	Other Buzzer	X			Attention Light
003-014	Buzzer Stop Trigger (Out of Paper) Sound Medium	Sounds the Attention Light Buzzer to simulate Stop Trigger (Out of Paper) in a medium volume.		O	-	Other Buzzer	X			Attention Light
003-015	Buzzer Stop Trigger (Out of Paper) Sound Soft	Sounds the Attention Light Buzzer to simulate Stop Trigger (Out of Paper) in a soft volume.		O	-	Other Buzzer	X			Attention Light
003-016	Buzzer Stop Trigger (Other than Out of Paper) Sound Loud	Sounds the Attention Light Buzzer to simulate Stop Trigger (Other than Out of Paper) in a loud volume.		O	-	Other Buzzer	X			Attention Light
003-017	Buzzer Stop Trigger (Other than Out of Paper) Sound Medium	Sounds the Attention Light Buzzer to simulate Stop Trigger (Other than Out of Paper) in a medium volume.		O	-	Other Buzzer	X			Attention Light
003-018	Buzzer Stop Trigger (Other than Out of Paper) Sound Soft	Sounds the Attention Light Buzzer to simulate Stop Trigger (Other than Out of Paper) in a soft volume.		O	-	Other Buzzer	X			Attention Light

6.3.3 DC135 HFSI List

NOTE: *Condition of replacement interval (A4 impressions): FC Ratio: 100%, A4 Job Size: 250, Area Coverage: 7.5% for each color.*

NOTE:

**1: When white toner is used, the replacement interval is changed because the HFSI count up value is changed and used.*

Table 1 6.3.3 DC135 HFSI List

Chain-Link	HFSI Name	Parts Name	PL No.	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impressions)	Units	Description	Sub Module Name
004-800	DRIVE ASSY-PR #1	DRIVE ASSY-DRUM A	PL 3.1 Item 1	10,000,000	10000K	#1 Number of Drum rotations		DRIVE
004-801	DRIVE ASSY-PR #6	DRIVE ASSY-DRUM A	PL 3.1 Item 1	10,000,000	10000K	#6 Number of Drum rotations		DRIVE
004-802	DRIVE ASSY-PR #2,3,4	DRIVE ASSY-DRUM A	PL 3.1 Item 1	10,000,000	10000K	#2, 3, 4 Number of Drum rotations		DRIVE
004-803	DRIVE ASSY-PR #5	DRIVE ASSY-DRUM A	PL 3.1 Item 1	10,000,000	10000K	#5 Number of Drum rotations		DRIVE
004-804	GEAR IBT DRIVE 56T	IBT Drive Gear (56T)	PL 6.5 Item 10	550,000	5000K	No. of IBT Belt revolutions*		DRIVE
004-810	Suction Filter #1	FILTER ASSY-MAIN	PL 4.11 Item 9 (#1)	500,000	500K*1	Total impressions		NOHAD
004-811	Suction Filter #6	FILTER ASSY-MAIN	PL 4.10 Item 5 (#6)	500,000	500K*1	Total impressions		NOHAD
004-812	Suction Filter #2,3,4	FILTER ASSY-MAIN	• PL 4.11 Item 9 (#2) • PL 4.10 Item 5 (#3, #4)	500,000	500K	Total impressions		NOHAD
004-813	Suction Filter #5	FILTER ASSY-MAIN	PL 4.10 Item 5 (#5)	500,000	500K	Total impressions		NOHAD
004-816	CC Dust Filter #1	FILTER ASSY-CC DUST	PL 4.4 Item 6	2,000,000	2000K	Total impressions		NOHAD
004-817	CC Dust Filter #6	FILTER ASSY-CC DUST	PL 4.4 Item 6	2,000,000	2000K	Total impressions		NOHAD
004-818	CC Dust Filter #2,3,4	FILTER ASSY-CC DUST	PL 4.4 Item 6	2,000,000	2000K	Total impressions		NOHAD
004-819	CC Dust Filter #5	FILTER ASSY-CC DUST	PL 4.4 Item 6	2,000,000	2000K	Total impressions		NOHAD
004-820	VOC Filter	FILTER-VOC UPPER	PL 19.9 Item 13	800,000	800K	Total impressions		NOHAD
007-800	Feed /Retard /Nudger Roll (#1 Tray)	ROLL ASSY NUD ROLL ASSY-FEED ROLL ASSY-RETARD	• PL 10.7 Item 14 • PL 10.7 Item 16 • PL 10.10 Item 6	500,000	500K Feed	#1 Tray Feed Count		PH (Feeder)
007-801	Feed /Retard /Nudger Roll (#2 Tray)	ROLL ASSY NUD ROLL ASSY-FEED ROLL ASSY-RETARD	• PL 10.7 Item 14 • PL 10.7 Item 16 • PL 10.10 Item 6	500,000	500K Feed	#2 Tray Feed Count		PH (Feeder)
007-803	#1 Feeder Unit	FEEDER ASSY-SMH	PL 10.5 Item 1	3,000,000	3000K Feed	#1 Tray Total Feed Count		PH (Feeder)
007-804	#2 Feeder Unit	FEEDER ASSY-SMH	PL 10.5 Item 1	3,000,000	3000K Feed	#2 Tray Total Feed Count		PH (Feeder)
007-806	#1 T/A Roll	ROLL ASSY-TA	PL 10.8 Item 9	1,500,000	1500K Feed	T/A Roll #1 Feed Count		PH (Feeder)
007-807	#2 T/A Roll	ROLL ASSY-TA	PL 10.8 Item 9	1,500,000	1500K Feed	T/A Roll #2 Feed Count		PH (Feeder)
008-821	ALIGNER ROLL CROSSED	• ROLL ASSY-CROSSED • BRACKET ASSY-PAD	• PL 15.12 Item 5 • PL 15.12 Item 3	3,000,000	3000K	Total impressions		PH (ALIGNER/REG)

Table 1 6.3.3 DC135 HFSI List

Chain-Link	HFSI Name	Parts Name	PL No.	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impressions)	Units	Description	Sub Module Name
008-830	REG ROLL	• ROLLER ASSY-REGI DRIVE • ROLLER ASSY-REGI PINCH • GEAR-Z15 47 M0.5	• PL 15.13 Item 1 • PL 15.13 Item 26 • PL 15.14 Item 9	3,200,000	3200K	TOTAL Regi COUNT		PH (ALIGNER/ REG)
008-840	V-Tra #1 Belt	BELT-TRANSPORT	PL 6.22 Item 9	3,000,000	3000K	Total impressions		V-Tra
008-841	V-Tra #2 Belt	BELT-TRANSPORT	PL 6.22 Item 9	3,000,000	3000K	Total impressions		V-Tra
008-842	V-Tra #3 Belt	BELT-TRANSPORT	PL 6.22 Item 9	3,000,000	3000K	Total impressions		V-Tra
008-843	V-Tra Brush	BRUSH ASSY-BELT	PL 6.22 Item 10	1,000,000	1000K	Total impressions		V-Tra
009-800	DEVELOPER CT #1	KIT SP DEV CLR DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120LA	Developer
009-802	DEVELOPER GLD #1	KIT SP DEV GLD DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120GA	Developer
009-804	DEVELOPER GLD #6	KIT SP DEV GLD DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120GA	Developer
009-806	DEVELOPER SLV #6	KIT SP DEV SLV DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120SA	Developer
009-807	DEVELOPER SLV #1	KIT SP DEV SLV DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120SA	Developer
009-808	DEVELOPER #2 (Y)	KIT SP DEV Y DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120YA	Developer
009-809	DEVELOPER #3 (M)	KIT SP DEV M DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120MA	Developer
009-810	DEVELOPER #4 (C)	KIT SP DEV C DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120CA	Developer
009-811	DEVELOPER #5 (K)	KIT SP DEV K DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120BA	Developer
009-812	DEVE Housing CT #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (CLR)	4,000,000	4000K	Deve Motor drive time		Developer
009-814	DEVE Housing GLD #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (GLD)	4,000,000	4000K	Deve Motor drive time		Developer
009-816	DEVE Housing GLD #6	KIT DEVE SP SC NB	PL 5.8 Item 1 (GLD)	4,000,000	4000K	Deve Motor drive time		Developer
009-818	DEVE Housing SLV #6	KIT DEVE SP SC NB	PL 5.8 Item 1 (SLV)	4,000,000	4000K	Deve Motor drive time		Developer
009-819	DEVE Housing SLV #1	KIT DEVE SP SC NB	PL 5.8 Item 1 (SLV)	4,000,000	4000K	Deve Motor drive time		Developer
009-820	DEVE Housing #2 (Y)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (Y)	4,000,000	4000K	Deve Motor drive time		Developer
009-821	DEVE Housing #3 (M)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (M)	4,000,000	4000K	Deve Motor drive time		Developer
009-822	DEVE Housing #4 (C)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (C)	4,000,000	4000K	Deve Motor drive time		Developer
009-823	DEVE Housing #5 (K)	KIT DEVE SP 4C NB	PL 5.8 Item 33 (K)	4,000,000	4000K	Deve Motor drive time		Developer

Table 1 6.3.3 DC135 HFSI List

Chain-Link	HFSI Name	Parts Name	PL No.	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impressions)	Units	Description	Sub Module Name
009-824	DEVELOPER TX #1	KIT SP DEV TX DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120PA	Developer
009-825	DEVE Housing TX #1	KIT DEVE SP SC NB	PL 5.8 Item1 (TX)	4,000,000	4000K	Deve Motor drive time		Developer
009-826	DEVELOPER P #1	KIT SP DEV PINK DW	-	4,000,000	4000K	Deve Motor drive time	BP-NV120PA	Developer
009-827	DEVE Housing P #1	KIT DEVE SP SC NB	PL 5.8 Item1 (P)	4,000,000	4000K	Deve Motor drive time		Developer
009-828	DEVELOPER P #6	KIT SP DEV PINK DW	-	4,000,000	4000K	Deve Motor drive time		Developer
009-829	DEVE Housing P #6	KIT DEVE SP SC NB	PL 5.8 Item1 (P)	4,000,000	4000K	Deve Motor drive time	BP-NV120TA	Developer
009-836	DEVE Filter CT #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (CLR)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where CLR#1 is installed is converted to PV per A4 and accumulated.	Developer
009-838	DEVE Filter GLD #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (GLD)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where GLD#1 is installed is converted to PV per A4 and accumulated.	Developer
009-839	DEVE Filter SLV #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (SLV)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where SLV#1 is installed is converted to PV per A4 and accumulated.	Developer
009-840	Drum Uint PV #1	KIT DRUM DW	-	1,200,000	1200K	Total impressions	BP-DU120	EPG/CLN
009-842	Drum Unit PV #2	KIT DRUM DW	-	1,200,000	1200K	Total impressions	BP-DU120	EPG/CLN
009-844	Drum Unit PV #3	KIT DRUM DW	-	1,200,000	1200K	Total impressions	BP-DU120	EPG/CLN
009-846	Drum Unit PV #4	KIT DRUM DW	-	1,200,000	1200K	Total impressions	BP-DU120	EPG/CLN
009-848	Drum Unit PV #5	KIT DRUM DW	-	1,200,000	1200K	Total impressions	BP-DU120	EPG/CLN
009-850	Drum Unit PV #6	KIT DRUM DW	-	1,200,000	1200K	Total impressions	BP-DU120	EPG/CLN
009-870	2nd BTB Unit (IMPS)	BELT ASSY-2ND,BTB,C2,LOW	PL 6.20 Item 4	720,000	720K	Total impressions		Xfer
009-872	Belt Cleaner Unit (IMPS)	CLEANER ASSY-HIGH,C2	PL 6.2Item 10	720,000	720K	Total impressions		Xfer
009-874	1st BTR #1	ROLLER ASSY 1ST	PL 6.7 Item 1	720,000	720K	Total impressions		Xfer
009-875	1st BTR #6	ROLLER ASSY 1ST	PL 6.7 Item 1	720,000	720K	Total impressions		Xfer
009-876	1st BTR #2 ~ #4	ROLLER ASSY 1ST	PL 6.7 Item 1	720,000	720K	Total impressions		Xfer
009-877	1st BTR #5	ROLLER ASSY 1ST	PL 6.7 Item 1	720,000	720K	Total impressions		Xfer
009-878	IBT BELT (IMPS)	BELT ASSY-|IBT	PL 6.3 Item 1	1,200,000	1200K	Total impressions		Xfer
009-880	Belt Inner Cleaner	BRUSH ASSY-INNER	PL 6.6 Item 20	1,200,000	1200K	Total impressions		Xfer
009-881	Back Up Roll	ROLL ASSY-BUR,FIN	PL 6.15 Item 2	1,200,000	1200K	Total impressions		Xfer

Table 1 6.3.3 DC135 HFSI List

Chain-Link	HFSI Name	Parts Name	PL No.	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impressions)	Units	Description	Sub Module Name
009-882	Bearing 1st BTR Assy #1	• HOLDER ASST BTR F(Front Parts) • HOLDER ASSY BTR R(RearParts)	• PL 6.7 Item 12 • PL 6.7 Item 3	2,400,000	2400K	Total impressions		Xfer
009-883	Bearing 1st BTR Assy #6	• HOLDER ASST BTR F(Front Parts) • HOLDER ASSY BTR R(RearParts)	• PL 6.7 Item 15 • PL 6.7 Item 16	2,400,000	2400K	Total impressions		Xfer
009-884	Bearing 1st BTR Assy #2 ~ #4	• HOLDER ASST BTR F(Front Parts) • HOLDER ASST BTR F(Front Parts #3,#4) • HOLDER ASSY BTR R(Rear Parts)	• PL 6.7 Item 2 • PL 6.7 Item 3 • PL 6.7 Item 12	2,400,000	2400K	Total impressions		Xfer
009-885	Bearing 1st BTR Assy #5	• HOLDER ASST BTR F(Front Parts) • HOLDER ASSY BTR R(RearParts)	• PL 6.7 Item 13 • PL 6.7 Item 14	2,400,000	2400K	Total impressions		Xfer
009-886	Back Up Roll Assy	ROLLER ASSY-BACKUP,C2	PL 6.6 Item 8	2,400,000	2400K	Total impressions		Xfer
009-887	Torque Limiter Assy GEAR IDLER	• BRACKET ASSY-TORQUE • GEAR-BELT,IDLE • HOLDER ASSY-BTB,RR	• PL 6.25 Item 1 • PL 6.24 Item 10 • PL 6.25 Item 9	1,600,000	1600K	Total impressions		Xfer
009-889	IBT CLN MOT GEARS	GEAR-HELICAL,35	PL 6.5 Item 19	3,200,000	3200K	Total impressions		Xfer
009-890	BTB FRAME ESB GEARS	• GEAR-HERICAL,32 • GEAR-HERICAL,41/15	• PL 6.24 Item 7 • PL 6.24 Item 8	1,600,000	1600K	Total impressions		Xfer
009-891	DEVE Filter GLD #6	KIT DEVE FILTER NB	PL 5.8 Item 30 (GLD)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where GLD#6 is installed is converted to PV per A4 and accumulated.	Developer
009-892	DEVE Filter SLV #6	KIT DEVE FILTER NB	PL 5.8 Item 30 (SLV)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where SLV#6 is installed is converted to PV per A4 and accumulated.	Developer
009-893	DEVE Filter TX #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (TX)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where TX #1 is installed is converted to PV per A4 and accumulated.	Developer
009-894	DEVE Filter P #1	KIT DEVE FILTER NB	PL 5.8 Item 30 (P)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where P #1 is installed is converted to PV per A4 and accumulated.	Developer

Table 1 6.3.3 DC135 HFSI List

Chain-Link	HFSI Name	Parts Name	PL No.	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impressions)	Units	Description	Sub Module Name
009-895	DEVE Filter #2 (Y)	KIT DEVE FILTER NB	PL 5.8 Item 30 (Y)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where Y (#2) is installed is converted to PV per A4 and accumulated.	Developer
009-896	DEVE Filter #3 (M)	KIT DEVE FILTER NB	PL 5.8 Item 30 (M)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where M (#3) is installed is converted to PV per A4 and accumulated.	Developer
009-897	DEVE Filter #4 (C)	KIT DEVE FILTER NB	PL 5.8 Item 30 (C)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where C (#4) is installed is converted to PV per A4 and accumulated.	Developer
009-898	DEVE Filter #5 (K)	KIT DEVE FILTER NB	PL 5.8 Item 30 (K)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where K (#5) is installed is converted to PV per A4 and accumulated.	Developer
009-899	DEVE Filter P #6	KIT DEVE FILTER NB	PL 5.8 Item 30 (P)	1,200,000	1200K	Deve Motor drive time	The Deve Motor ON time at the position where P #6 is installed is converted to PV per A4 and accumulated.	Developer
010-800	Web CRU	WEB ASSY DW	PL 7.2 Item 3	1,200,000	1200K	WEB (E/R) MOTOR ON TIME(S)		Fusing (BRF)
010-801	Oil Wick	WICK ASSY-BELT OIL	PL 7.4 Item 8	500,000	500K	Total impressions		Fusing (BRF)
010-802	BELT Module	BELT ASSY-FUSING,MODULE	PL 7.4 Item 2	1,500,000	1500K	Total impressions		Fusing (BRF)
010-803	Fusing Belt	BELT ASSY-Fusing	PL 7.4 Item 1	500,000	500K	Total impressions		Fusing (BRF)
010-804	P/Roll	ROLL ASSY-PRESS	PL 7.3 Item 19	500,000	500K	Total impressions		Fusing (BRF)
010-805	External Assy	ROLL ASSY-EXTERNAL	PL 7.7 Item 26	1,000,000	1000K	Total impressions		Fusing (BRF)
010-806	Sheet	PLATE ASSY-PAD	PL 7.14 Item 29	500,000	500K	Total impressions		Fusing (BRF)
010-807	Refresh Roll	ROLL ASSY-REFRESH	PL 7.10 Item 1	1,000,000	1000K	Total impressions		Fusing (BRF)
010-808	CHUTE ASSY-FINGER PR	CHUTE ASSY-FINGER PR	PL 7.3 Item 12	500,000	500K	Total impressions		Fusing (BRF)
010-809	V-Tra Exit Belt	• BELT-TRANSPORT EXIT W • BELT-TRANSPORT EXIT S	• PL 7.6 Item 27 • PL 7.6 Item 8	2,000,000	2000K	Total impressions		Fusing (BRF)
010-811	V-TRA BELT INLET	BELT-TRANSPORT,INLET	PL 7.5 Item 15	2,000,000	2000K	Total impressions		Fusing (BRF)
010-816	ER TORQUE-LIMITER	Torque Joint	PL 7.7 Item 12	3,000,000	35000K	Number of Torque Limiter Rotations		Fusing (BRF)
010-817	Web CRU Film	WEB ASSY FILM DW	PL 7.2 Item3	55,000	55K	WEB (H/R) MOTOR ON TIME	Accumulate Fusing Web Motor ON Time (sec).	Fusing (BRF)

Table 1 6.3.3 DC135 HFSI List

Chain-Link	HFSI Name	Parts Name	PL No.	HFSI Replacement Life (Count Data)	Replacement Interval (A4 Impressions)	Units	Description	Sub Module Name
010-820	BELT-DECURLER	BELT-DECURLER	PL 16.24 Item 10	3,000,000	3000K	Total impressions		Fusing (Decurler)
010-822	ROLL ASSY-LEVER PENE	ROLL ASSY-LEVER PENE	PL 16.23 Item 33	400,000	400K	Total impressions		Fusing (Decurler)
010-840	Cooling Belt Upper	BELT-COOLING	PL 16.5 Item 1	1,000,000	1000K	Total impressions		Fusing (Cooling)
010-841	Cooling Belt Lower	BELT-COOLING	PL 16.7 Item 1	1,000,000	1000K	Total impressions		Fusing (Cooling)
010-842	ROLL ASSY-DRIVE_COOLING	ROLL ASSY-DRIVE BRG	PL 16.5 Item 2 PL 16.9 Item 5	4,000,000	4000K	Total impressions		Fusing (Cooling)
010-843	ROLL ASSY-BACKUP D32	ROLL ASSY-BACKUP D32	PL 16.8 Item 2	4,000,000	4000K	Total impressions		Fusing (Cooling)
010-844	ROLL ASSY-BACKUP D20	• ROLL ASSY-BACKUP D20 • ROLL ASSY-BACKUP D20S	• PL 16.8 Item 1 • PL 16.8 Item 19	4,000,000	4000K	Total impressions		Fusing (Cooling)
010-845	ROLL ASSY-STEERING_UPPER	ROLL ASSY-STEERING	PL 16.6 Item 38	4,000,000	4000K	Total impressions		Fusing (Cooling)
010-846	ROLL ASSY-STEERING_LOWER	ROLL ASSY-STEERING	PL 16.9 Item 37	4,000,000	4000K	Total impressions		Fusing (Cooling)
011-800	Developer SP 1(WWW) #1	KIT SP DEV WHT DW	-	4,000,000	4000K	Deve Motor Drive Time	BP-NV120WA	Developer
011-816	Developer SP 1(WWW) #6	KIT SP DEV WHT DW	-	4,000,000	4000K	Deve Motor Drive Time	BP-NV120WA	Developer
011-832	Developer Housing SP1(WWW) #1	KIT DEVE SP W NB	PL 5.8 Item1 (WHT)	4,000,000	4000K	Deve Motor Drive Time		Developer
011-848	Developer Housing SP1(WWW) #6	KIT DEVE SP W NB	PL 5.8 Item1 (WHT)	4,000,000	4000K	Deve Motor Drive Time		Developer
011-864	Developer Filter SP 1(WWW) #1	KIT DEVE FILTER NB	PL 5.8 Item30 (WHT)	1,200,000	1200K	Deve Motor Drive Time	The Deve Motor ON time at the position where WHT#1 is installed is converted to PV per A4 and accumulated.	Developer
011-880	Developer Filter SP 1(WWW) #6	KIT DEVE FILTER NB	PL 5.8 Item30 (WHT)	1,200,000	1200K	Deve Motor Drive Time		Developer

6.3.4 DC140 Analog Monitor List

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
004-100	Edge Sensor 1st	Displays the analog AD value for Belt Edge Sensor 1	O			-	-	-	-	DRIVE
004-101	Edge Sensor 3rd	Displays the analog AD value for Belt Edge Sensor 3	O			-	-	-	-	DRIVE
006-080	ReC LED In A	LED ON for In (Rear) ReC Sensor		O		-	-	-	-	REGI CON
006-081	ReC LED Center A	LED ON for Center ReC Sensor		O		-	-	-	-	REGI CON
006-082	ReC LED Out A	LED ON for Out (Front) ReC Sensor		O		-	-	-	-	REGI CON
006-180	ReC Moni In A	Displays the analog monitor voltage for In (Rear) ReC Sensor A-Pulse	O			-	-	-	Analog monitor voltage display of ReC Sensor (In-A)	REGI CON
006-181	ReC Moni In B	Displays the analog monitor voltage for In (Rear) ReC Sensor B-Pulse	O			-	-	-	Analog monitor voltage display of ReC Sensor (In-B)	REGI CON
006-182	ReC Moni Center A	Displays the analog monitor voltage for Center ReC Sensor A-Pulse	O			-	-	-	Analog monitor voltage display of ReC Sensor (Center-A)	REGI CON
006-183	ReC Moni Center B	Displays the analog monitor voltage for Center ReC Sensor B-Pulse	O			-	-	-	Analog monitor voltage display of ReC Sensor (Center-B)	REGI CON
006-184	ReC Moni Out A	Displays the analog monitor voltage for Out (Front) ReC Sensor A-Pulse	O			-	-	-	Analog monitor voltage display of ReC Sensor (Out-A)	REGI CON
006-185	ReC Moni Out B	Displays the analog monitor voltage for Out (Front) ReC Sensor B-Pulse	O			-	-	-	Analog monitor voltage display of ReC Sensor (Out-B)	REGI CON
007-200	Tray Temp Sensor Analog	Displays the AD value for Tray Temp Sensor (Temperature Sensor).	O			-	-	-	• Normal Output Range: 790 to 196 (nominal) • Failure Determination Level: Out of the above range • Presumed cause for failure: Operation failure at the temperature detection section of the Tray Humidity & Temp Sensor • Corrective action at failure: Check the operation of Tray Humidity & Temp Sensor (check for hardware failures/Sensor output AD value). If NG, replace the Tray Humidity & Temp Sensor	Tray

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
007-201	Tray Humidity Sensor Analog	Displays the AD value for Tray Humidity Sensor (Humidity Sensor).	O			-	-	-	• Normal Output Range: 0 to 412 (nominal) • Failure Determination Level: Out of the above range • Presumed cause for failure: Operation failure at the humidity detection section of the Tray Humidity & Temp Sensor • Corrective action at failure: Check the operation of Tray Humidity & Temp Sensor (check for hardware failures/Sensor output AD value). If NG, replace the Tray Humidity & Temp Sensor	Tray
007-202	Tray 1 Lead Heater Temp Sensor Analog	Displays the AD value for Tray 1 Lead Heater Temp Sensor (Temperature Sensor).	O			-	-	-	• Normal Output Range: 909 to 119 (nominal) • Failure Determination Level: Out of the above range • Presumed cause for failure: Tray 1 Lead Heater Temp Sensor operation failure • Corrective action at failure: Check the operation of Tray 1 Lead Heater Temp Sensor (check for hardware failures/Sensor output AD value). If NG, replace the Tray 1 Lead Heater (because Tray 1 Lead Heater Temp Sensor is built into the Tray 1 Lead Heater)	Tray
007-203	Tray 2 Lead Heater Temp Sensor Analog	Displays the AD value for Tray 2 Lead Heater Temp Sensor (Temperature Sensor). Display.	O			-	-	-	• Normal Output Range: 909 to 119 (nominal) • Failure Determination Level: Out of the above range • Presumed cause for failure: Tray 2 Lead Heater Temp Sensor operation failure • Corrective action at failure: Check the operation of Tray 2 Lead Heater Temp Sensor (check for hardware failures/Sensor output AD value). If NG, replace the Tray 2 Lead Heater (because Tray 2 Lead Heater Temp Sensor is built into the Tray 2 Lead Heater)	Tray
008-200	Multi Feed Sensor	Displays the Paper Weight AD Value of Transported Paper.	O			-	-	-	• Normal Output Range: 293 to 786 when there is no paper. When 1 sheet of standard paper (P paper) is passing through, it is approx. -12 to -18 compared to when there is no paper (depending on paper thickness). • Failure Determination Level: When unable to adjust within the previously stated output range, it could be due to the following reasons. The precision of the installation section of the Multi Feed Sensor, a Multi Feed Sensor operation failure, or operation failure at the harness from the Multi Feed Sensor to the PWB. • Corrective action at failure: Check the Multi Feed Sensor, the harness, the shape of the Multi Feed Sensor installation section, etc. If NG, replace the previously mentioned parts.	TRANSPORT

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-130	Fusing P/Roll IRS 1	Displays the temperature (degrees) for Fusing IRS Sensor 1 (Rear) (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Switches the P/R into Latch Contact to warm up when it is at the specified temperature or lower and drives the P/R Cooling Fan to cool the P/R when it is at the specified temperature or higher according to the monitor temperature of this IRS. • Normal Output Range: room temperature to 150 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type. • Failure Determination Level: – Outside the normal output range – 0 degrees, which means Open Circuit Fail detected – Display temperature is fluctuating – Temperature difference with P/Roll IRS 2 is several 10 degrees. • Presumed cause for failure: – Open Circuit – Contamination/foreign substances stuck to P/ Roll IRS 1 (including poor cleaning of IRS 1) – Malfunction of P/Roll IRS 1 (element) – Malfunction of P/Roll IRS 1 Shutter – Improper installation of P/Roll IRS 1 – Temperature detection circuit/power supply error – Malfunction of P/Roll IRS Cooling Fan • Corrective action at failure: – Check the P/Roll IRS 1 for malfunction. – Check the P/Roll IRS 1 Shutter for malfunction. – Check the P/Roll IRS 1 harness for damage/ short circuit. – Check the P/Roll IRS Cooling Fan. – Check the temperature detection circuit. – Check the LV power supply. – Check the NVM Default Value of P/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-131	Fusing P/Roll IRS 2	Displays the temperature (degrees) for Fusing IRS Sensor 2 (Front) (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Switches the P/R into Latch Contact to warm up when it is at the specified temperature or lower and drives the P/R Cooling Fan to cool the P/R when it is at the specified temperature or higher according to the monitor temperature of this IRS. • Normal Output Range: room temperature to 150 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type/Paper Size. • Failure Determination Level: – Outside the normal output range – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating – Temperature difference with P/Roll IRS 1 is several 10 degrees. • Presumed cause for failure: – Open Circuit – Contamination/foreign substances stuck to P/ Roll IRS 2 (including poor cleaning of IRS 2) – Malfunction of P/Roll IRS 2 (element) – Malfunction of P/Roll IRS 2 Shutter – Improper installation of P/Roll IRS 2 – Temperature detection circuit/power supply error – Malfunction of P/Roll IRS Cooling Fan • Corrective action at failure: – Check the P/Roll IRS 2 for malfunction. – Check the P/Roll IRS 2 Shutter for malfunction. – Check the P/Roll IRS 2 harness for damage/ short circuit. – Check the P/Roll IRS Cooling Fan. – Check the temperature detection circuit. – Check the LV power supply. – Check the NVM Default Value of P/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-132	Fusing H/Roll STS 1	Displays the temperature (degrees) for H/Roll STS 1 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Turns the H/R Lamp ON or OFF according to the monitor temperature of this STS. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature differences with H/Roll STS 2, 3 are several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to/ improper soldering of H/Roll STS 1 – Malfunction of H/Roll STS 1 – Improper installation of H/Roll STS 1 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the H/Roll STS 1 for malfunction. – Check the H/Roll STS 1 harness for damage/ short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each H/R Lamp. – Check the NVM Default Value of H/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-133	Fusing H/Roll STS 2	Displays the temperature (degrees) for H/Roll STS 2 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Switches the H/R Lamp Main/Sub according to the difference between monitor temperature of this STS and monitor temperature of H/Roll STS 1. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type/Paper Size. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature differences with H/Roll STS 1, 3 are several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to/ improper soldering of H/Roll STS 1, 2 – Malfunction of H/Roll STS 1, 2 – Improper installation of H/Roll STS 1, 2 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the H/Roll STS 1, 2 for malfunction. – Check the H/Roll STS 1, 2 harness for damage/ short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each H/R Lamp. – Check the NVM Default Value of H/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-134	Fusing H/Roll STS 3	Displays the temperature (degrees) for H/Roll STS 3 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	This sensor comes with hardware detection for Over Heat/Open Circuit. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/Coating Type. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature differences with H/Roll STS 1, 2 are several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to/improper soldering of H/Roll STS 1, 3 – Malfunction of H/Roll STS 1, 3 – Improper installation of H/Roll STS 1, 3 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the H/Roll STS 1, 3 for malfunction. – Check the H/Roll STS 1, 3 harness for damage/short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each H/R Lamp. – Check the NVM Default Value of H/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-135	Fusing E/Roll STS 1	Displays the temperature (degrees) for E/Roll STS 1 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Turns the E/R Lamp ON or OFF according to the monitor temperature of this STS. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature difference with E/Roll STS 2 is several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to E/ Roll STS 1 – Malfunction of E/Roll STS 1 – Improper installation of E/Roll STS 1 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the E/Roll STS 1 for malfunction. – Check the E/Roll STS 1 harness for damage/ short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each E/R Lamp. – Check the NVM Default Value of E/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-136	Fusing E/Roll STS 2	Displays the temperature (degrees) for E/Roll STS 2 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Switches the E/R Lamp Main/Sub according to the difference between monitor temperature of this STS and monitor temperature of E/Roll STS 1. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type/Paper Size. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature difference with E/Roll STS 1 is several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to E/ Roll STS 1, 2 – Malfunction of E/Roll STS 1, 2 – Improper installation of E/Roll STS 1, 2 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the E/Roll STS 1, 2 for malfunction. – Check the E/Roll STS 1, 2 harness for damage/ short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each E/R Lamp. – Check the NVM Default Value of E/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-137	Fusing E/Roll STS 3	Displays the temperature (degrees) for E/Roll STS 3 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	This sensor comes with hardware detection for Over Heat/ Open Circuit. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type/Paper Size. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature difference with E/Roll STS 1, 2 is several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to/ improper soldering of H/Roll STS 1, 2, 3 – Malfunction of E/Roll STS 1, 2, 3 – Improper installation of E/Roll STS 1, 2, 3 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the E/Roll STS 1, 2, 3 for malfunction. – Check the E/Roll STS 1, 2, 3 harness for damage/short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each E/R Lamp. – Check the NVM Default Value of E/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-138	Fusing I/Roll STS 1	Displays the temperature (degrees) for I/Roll STS 1 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Turns the I/R Lamp ON or OFF according to the monitor temperature of this STS. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature differences with I/Roll STS 2, 3 are several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to/ improper soldering of I/Roll STS 1 – Malfunction of I/Roll STS 1 – Improper installation of I/Roll STS 1 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the I/Roll STS 1 for malfunction. – Check the I/Roll STS 1 harness for damage/ short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each E/R Lamp. – Check the NVM Default Value of E/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-139	Fusing I/Roll STS 2	Displays the temperature (degrees) for I/Roll STS 2 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	Switches the I/R Lamp Main/Sub according to the difference between monitor temperature of this STS and monitor temperature of I/Roll STS 1. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/ Coating Type/Paper Size. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature differences with I/Roll STS 1, 3 are several 10 degrees. • Presumed cause for failure: – Over Heat – Open Circuit – Contamination/foreign substances stuck to/ improper soldering of I/Roll STS 1, 2 – Malfunction of I/Roll STS 1, 2 – Improper installation of I/Roll STS 1, 2 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the I/Roll STS 1, 2 for malfunction. – Check the I/Roll STS 1, 2 harness for damage/ short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each I/R Lamp. – Check the NVM Default Value of I/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-140	Fusing I/Roll STS 3	Displays the temperature (degrees) for I/Roll STS 3 (Temperature Sensor) ***NOTE:*** *When performing Analog Monitor, do it before performing the Output check of Fusing Component Control.As performing the Output check of Component Control stops the Temperature Control, it may sometimes cause low temperature to be displayed.*	O			-	-	-	This sensor comes with hardware detection for Over Heat/Open Circuit. • Normal Output Range: 150 to 230 degrees – The display (setting) temperature differs depending on the Paper Weight/Paper Type/Coating Type. • Failure Determination Level: – Outside the normal output range – 240 degrees or higher, which means High Temperature Error detected – 0 degrees or lower, which means Open Circuit Fail detected – Display temperature is fluctuating regardless of Lamp ON/OFF – Temperature differences with I/Roll STS 1, 2 are several 10 degrees. • Presumed cause for failure: – Over Heat, Open Circuit – Contamination/foreign substances stuck to/improper soldering of I/Roll STS 1, 3 – Malfunction of I/Roll STS 1, 3 – mproper installation of I/Roll STS 1, 3 – Temperature detection circuit/power supply error • Corrective action at failure: – Check the I/Roll STS 1, 3 for malfunction. – Check the I/Roll STS 1, 3 harness for damage/short circuit. – Check the Thermostat conductivity. If it is not conducting, replace it. – Check the temperature detection circuit. – Check the LV power supply. – Check the ON/OFF of each I/R Lamp. – Check the NVM Default Value of I/R Temperature Control.	FUSING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-141	Fusing Out Env Snr	Displays the temperature (degrees) for Fusing Out Env Sensor (Temperature Sensor)	O			-	-	-	Since this is a hidden Fail, the machine will operate as usual even when the Fail has occurred. • Normal Output Range: Machine installation environment temperature • Failure Determination Level: – Outside the normal output range – 51 degrees or higher or -10 degrees or lower, which means Environment Temperature Sensor Fail detected – 38 degrees or higher or 4 degrees or lower, which means Environment Temperature Fail detected – Display temperature is fluctuating – The temperature difference with the measuring device (thermometer) is higher than 5 degrees • Presumed cause for failure: – Malfunction of Environment Temperature Sensor – Open Circuit/Short Circuit – The Environment Sensor is directly affected by air-conditioning – Temperature detection circuit/power supply error – Dust, etc. is stuck to the sensor • Corrective action at failure: – Check the machine usage environment temperature. – Check the Environment Temperature Sensor for malfunction. – Check the temperature detection circuit. – Check the LV power supply.	FUSING
010-142	Clg Upper Belt Position Sensor	Displays the current position for Cooling Upper Belt.	O			-	-	-	***NOTE:*** If the read value is a Fail, this will not result in a Fail. This could be because this function is also used for checking when a CE is adjusting the Belt.	COOLING

Table 1 DC140 Analog MonitorList

Chain-Link	Component Name	Description	IN	OUT	Time Out	Simultaneous Output Prohibited Items	Setting Range (Minimum Value)	Setting Range (Minimum Value)	CE Corrective Action	Sub Module Name
010-143	Clg Lower Belt Position Sensor	Displays the current position for Cooling Lower Belt.	O			-	-	-	***NOTE:*** If the read value is a Fail, this will not result in a Fail. This could be because this function is also used for checking when a CE is adjusting the Belt.	COOLING
010-144	Fusing Humidity Sensor	Displays the humidity value for [Tray Humidity & Temp Sensor]. This is the humidity data that is used for the control of Decurler device.	O			-	-	-	The display is not an AD value and uses a [%] unit conversion.When the sensor is malfunctioning, this will display '255'.Normal Output Range: Machine installation environment humidityFailure Determination Level: When it has deviate by a large margin from the machine installation environment humidity	FUSING (PAPER SUPPLYING)

6.3.5.1 DC612 Color Test Pattern List

[Print Side] selection: 1 Sided (Default)/2 Sided/Invert Side

[Tray] selection: Tray 1 (Default), Tray 2, Tray 3, Tray 4, Tray 5, Tray 6, MBT

[Procon TRC] selection: OFF, ON (Default)

[Object] selection: Screen disabled, 150C, 150R, 175C, 200C (Default), 200R, 300C, 600C, FM, Gray Font/1200 dpi, Gray Font/2400 dpi

[Print Quantity] selection: 1 (Default) to 9999

[Output Destination] Select: Default will be the beginning in the order of OCT/LTC (Default), HCS 1 Top Tray, HCS1 Stacker Tray, HCS2 Top Tray, HCS2 Stacker Tray, Finisher Top Tray, Finisher Stacker Tray 2.

[Contact Engine] Select:

Table 1 Setting Data

Setting Item	Description
6C	Select 6C (CMYK + #1 Color + #6 Color).
5C#1	Select 5C#1 (CMYK + #1 Color).
5C#6	Select 5C#6 (CMYK + #6 Color).
4C	Select 4C (CMYK) (Default).
2C#1#5	Select 2C#1#5 (K + #1 Color).
2C#1#6	Select 2C#1#6 (#1 Color + #6 Color).
2C#5#6	Select 2C#5#6 (K + #6 Color).
1C#1	Select 1C#1 (#1 Color).
1C#5	Select 1C#5 (K).
1C#6	Select 1C#6 (#6 Color).

*1: Color selection can be selected according to PG pattern. Color selection is specified by one of the contact engine selectors (combination of #1 to #6) and one of the color selectors (Y, M, C, K, R, G, B, 3 C).

(The corresponding engine of the color selector is Y=#2, M=#3, C=#4, K=#5, R=#2, #3, G=#2, #4, B=#3, #4, 3C=#2, #3, #4.)

*2: When one of the color selectors (Y, M, C, K, R, G, B, 3 C) is selected, color selection instruction from the check of the contact engine selectors (#1 to #6) is not possible, and when the check from the contact engine selectors (#1 to #6) is selected, color instruction from the color selectors (Y, M, C, K, R, G, B, 3 C) is not possible. Also, when the contact engine 1C (#1), 1C (#5), 1C (#6) and 2C (#5 #6) is selected, the color selector (Y, M, C, K, R, G, B, 3C) can not be selected.

*3: Cin% of each color is available for input only when Half Tone is selected.

There are 2 types of input methods, independent of each color and common to each color. In any case, the setting range is 0 to 100% (1% unit),Default is 20%.

*4: Each color-independent Cin setting when Half Tone is selected adds Cin% in the order of input, and has a guard so that it becomes 240% even if a value exceeding Total 240% is input. When the contact engine can output more than 5 colors, Total 340% is the limit value. As for the way of limiting, PC-Diag does not apply any guard, but after pressing the execution button, the total amount before cycle up at IOT is determined, and if the total value is exceeded, [Total Cin has exceeded 240% (or 340%), please change the Cin.] is displayed.

NOTE:

- *If there is a check mark at [Skip Image Quality Adjustment], image quality adjustment does not get performed when the test pattern is being printed.*
- *Transparent HT will be OFF if Clear Toner is not installed. When installed, and engine with Clear Toner installed is the applicable contact engine, ON will be set as Default.*
- *When pattern number (230 to 250: batch printing of built-in pattern) is selected, multiple test patterns will be output at once.*
- *For paper size, output can be in standard and custom sizes set in the tray. It can also perform full size output.*

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
230	HT25/60% YMCKRGB & 3C & 4C (36 page)	No PG Sample Refer to Pattern List [6.3.5.2]	Used in DC961 ROS Correct, DC128 Finisher - Adjust Fold Position, DC973 Alignment Setup	Continuous Batch Output for each PG: 2 sheets each of 25% halftone for Y, M, C, K, R, G, B, 3C, 4C, 2 sheets each of 60% halftone for Y, M, C, K, R, G, B, 3C, 4C. Total output quantity (sheets): 36	4C	-	330.2x488
231	HT25/60/80% YMCK & 3C (30 page)	No PG Sample Refer to Pattern List [6.3.5.3]	Same as above	Continuous Batch Output for each PG: 2 sheets each of 25% halftone for Y, M, C, K, R, G, B, 3C, 2 sheets each of 60% halftone for Y, M, C, K, R, G, B, 3C, 2 sheets each of 80% halftone for Y, M, C, K, 3C. Total output quantity (sheets): 30		-	330.2x488
232	HT25/60/80% RGB (18 page)	No PG Sample Refer to Pattern List [6.3.5.4]	Same as above	Continuous batch output of each PG: 2 sheets each of 25% halftone for R, G, B, 2 sheets each of 60% halftone for R, G, B, 2 sheets each of 80% halftone for R, G, B. Total output quantity (sheets): 18		-	330.2x488
233	Banding Check Pattern (18 page)	No PG Sample Refer to Pattern List [6.3.5.5]	Used in DC961 ROS Correct	Continuous Batch Output for each PG: 2 sheets each of 25% halftone for M, C, K, 2 sheets each of 60% halftone for M, C, K. Total output quantity (sheets): 18		-	330.2x488
234	HT40% YMCK & 3C & 4C+ HT0% + TotalChart (8 page)	No PG Sample Refer to Pattern List [6.3.5.6]	TS Batch Output Area (Not used)	Continuous Batch Output for each PG: 1 sheet each of 40% halftone for Y, M, C, K, R, G, B, 3C, 4C, 1 sheet of Wh0% halftone, 1 sheet of Total Chart1. Total output quantity (sheets): 18		-	330.2x488
235	IQ Check Pattern (34 page)	No PG Sample Refer to Pattern List [6.3.5.7]	TBD	Continuous batch output of each PG: 2 sheets each of TEDS Total, Total Chart 2, Total Chart 1, Tone Curve Check (21 patch), Procon PG #2-5, CTRACS Pattern (for correction/4C/ILS), Density Uniformity for FS (RGBPK), Banding, ATCN33, ATCN1, ATCN2, L-Mottle, 2 sheets each of 60% halftone for Y, M, C, K, 3C. Total output quantity (sheets): 36		-	330.2x488
237	Uniformity Check Pattern (8 page)	No PG Sample Refer to Pattern List [6.3.5.8]	TBD	Continuous batch output of each PG: 2 sheets each of Uniformity Check Pattern 1 to Pattern 4. Total output quantity (sheets): 8		-	330.2x488
238	Registration Check Pattern (32 page)	No PG Sample Refer to Pattern List [6.3.5.9]	TBD	Continuous batch output of each PG: 8 sheets of Color Regi Check Pattern (MQ-All/YMCK), 4 sheets of Total Chart 1, Total Chart 2, and 20 sheets of Grid Pattern (90 deg)-204. Total output quantity (sheets): 32		-	330.2x488
239	HT40% M & 4C (12 page)	No PG Sample Refer to Pattern List [6.3.5.10]	TS batch output area	Continuous batch output of each PG: 8 sheets 40% halftone for M, 4 sheets of 40% halftone for 4CTotal output quantity: 12 sheets.		-	330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
240	Base Data Chart (14 page)	No PG Sample Refer to Pattern List [6.3.5.11]	Line batch output area	Continuous batch output of each PG: 2 sheets each for Y, M, C, R, G, B, 3K. Total output quantity (sheets): 14	4C	-	330.2x488
242	HT0% + INOUT-Bar + HT40/70% YMCK + HT40% RGB (30 page)	No PG Sample Refer to Pattern List [6.3.5.12]	Line batch output area	Continuous batch output of each PG: 3 sheets of Wh 0% halftone, 1 sheet each of Density Uniformity for FS (CMYK), Density Uniformity for FS (RGBPK), 3 sheets of 40% halftone for Y, 1 sheet of 70% halftone for Y, 3 sheets of 40% halftone for M, 1 sheet of 70% halftone for M, 3 sheets of 40% halftone for C, 1 sheet of 70% halftone for C, 3 sheets of 40% halftone for K, 1 sheet of 70% halftone for K, 3 sheets each of 40% halftone for R, G, B. Total output quantity (sheets): 30		-	330.2x488
243	HT50% KYMCBGR (21 page)	No PG Sample Refer to Pattern List [6.3.5.13]	Line batch output area	Continuous Batch Output for each PG: 3 sheets each of 50% halftone for K , Y , M , C , B , G , R. Total output quantity (sheets): 21		-	330.2x488
244	Test Patterns for Mfg 1	No PG Sample Refer to Pattern List [6.3.5.14]	Line batch output area	Continuous Batch Output for each PG: 1 sheet of 50% halftone for K, C, G, 11 sheets of 50% halftone for M. Total output quantity (sheets): 14		-	330.2x488
245	Test Patterns for Mfg 2	No PG Sample Refer to Pattern List [6.3.5.15]	Line batch output area	Total output quantity (sheets): 22 (Refer to 6.3.5.15)		-	330.2x488
246	Test Patterns for Mfg 3	No PG Sample Refer to Pattern List [6.3.5.16]	Line batch output area	Total output quantity (sheets): 14 (Refer to 6.3.5.16)		-	330.2x488
247	Test Patterns for Mfg 4	No PG Sample Refer to Pattern List [6.3.5.17]	Line batch output area	Total output quantity (sheets): 5 (Refer to 6.3.5.17)		-	330.2x488
248	Test Patterns for Mfg 5	No PG Sample Refer to Pattern List [6.3.5.18]	Line batch output area	Total output quantity (sheets): 18 (Refer to 6.3.5.18)		-	330.2x488
249	Test Patterns for Mfg 6	No PG Sample Refer to Pattern List [6.3.5.19]	Line batch output area	Total output quantity (sheets): 10 (Refer to 6.3.5.19)		-	330.2x488
250	Test Patterns for Mfg 7	No PG Sample Refer to Pattern List [6.3.5.20]	Line batch output area	Total output quantity (sheets): 3 (Refer to 6.3.5.20)		-	330.2x488
251	Test Patterns for Mfg 8	No PG Sample Refer to Pattern List [6.3.5.103]	Line batch output area	Total output quantity (sheets): 2 (Refer to 6.3.5.103)		-	330.2x488
252	Test Patterns for Mfg 9	No PG Sample Refer to Pattern List [6.3.5.104]	Line batch output area	Total output quantity (sheets): 27 (Refer to 6.3.5.104)		-	330.2x488
253	Test Patterns for Mfg 10	No PG Sample Refer to Pattern List [6.3.5.105]	Line batch output area	Total output quantity (sheets): 19 (Refer to 6.3.5.105)		-	330.2x488
254	Test Patterns for Mfg 11	No PG Sample Refer to Pattern List [6.3.5.106]	Line batch output area	Total output quantity (sheets): 24 (Refer to 6.3.5.106)		-	330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
255	Test Patterns for Mfg 12	No PG Sample Refer to Pattern List [6.3.5.107]	Line batch output area	Total output quantity (sheets): 16 (Refer to 6.3.5.107)	4C	-	330.2x488
301	Color Regi Check Pattern (3 axis/ YMCK)	6.3.5.21	For Color Regi Measurement	Repeat Pattern for Measurement 3 row ***NOTE:*** *Up to 4 colors, and 4C (CMYK) can be selected.*	6C, 5C#1, 5C#6, 4C	-	297x420
302	Color Regi Check Pattern (MQ-All/ YMCK)	6.3.5.22	For Color Regi Measurement	Repeat Pattern of Measurement 3 row 1on5off ladder. Halftone Vertical Belt ***NOTE:*** *Up to 4 colors, and 4C (CMYK) can be selected.*	6C, 5C#1, 5C#6, 4C	-	297x420
304	PH REGI (grid with scale)	6.3.5.23	For alignment check	100 mm Grid Pattern with Memory ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	Paper length is variable
305	Grid Pattern (90 deg)-204 + Color Regi Mesurement Pattern	6.3.5.24	Alignment Measurement + Color Regi Measurement	Repeat Pattern for Measurement, 3 rows of Full-Page 20 mm Grid, Halftone Patch ***NOTE:*** *Up to 4 colors, and 4C (CMYK) can be selected.*	6C, 5C#1, 5C#6, 4C	-	Paper length is variable
306	Grid Pattern (90 deg)-Duplex	6.3.5.25	Alignment Measurement: For Side 1/ Side 2 Alignment Check	2 dot line Grid Pattern (Duplex) every 10 mm Pitch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	Paper length is variable
307	Grid Pattern (45 deg)	6.3.5.26	Diagonal Line Reproducibility Check: For checking Defect of Paper Alignment, Line Image	Grid (1 Side: 35.32 mm) Diagonal Pattern. ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable
308	Grid Pattern (for adjustment of folding positon)	6.3.5.27	Fold Position Adjustment of Finisher (Unable to specify the Output Device for DC612)	Grid Pattern with 1 Side of approx. 5 mm ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable
309	Grid Pattern (90 deg)-102	6.3.5.28	Alignment Measurement: For checking Defect of Paper Alignment, Line Image	2 dot line Grid Pattern every 10 mm Pitch ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable
310	Grid Pattern (90 deg)-204	6.3.5.29	Alignment Measurement: For checking Defect of Paper Alignment, Line Image	4 dot line Grid Pattern every 20 mm Pitch ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable
311	Grid Pattern (90 deg)-208	6.3.5.30	Alignment Measurement: For checking Defect of Paper Alignment, Line Image	8 dot line Grid Pattern every 20 mm Pitch ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable
312	Grid Pattern (45 deg)-101	6.3.5.31	Diagonal Line Reproducibility Check: For checking Defect of Paper Alignment, Line Image	1 dot line Grid Diagonal Pattern every 10 mm Pitch ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
313	Grid Pattern (45 deg)-102	6.3.5.32	Diagonal Line Reproducibility Check: For checking Defect of Paper Alignment, Line Image	2 dot line Grid Diagonal Pattern every 10 mm Pitch ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	Paper length is variable
314	Grid Pattern (45 deg)-1200dpi-1dot-20mm	6.3.5.33	Diagonal Line Reproducibility Check: For checking Defect of Paper Alignment, Line Image	1 dot (1200 dpi) line Grid Diagonal Pattern every 10 mm Pitch ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	Paper length is variable
315	Ladder (2 on 6 off)	6.3.5.34	Defect Detection: For checking the occurrence location of defects such as the scattering of Toner on the Line Image in the FS Direction.	2 dot line Pattern that is parallel to the Fast Scan Direction of 2 line on/6 line off ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B, 3C can be selected.*		-	330.2x660.4
316	KO Pattern for Finisher	6.3.5.35	For Finisher Fold Position Adjustment	Microscopic Patch adjoining 2 rows ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
317	Arrow Pattern for Finisher	6.3.5.36	For Finisher Fold Position Adjustment	Arrow Mark 82X85 mm ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
318	TEDSTotal	6.3.5.37	TED/Starvation check	Multiple Type density Patch is adjoining front/back of each color 100% Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
319	TMA	6.3.5.38	For TMA Measurement	YMCK 100% Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
320	DMA	6.3.5.39	For DMA Measurement	Single Color 100% Patch Repeat ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B, 3C can be selected.*		-	330.2x488
321	HT GMCK	6.3.5.40	For Streak Check	Draw by 1/4 at a time in the Paper Feed Direction with 65% of G, M, C, K ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
322	Total Chart 2	6.3.5.41	Overall Image Quality Evaluation Chart (Character/Line)	8 pt character, 1 to 8 dot line, Ladder Pattern ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
323	Total Chart 1	6.3.5.42	Overall Image Quality Evaluation Chart (For IQIT)	Tone Patch, Halftone Band/Patch, 1 to 2 dot line, 8 pt characters ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	330.2x488
324	Gradation Check Pattern (16Patch)	6.3.5.43	Tone Characteristics, Defect Detection: For isolating the Cin when streaks occur in the Process Direction	Repeat Pattern that split Cin in 16 stages ***NOTE:*** *Up to 2 colors, and Y, M, C, K, R, G, B can be selected.*		-	330.2x488
325	Half Tone	6.3.5.44	Defect detection	Paper Full-Page Drawing in Optional Color/Cin ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		0~100*3*4	330.2x660.4
326	CTRACS Pattern (for correction/4C/ILS)	6.3.5.45	Calibration (For ILS Correction)	24 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		'-	330.2x488
327	CTRACS Pattern (for check/4C/ILS)	6.3.5.46	Calibration (For ILS Check)	24 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
330	ToneCurveCheck(21 patch)	6.3.5.47	For CPS	21 Tone + Highlight Part 20 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
332	Stability2	6.3.5.48	For Color Stability Measurement	Each Color 12 mm ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
333	Adjustment Highlight Color	6.3.5.49	Procon Tone Characteristics Check: For checking reproducibility of Low Cin part	11 Tone Patch X 2 types ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
334	Gradation1	6.3.5.50	Gradation Check	Gradation of each color Cin 0 to 100% ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
335	Gradation2	6.3.5.51	Gradation Check	Gradation of each color Cin 0 to 25% ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
336	Density Uniformity for FS (CMYK)	6.3.5.52	Density Uniformity for FS (CMYK) : For IN-OUT Density Adjustment/Measurement (Check the current status only for DC612/Perform Adjustment in DC931)	Repeat Pattern of Cin 20%, 60% of Primary Color ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
337	Density Uniformity for FS (RGBPK)	6.3.5.53	Density Uniformity for FS (RGBPK) : For IN-OUT Density Adjustment/Measurement (Check the current status only for DC612/Perform Adjustment in DC931)	Repeat Pattern of Cin 20%, 60% of Secondary Color, Process Color ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	330.2x488
338	Density Uniformity for FS (Single Color)	6.3.5.54	Density Uniformity for FS (CMYK) : For IN-OUT Density Adjustment/Measurement	Cin 99%, Cin 33% Pattern. ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
339	Density Uniformity for SS (YC)	6.3.5.55	SS Direction Surface Density Uniformity Check	Stripe Pattern of #3, #5 Engine Color ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
340	Density Uniformity for SS (MK)	6.3.5.56	SS Direction Surface Density Uniformity Check	Stripe Pattern of #4, #6 Engine Color ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
341	Banding	6.3.5.57	For Banding Measurement	2on6off Ladder, Halftone Vertical Band ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
342	Banding2	6.3.5.58	For Single Color Banding Measurement	Each Color Halftone Vertical Band ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
343	Banding2 (pkrgb)	6.3.5.59	For Multi Color Banding Measurement	Each Color Halftone Vertical Band ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
344	ATCN33	6.3.5.60	Tone Characteristics Measurement	24 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
345	ATCN24	6.3.5.61	Tone Characteristics Measurement	33 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2 x 488
346	ATCN123	6.3.5.62	Tone Characteristics Measurement	24 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
347	ATCN1	6.3.5.63	Tone Characteristics/Graininess Measurement	12 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
348	ATCN2	6.3.5.64	Tone Characteristics/Graininess Measurement	12 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*			330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
349	L-Mottle	6.3.5.65	Tone Characteristics/Low Frequency Graininess Measurement	9 Tone Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	330.2x488
350	Page Information Printed Pattern	6.3.5.66	Page & Machine Information Overlay Chart	Print out the PV count, Machine Serial Number, Print Date/Time Information ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
352	Base Data Y	6.3.5.67	Color Reproducibility Measurement	Patch for creating Yellow Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
353	Base Data M	6.3.5.68	Color Reproducibility Measurement	Patch for creating Magenta Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
354	Base Data C	6.3.5.69	Color Reproducibility Measurement	Patch for creating Cyan Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
355	Base Data R	6.3.5.70	Color Reproducibility Measurement	Patch for creating Red Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
356	Base Data G	6.3.5.71	Color Reproducibility Measurement	Patch for creating Green Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
357	Base Data B	6.3.5.72	Color Reproducibility Measurement	Patch for creating Blue Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
358	Base Data 3C	6.3.5.73	Color Reproducibility Measurement	Patch for creating Gray Color Model ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
359	Xfer Voltage Setup Pattern (A3 & 11x17)	6.3.5.74	Secondary Transfer Adjustment	15 mm square Each Color Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
360	Xfer Voltage Setup Pattern (A4 & Let-1)	6.3.5.75	Secondary Transfer Adjustment	15 mm square Each Color Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
361	Xfer Voltage Setup Pattern (A4 & Let-2)	6.3.5.76	Secondary Transfer Adjustment	15 mm square Each Color Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
362	CPC200	6.3.5.77	For Color Reproducibility Maintenance Service	10X15 mm Each Color Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	330.2x488
363	Uniformity Check Pattern1	6.3.5.78	SS Direction Measurement (For Maintenance Service)	5X20 mm 2 Color Alternating Patch 3 row ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
364	Uniformity Check Pattern2	6.3.5.79	SS Direction Measurement (For Maintenance Service)	5X20 mm 2 Color Alternating Patch 3 row ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
365	Uniformity Check Pattern3	6.3.5.80	SS Direction Measurement (For Maintenance Service)	5X20 mm 2 Color Alternating Patch 3 row ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
366	Uniformity Check Pattern4	6.3.5.81	SS Direction Measurement (For Maintenance Service)	5X20 mm 2 Color Alternating Patch 3 row ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
367	ISO12642 iSis Color Port 600 A4	6.3.5.82	For Color Reproducibility, Stability Measurement	6 mm square Each Color Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
368	ROS LDF	6.3.5.83	Checking of ROS Stitching	ROS Beam Forced ON Pattern ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
369	ILS Defect Check PG	6.3.5.84	ILS Defect Detection Check	Full-Page Halftone ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
370	ILS Overlay Chart	6.3.5.85	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
371	IQ defect detection Pattern	6.3.5.86	ILS Point/Streak Detection	Full-Page Halftone ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
372	Total Chart for BW	6.3.5.87	Overall Image Quality (For BW)	Tone Patch, Halftone Band/Patch, 1 to 2 dot line, 8 pt characters ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
377	BA Color	6.3.5.88	For Toner Consumption Amount Test	V Shape with 7.3X13 mm Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
378	BA BW	6.3.5.89	For Toner Consumption Amount Test	X Shape with 7.3X13 mm Patch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	330.2x488
379	Coverage PG	6.3.5.90	For desired Area Coverage Output	Full-Page Halftone of optional color ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	330.2x488
380	Procon PG #2-5	6.3.5.91	TBD For DC800 ADC Sensor Setup (including any of #2, #3, #4, #5 engines when adjustment mode [YMCK] is selected)	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
381	Procon PG #1, 6	6.3.5.92	TBD For DC800 ADC Sensor Setup (including any of #1, #6 engines when adjustment mode [White] is selected)	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
382	IQ diagnostic pattern	6.3.5.93	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
383	2D-Smile correction Pattern (YC)	6.3.5.94	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
384	2D-Smile correction Pattern (MK)	6.3.5.95	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
385	CTRACS Pattern (for correction/6C/ ILS)	6.3.5.96	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
386	CTRACS Pattern (for check/6C/ ILS)	6.3.5.97	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
387	Xfer Voltage Setup Pattern 2	6.3.5.98	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
388	Xfer Voltage Setup Pattern for Custom Paper	6.3.5.99	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD

Table 2 Print Test Pattern (DC612)

Pattern Number	Name	Related Pattern Sample	Purpose/Usage	Overview	Contact engine*2	Cin%	Image Size (mm)
389	Color Patch PG	6.3.5.100	For checking the Procon	Checks the shade for all 182 type Patch (II8 Chart) of each screen ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*	6C, 5C#1, 5C#6, 4C, 2C#1#5, 2C#1#6, 2C#5#6, 1C#1, 1C#5, 1C#6	-	TBD
390	Stability	6.3.5.101	TBD	TBD ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
391	Density Uniformity for FS (Spacific Color)	6.3.5.102	Used when checking the Smile Correction density distribution in FS direction	Outputs the 60/20% band for All Color in one batch ***NOTE:*** *Up to 9 colors, and Y, M, C, K, R, G, B, 3C, 4C can be selected.*		-	TBD
392	Xfer Voltage Setup Pattern for white toner	TBD	TBD	TBD		-	TBD
393	PMC Test Pattern	TBD	TBD	TBD		-	BD

6.3.5.2 HT25/60% YMCKRGB & 3C & 4C (36 page)

Pattern Number: 230

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 25% Y	1 Sided	2	4C
2	H/T 25% M	1 Sided	2	4C
3	H/T 25% C	1 Sided	2	4C
4	H/T 25% K	1 Sided	2	4C
5	H/T 25% R	1 Sided	2	4C
6	H/T 25% G	1 Sided	2	4C
7	H/T 25% B	1 Sided	2	4C
8	H/T 25% 3C	1 Sided	2	4C
9	H/T 25% 4C	1 Sided	2	4C
10	H/T 60% Y	1 Sided	2	4C
11	H/T 60% M	1 Sided	2	4C
12	H/T 60% C	1 Sided	2	4C
13	H/T 60% K	1 Sided	2	4C
14	H/T 60% R	1 Sided	2	4C
15	H/T 60% G	1 Sided	2	4C
16	H/T 60% B	1 Sided	2	4C
17	H/T 60% 3C	1 Sided	2	4C
18	H/T 60% 4C	1 Sided	2	4C

6.3.5.3 HT25/60/80% YMCK & 3C (30 page)

Pattern Number: 231

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 25% Y	1 Sided	2	4C
2	H/T 25% M	1 Sided	2	4C
3	H/T 25% C	1 Sided	2	4C
4	H/T 25% K	1 Sided	2	4C
5	H/T 25% 3C	1 Sided	2	4C
6	H/T 60% Y	1 Sided	2	4C
7	H/T 60% M	1 Sided	2	4C
8	H/T 60% C	1 Sided	2	4C
9	H/T 60% K	1 Sided	2	4C
10	H/T 60% 3C	1 Sided	2	4C
11	H/T 80% Y	1 Sided	2	4C
12	H/T 80% M	1 Sided	2	4C
13	H/T 80% C	1 Sided	2	4C
14	H/T 80% K	1 Sided	2	4C
15	H/T 80% 3C	1 Sided	2	4C

6.3.5.4 HT25/60/80% RGB (18 page)

Pattern Number: 232

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 25% R	1 Sided	2	4C
2	H/T 25% G	1 Sided	2	4C
3	H/T 25% B	1 Sided	2	4C
4	H/T 60% R	1 Sided	2	4C
5	H/T 60% G	1 Sided	2	4C
6	H/T 60% B	1 Sided	2	4C
7	H/T 80% R	1 Sided	2	4C
8	H/T 80% G	1 Sided	2	4C
9	H/T 80% B	1 Sided	2	4C

6.3.5.5 Banding Check Pattern (18 page)

Pattern Number: 233

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 25% M	1 Sided	3	4C
2	H/T 25% C	1 Sided	3	4C
3	H/T 25% K	1 Sided	3	4C
4	H/T 60% M	1 Sided	3	4C
5	H/T 60% C	1 Sided	3	4C
6	H/T 60% K	1 Sided	3	4C

6.3.5.6 HT40% YMCK & 3C & 4C+ HT0% + TotalChart (8 page)

Pattern Number: 234

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 40% Y	1 Sided	1	4C
2	H/T 40% M	1 Sided	1	4C
3	H/T 40% C	1 Sided	1	4C
4	H/T 40% K	1 Sided	1	4C
5	H/T 40% 3C	1 Sided	1	4C
6	H/T 40% 4C	1 Sided	1	4C
7	H/T 0% W	1 Sided	1	4C
8	Total Chart 1 (PG_ID:323) [6.3.5.42]	1 Sided	1	4C

6.3.5.7 IQ Check Pattern (34 page)

Pattern Number: 235

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	TEDSTotal (PG_ID:318) [6.3.5.37]	1 Sided	2	4C
2	Total Chart 2 (PG_ID:322) [6.3.5.41]	1 Sided	2	4C
3	Total Chart 1	1 Sided	2	4C
4	21 Tone (PG_ID:330) [6.3.5.47]	1 Sided	2	4C
5	Procon_PG #2-5 (PG_ID:380) [6.3.5.91]	1 Sided	2	4C
6	Calibration (for correction) [4C](ILS) (PG_ID:326) [6.3.5.45]	1 Sided	2	4C
7	Density Uniformity for FS (RGBPK) (PG_ID:337) [6.3.5.52]	1 Sided	2	4C
8	Banding (PG_ID:341) [6.3.5.57]	1 Sided	2	4C
9	ATCN33 (PG_ID: 344) [6.3.5.60]	1 Sided	2	4C
10	ATCN1 (PG_ID:347) [6.3.5.63]	1 Sided	2	4C
11	ATCN2 (PG_ID:348) [6.3.5.64]	1 Sided	2	4C
12	L-Mottle (PG_ID:349) [6.3.5.65]	1 Sided	2	4C
13	H/T 60% Y	1 Sided	2	4C
14	H/T 60% M	1 Sided	2	4C
15	H/T 60% C	1 Sided	2	4C
16	H/T 60% K	1 Sided	2	4C
17	H/T 60% 3C	1 Sided	2	4C

6.3.5.8 Uniformity Check Pattern (8 page)

Pattern Number: 237

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	Uniformity Check Pattern1 (PG_ID:363) [6.3.5.78]	1 Sided	2	4C
2	Uniformity Check Pattern2 (PG_ID:364) [6.3.5.79]	1 Sided	2	4C
3	Uniformity Check Pattern3 (PG_ID:365) [6.3.5.80]	1 Sided	2	4C
4	Uniformity Check Pattern4 (PG_ID:366) [6.3.5.81]	1 Sided	2	4C

6.3.5.9 Registration Check Pattern (32 page)

Pattern Number: 238

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	Color Regi Check Pattern (MQ-All/YMCK) (PG_ID:302) [6.3.5.22]	1 Sided	8	4C
2	Total Chart 1 (PG_ID:323) [6.3.5.42]	1 Sided	4	4C
3	Grid Pattern (90 deg)-204 (PG_ID:310) [6.3.5.29]	1 Sided	20	4C

6.3.5.10 HT40% M & 4C (12 page)

Pattern Number: 239

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 40% M	1 Sided	8	4C
2	H/T 40% 4C	1 Sided	4	4C

6.3.5.11 Base Data Chart (14 page)

Pattern Number: 240

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	Base Data Y (PG_ID:352) [6.3.5.67]	1 Sided	2	4C
2	Base Data M (PG_ID:353) [6.3.5.68]	1 Sided	2	4C
3	Base Data C (PG_ID:354) [6.3.5.69]	1 Sided	2	4C
4	Base Data R (PG_ID:355) [6.3.5.70]	1 Sided	2	4C
5	Base Data G (PG_ID:356) [6.3.5.71]	1 Sided	2	4C
6	Base Data B (PG_ID:357) [6.3.5.72]	1 Sided	2	4C
7	Base Data 3C (PG_ID:358) [6.3.5.73]	1 Sided	2	4C

6.3.5.12 HT0% + INOUT-Bar + HT40/70% YMCK + HT40% RGB (30 page)

Pattern Number: 242

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 0% W	1 Sided	3	4C
2	Density Uniformity for FS (CMYK) (PG_ID:336) [6.3.5.52]	1 Sided	1	4C
3	Density Uniformity for FS (RGBPK) (PG_ID:337) [6.3.5.53]	1 Sided	1	4C
4	H/T 40% Y	1 Sided	3	4C
5	H/T 70% Y	1 Sided	1	4C
6	H/T 40% M	1 Sided	3	4C
7	H/T 70% M	1 Sided	1	4C
8	H/T 40% C	1 Sided	3	4C
9	H/T 70% C	1 Sided	1	4C
10	H/T 40% K	1 Sided	3	4C
11	H/T 70% K	1 Sided	1	4C
12	H/T 40% R	1 Sided	3	4C
13	H/T 40% G	1 Sided	3	4C
14	H/T 40% B	1 Sided	3	4C

6.3.5.13 HT50% KYMCBGR (21 page)

Pattern Number: 243

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	3	4C
2	H/T 50% Y	1 Sided	3	4C
3	H/T 50% M	1 Sided	3	4C
4	H/T 50% C	1 Sided	3	4C
5	H/T 50% B	1 Sided	3	4C
6	H/T 50% G	1 Sided	3	4C
7	H/T 50% R	1 Sided	3	4C

6.3.5.14 Test Patterns for Mfg 1 (4 page)

Pattern Number: 244

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	11	4C
4	H/T 50% G	1 Sided	1	4C

6.3.5.15 Test Patterns for Mfg 2 (22 page)

Pattern Number: 245

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	1	4C
4	H/T 50% G	2 Sided	1	4C
5	H/T 100% K	1 Sided	1	4C
6	H/T 100% M	1 Sided	1	4C
7	H/T 100% C	1 Sided	1	4C
8	H/T 50% K	1 Sided	1	4C
9	H/T 50% C	1 Sided	1	4C
10	H/T 50% M	1 Sided	1	4C
11	H/T 50% Y	1 Sided	1	4C
12	H/T 50% B	1 Sided	1	4C
13	H/T 50% G	1 Sided	1	4C
14	H/T 50% R	1 Sided	1	4C
15	Total Chart1	1 Sided	1	4C
16	H/T 60% B	1 Sided	1	4C
17	H/T 60% G	1 Sided	1	4C
18	H/T 60% R	1 Sided	1	4C
19	Density Uniformity for FS (Single Color)	1 Sided	1	4C
20	2D-Smile correction Pattern (YC)	1 Sided	1	4C
21	2D-Smile correction Pattern (MK)	1 Sided	1	4C
22	Procon_PG#2-5	1 Sided	1	4C

6.3.5.16 Test Patterns for Mfg 3 (14 page)

Pattern Number: 246

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	1	4C
4	H/T 50% G	2 Sided	1	4C
5	H/T 100% K	1 Sided	1	4C
6	H/T 100% M	1 Sided	1	4C
7	H/T 100% C	1 Sided	1	4C
8	H/T 60% B	1 Sided	1	4C
9	H/T 60% G	1 Sided	1	4C
10	H/T 60% R	1 Sided	1	4C
11	Density Uniformity for FS (Single Color)	1 Sided	1	4C
12	2D-Smile correction Pattern (YC)	1 Sided	1	4C
13	2D-Smile correction Pattern (MK)	1 Sided	1	4C
14	Procon_PG#2-5	1 Sided	1	4C

6.3.5.17 Test Patterns for Mfg 4 (5 page)

Pattern Number: 247

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 20% K	1 Sided	1	4C
2	H/T 20% C	1 Sided	1	4C
3	H/T 20% M	1 Sided	1	4C
4	H/T 20% Y	1 Sided	1	4C
5	H/T 20% 3C	1 Sided	1	4C

6.3.5.18 Test Patterns for Mfg 5 (18 page)

Pattern Number: 248

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 100% K	1 Sided	1	4C
2	H/T 100% M	1 Sided	1	4C
3	H/T 100% C	1 Sided	1	4C
4	H/T 50% K	1 Sided	1	4C
5	H/T 50% C	1 Sided	1	4C
6	H/T 50% M	1 Sided	1	4C
7	H/T 50% Y	1 Sided	1	4C
8	H/T 50% B	1 Sided	1	4C
9	H/T 50% G	1 Sided	1	4C
10	H/T 50% R	1 Sided	1	4C
11	Total Chart1	1 Sided	1	4C
12	H/T 60% B	1 Sided	1	4C
13	H/T 60% G	1 Sided	1	4C
14	H/T 60% R	1 Sided	1	4C
15	Density Uniformity for FS (Single Color)	1 Sided	1	4C
16	2D-Smile correction Pattern (YC)	1 Sided	1	4C
17	2D-Smile correction Pattern (MK)	1 Sided	1	4C
18	Procon_PG#2-5	1 Sided	1	4C

6.3.5.19 Test Patterns for Mfg 6 (10 page)

Pattern Number: 249

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 100% K	1 Sided	1	4C
2	H/T 100% M	1 Sided	1	4C
3	H/T 100% C	1 Sided	1	4C
4	H/T 60% B	1 Sided	1	4C
5	H/T 60% G	1 Sided	1	4C
6	H/T 60% R	1 Sided	1	4C
7	Density Uniformity for FS (Single Color)	1 Sided	1	4C
8	2D-Smile correction Pattern (YC)	1 Sided	1	4C
9	2D-Smile correction Pattern (MK)	1 Sided	1	4C
10	Procon_PG#2-5	1 Sided	1	4C

6.3.5.20 Test Patterns for Mfg 7 (3 page)

Pattern Number: 250

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	Grid Pattern (90 deg) - 204 K	2 Sided	1	4C
2	Density Uniformity for FS (CMYK)	1 Sided	1	4C
3	Density Uniformity for FS (RGBPK)	1 Sided	1	4C

6.3.5.21 Color Regi Check Pattern (3 axis/YMCK)

Pattern Number: 301

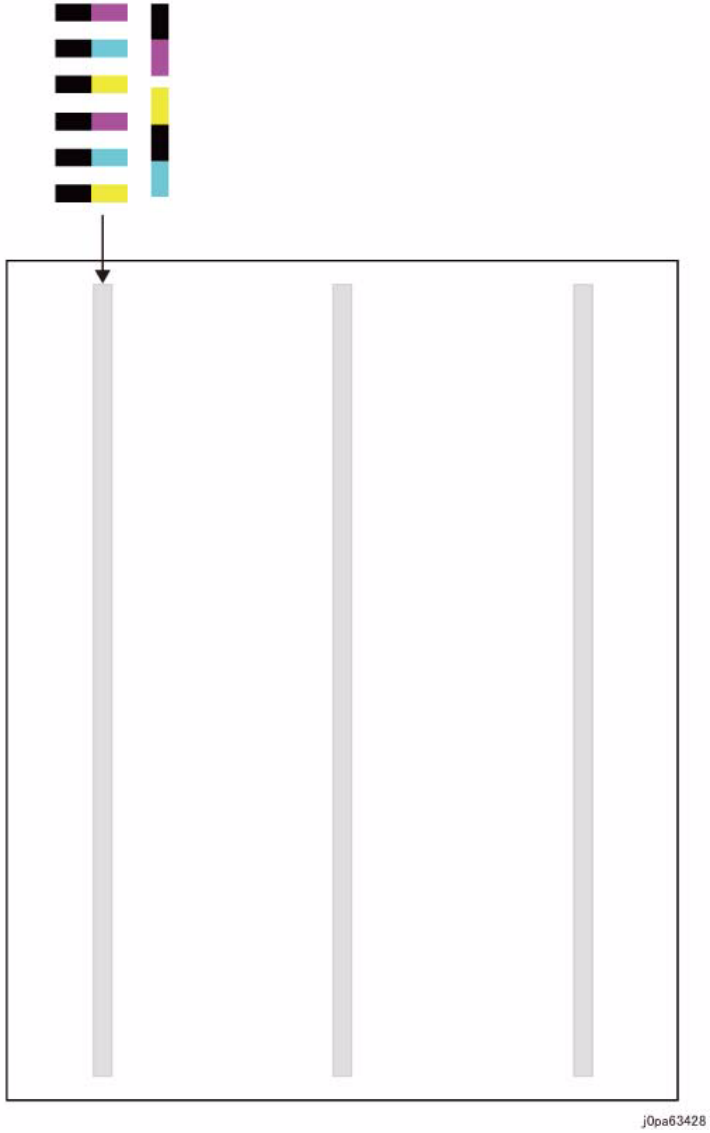


Figure 1 j0pa63428

6.3.5.22 Color Regi Check Pattern (MQ-All/YMCK)

Pattern Number: 302

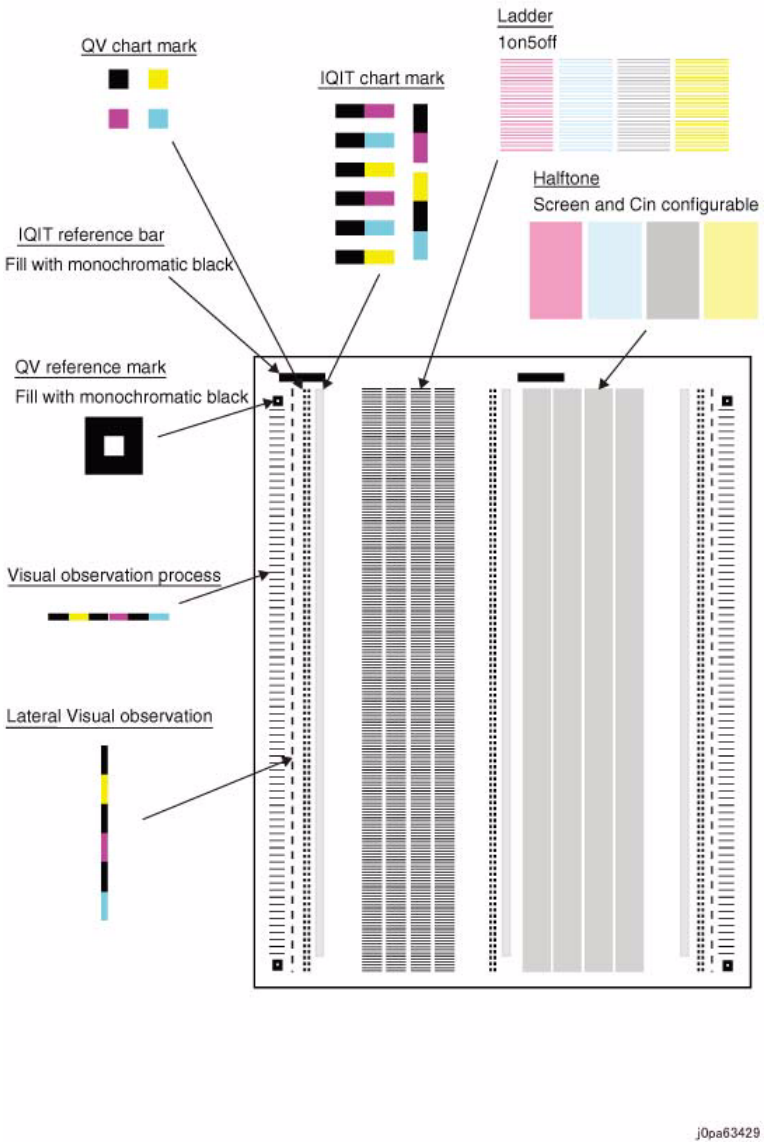


Figure 1 j0pa63429

6.3.5.23 PH REGI (grid with scale)

Pattern Number: 304

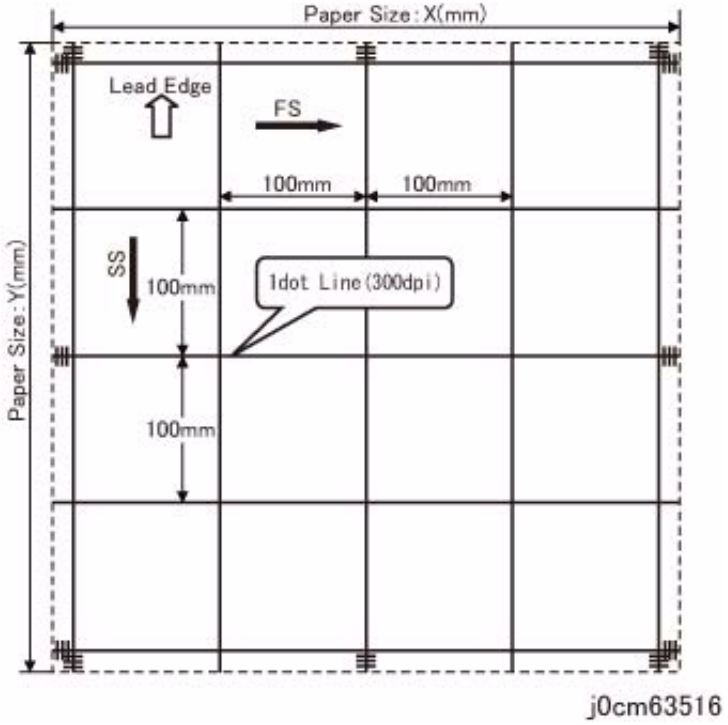


Figure 1 j0cm63516

6.3.5.24 Grid Pattern (90 deg)-204 + Color Regi Mesurement Pattern

Pattern Number: 305

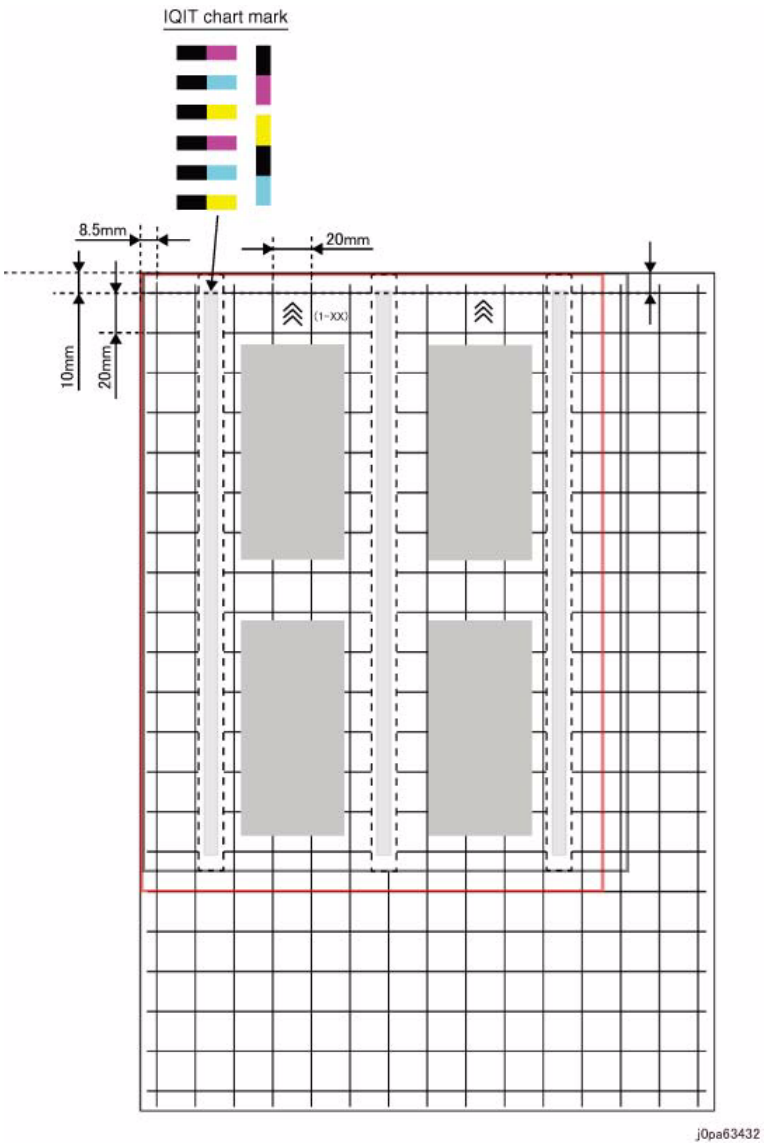


Figure 1 j0pa63432

6.3.5.25 Grid Pattern (90 deg)-Duplex

Pattern Number: 306

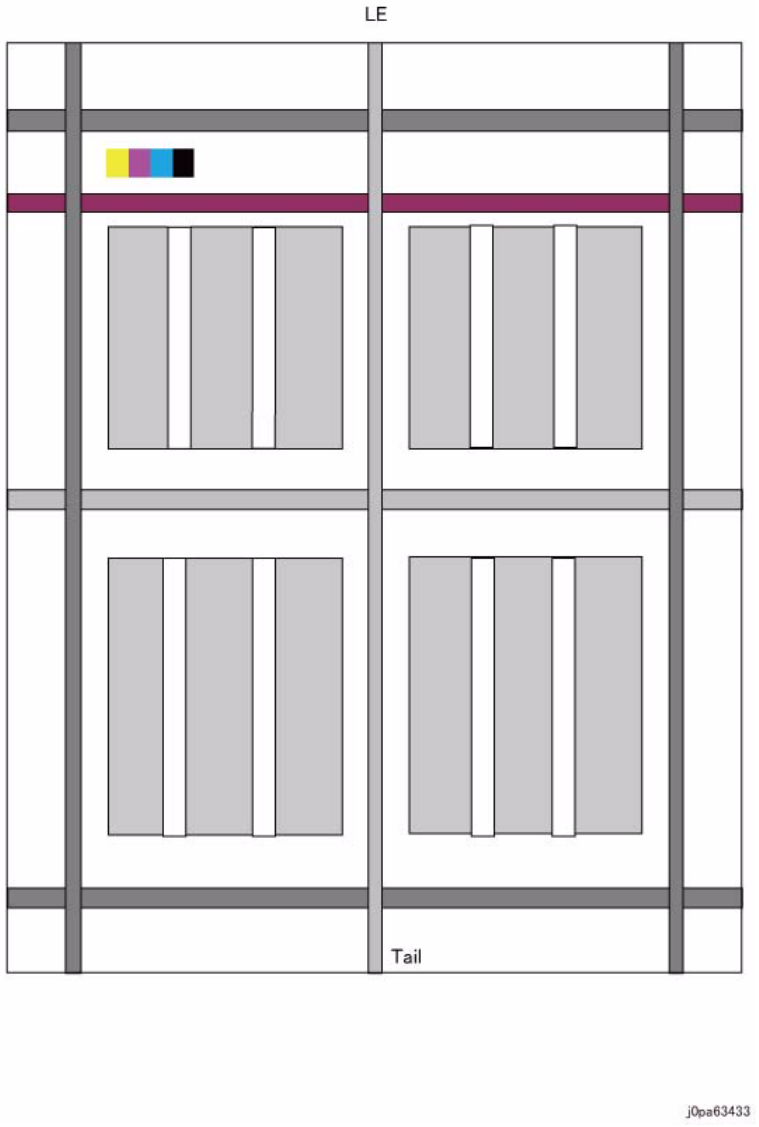


Figure 1 j0pa63433

6.3.5.26 Grid Pattern (45 deg)

Pattern Number: 307

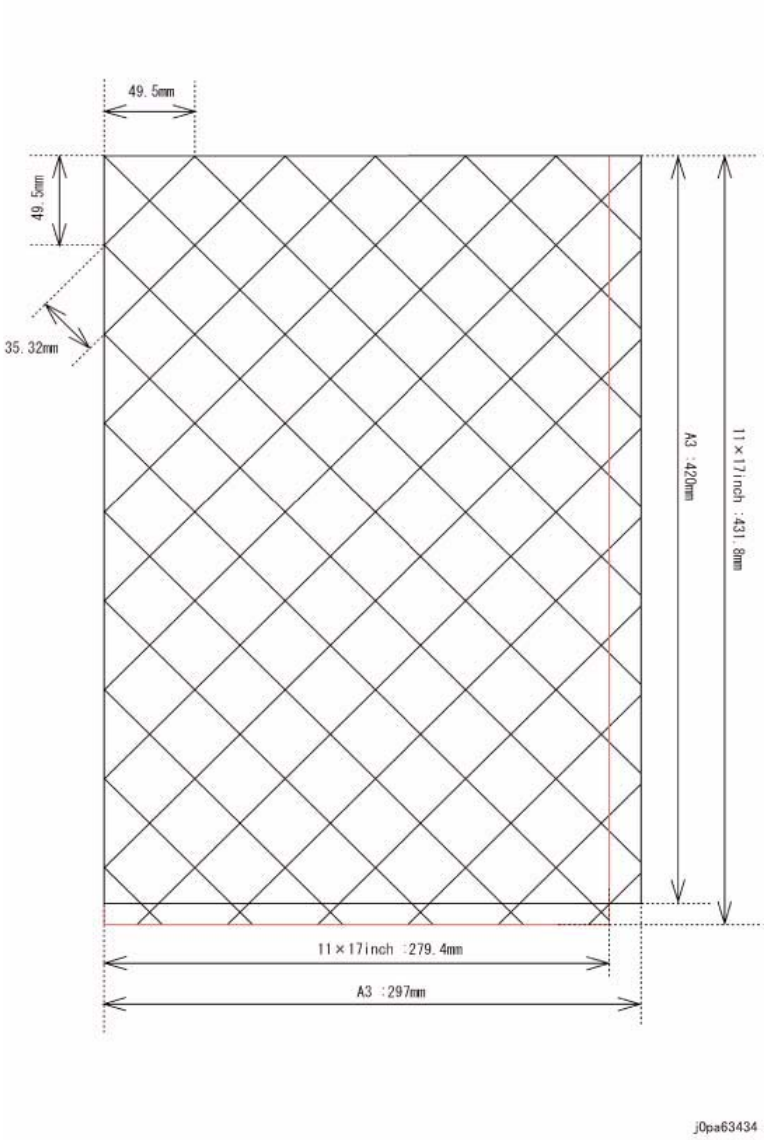


Figure 1 j0pa63434

6.3.5.27 Grid Pattern (for adjustment of folding positon)

Pattern Number: 308

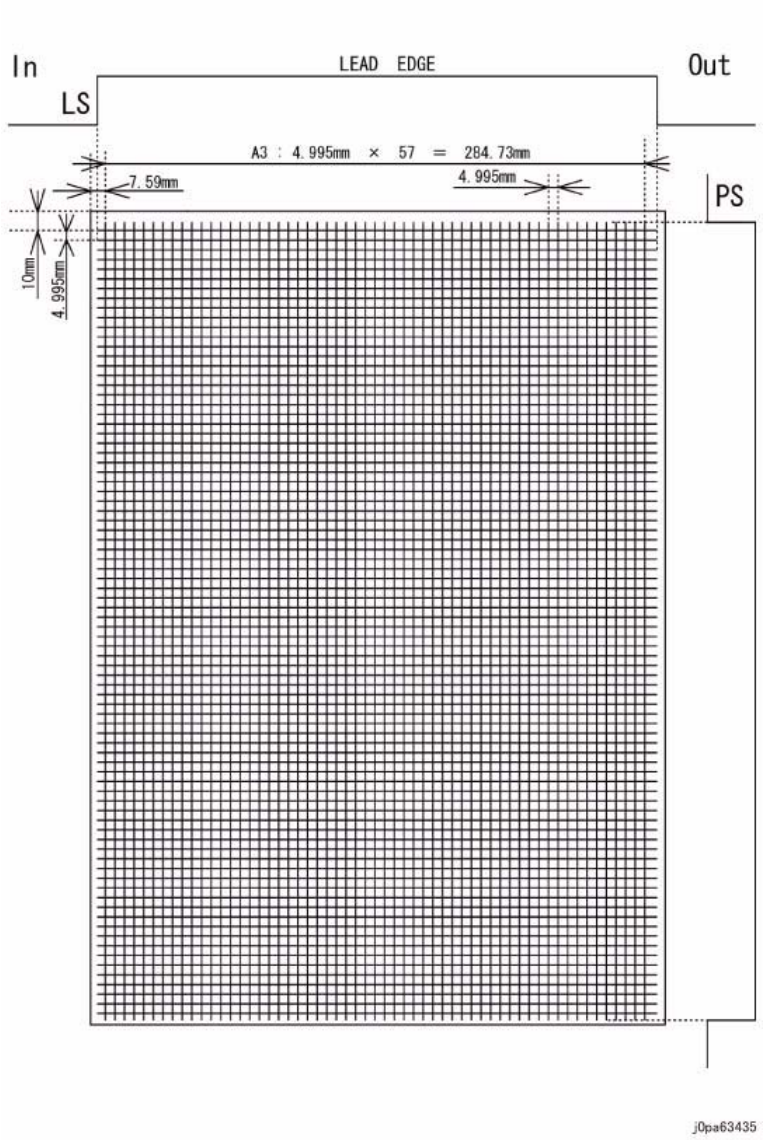


Figure 1 j0pa63435

6.3.5.28 Grid Pattern (90 deg)-102

Pattern Number: 309

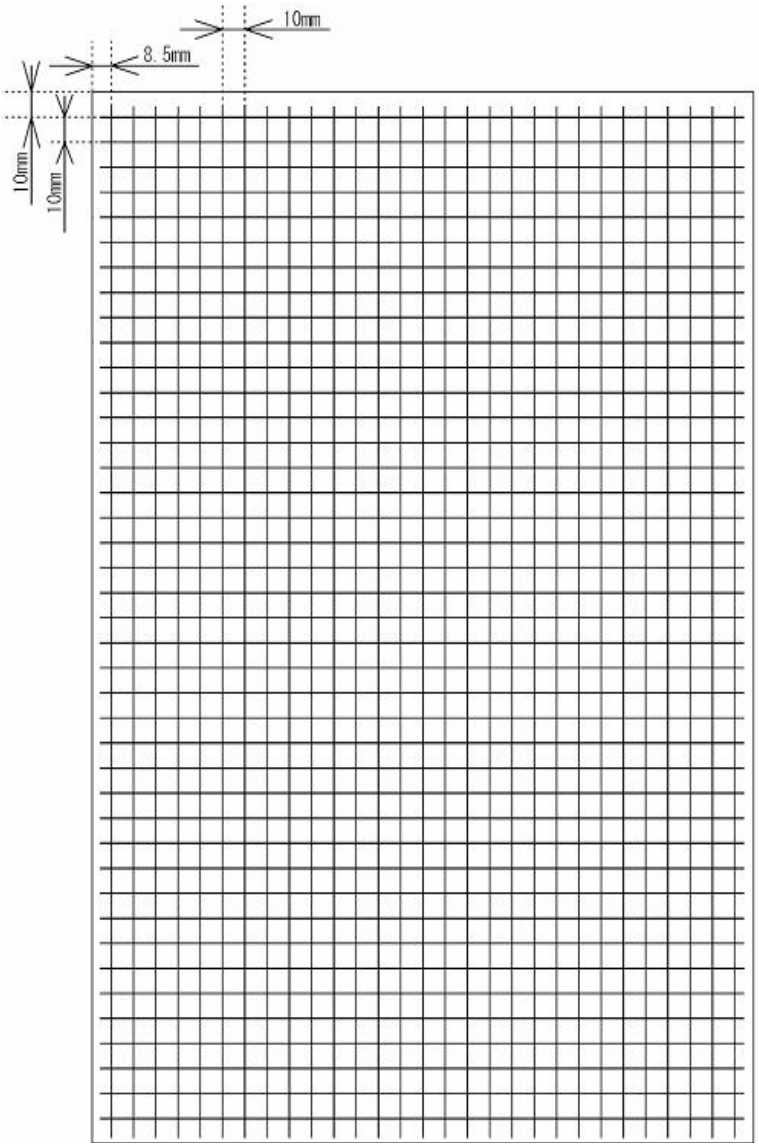


Figure 1 j0cm63505

6.3.5.29 Grid Pattern (90 deg)-204

Pattern Number: 310

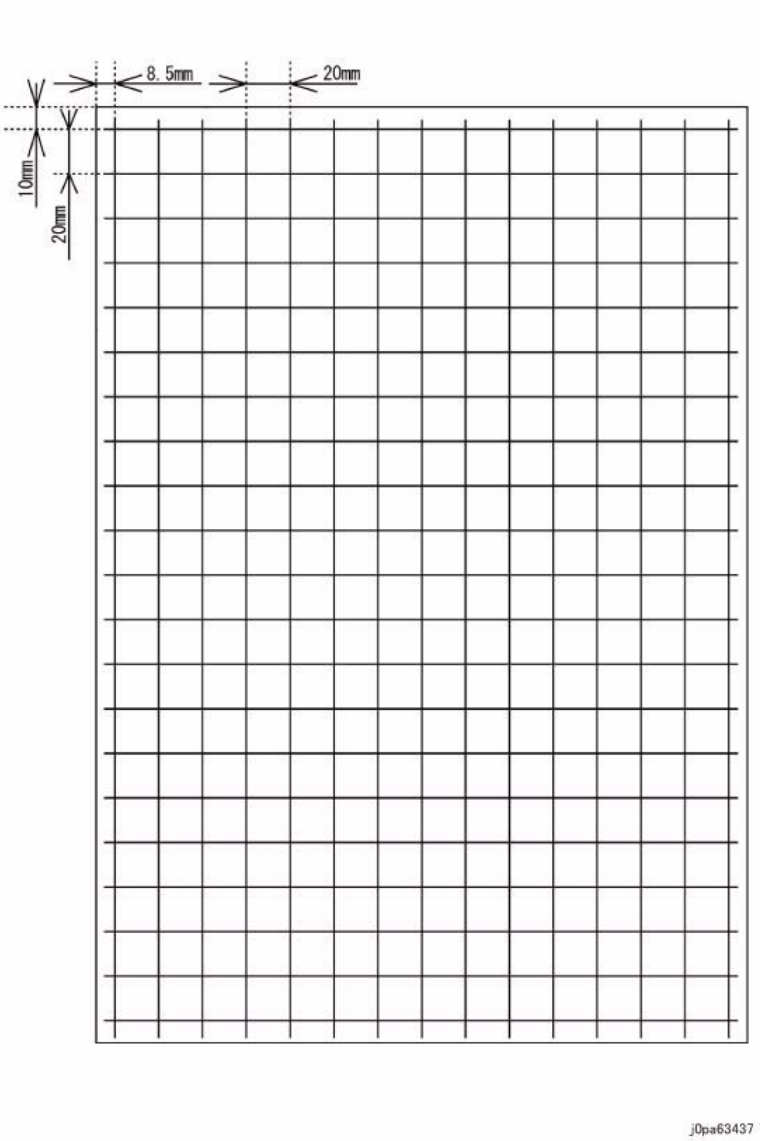


Figure 1 j0pa63437

6.3.5.30 Grid Pattern (90 deg)-208

Pattern Number: 311

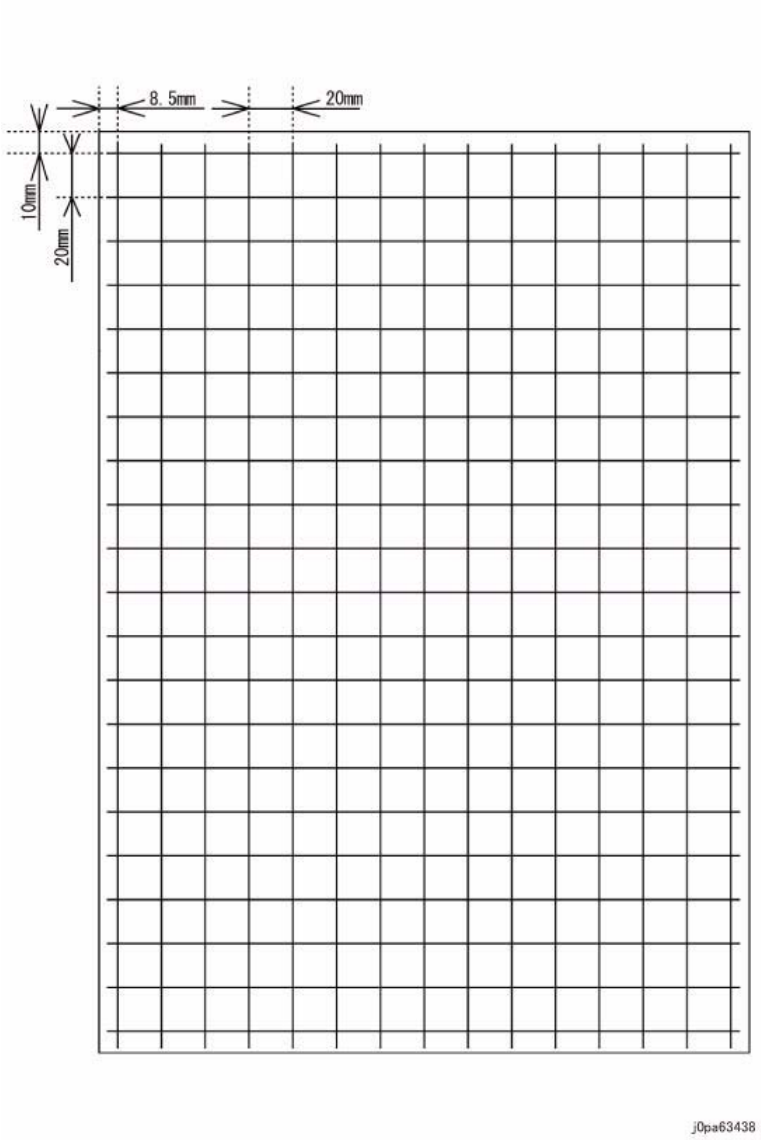


Figure 1 j0pa63438

6.3.5.31 Grid Pattern (45 deg)-101

Pattern Number: 312

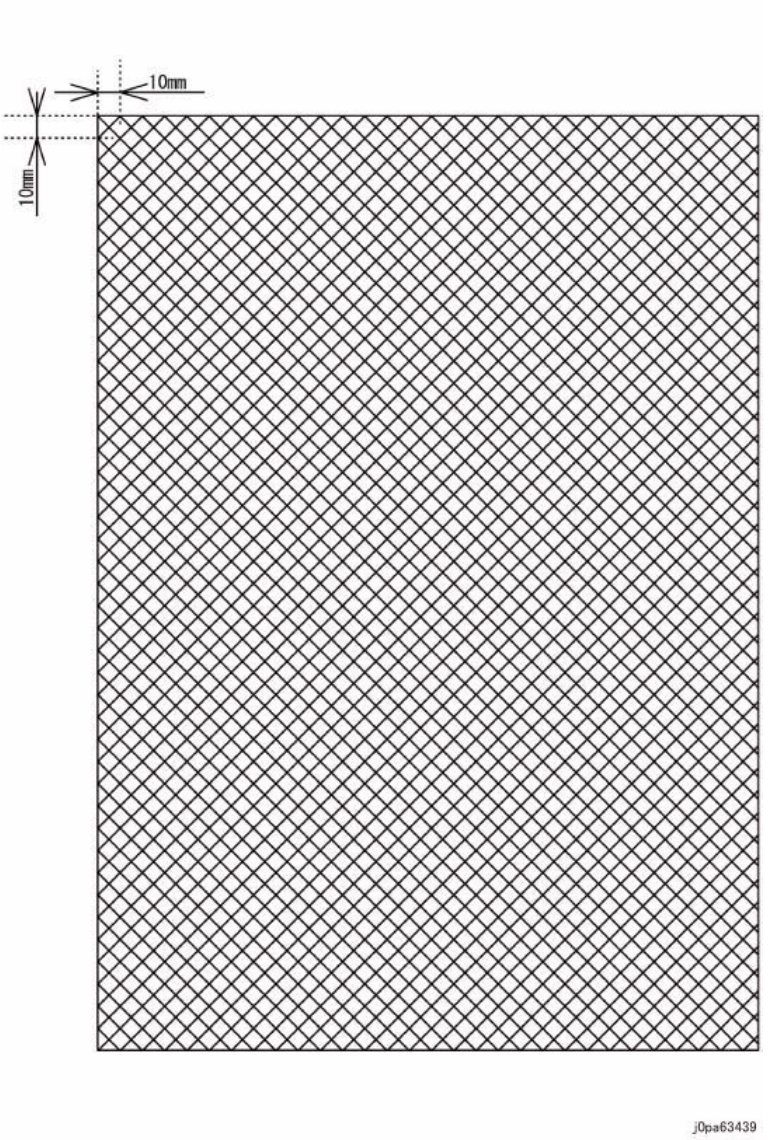


Figure 1 j0pa63439

6.3.5.32 Grid Pattern (45 deg)-102

Pattern Number: 313

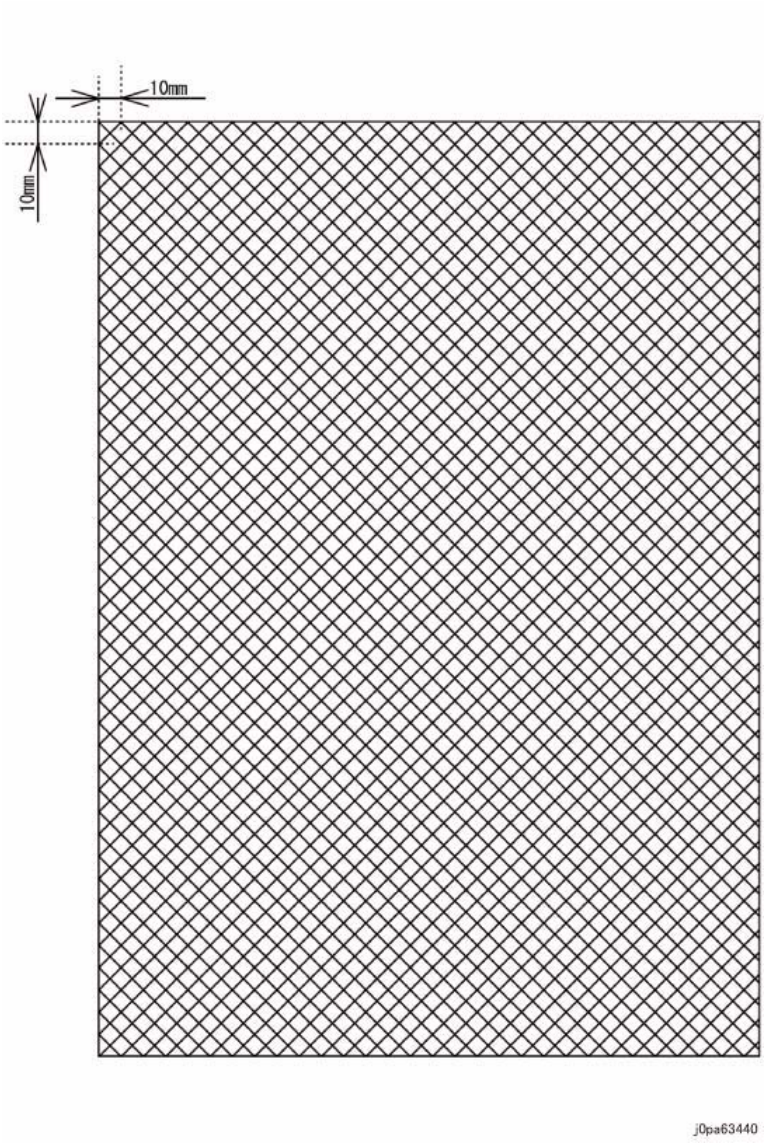


Figure 1 j0pa63440

6.3.5.33 Grid Pattern (45 deg)-1200dpi-1dot-20mm

Pattern Number: 314

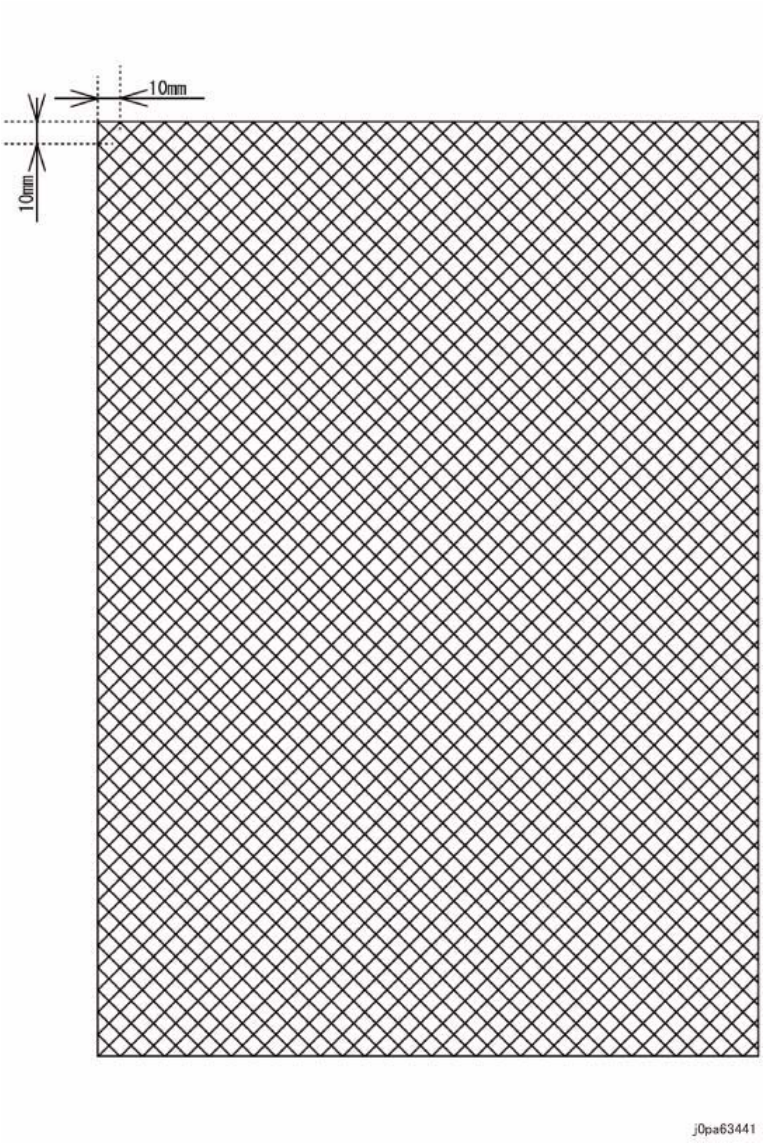
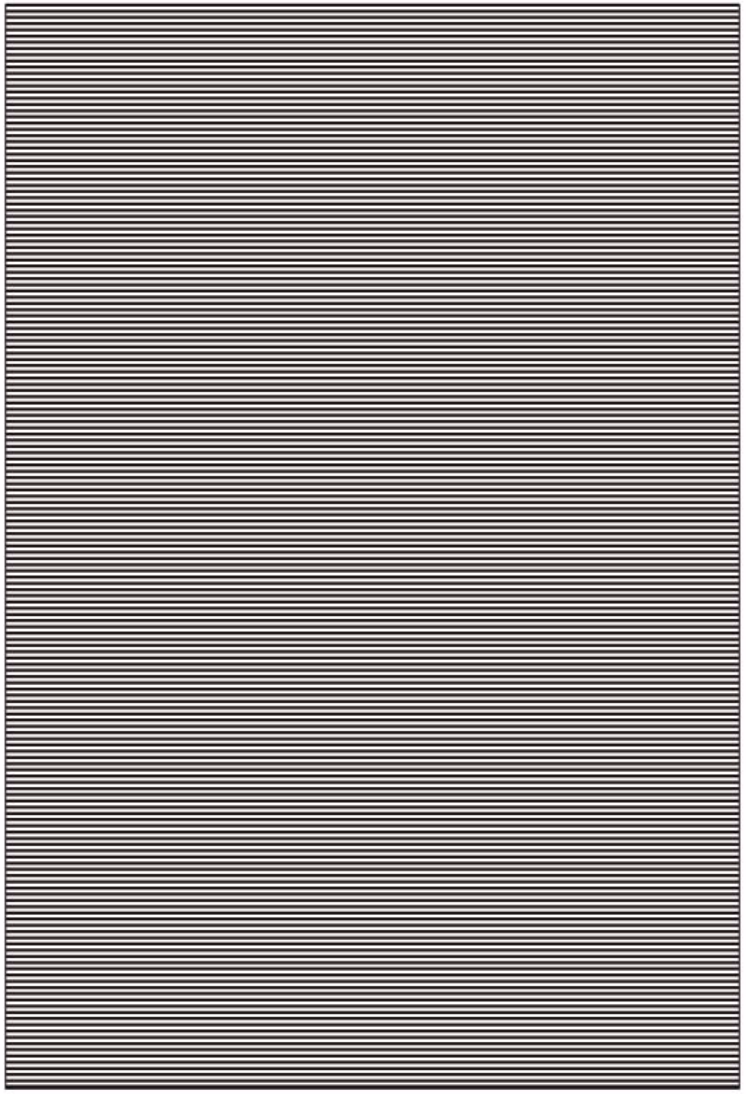


Figure 1 j0pa63441

6.3.5.34 Ladder (2 on 6 off)

Pattern Number: 315

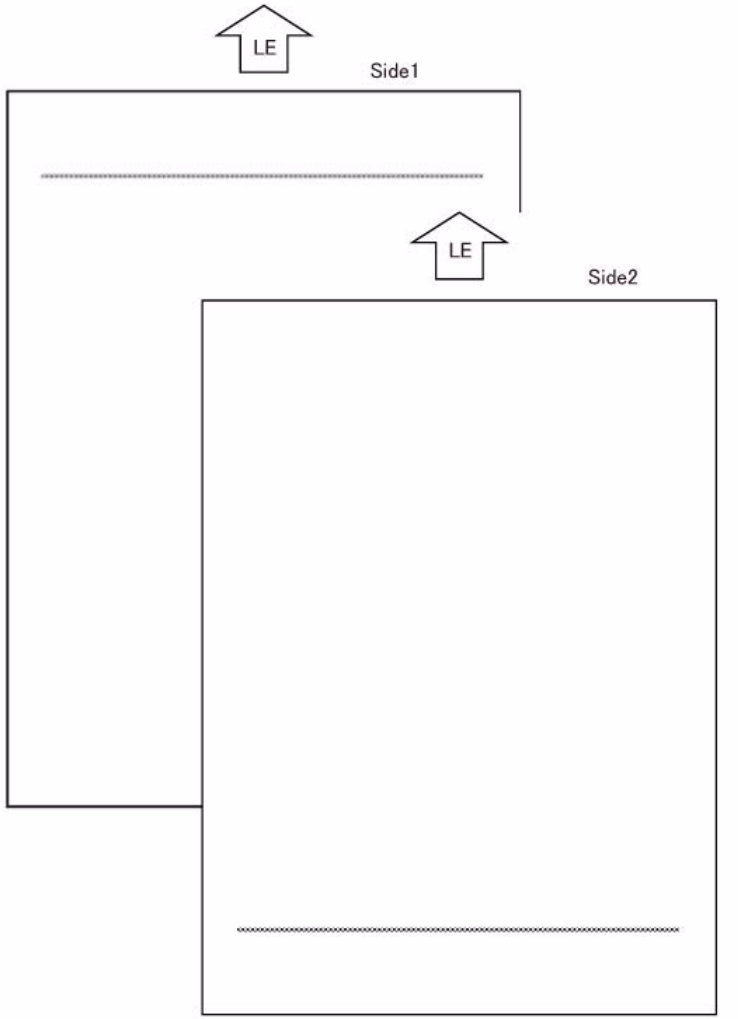


j0pa63442

Figure 1 j0pa63442

6.3.5.35 KO Pattern for Finisher

Pattern Number: 316



j0pa63443

Figure 1 j0pa63443

6.3.5.36 Arrow Pattern for Finisher

Pattern Number: 317

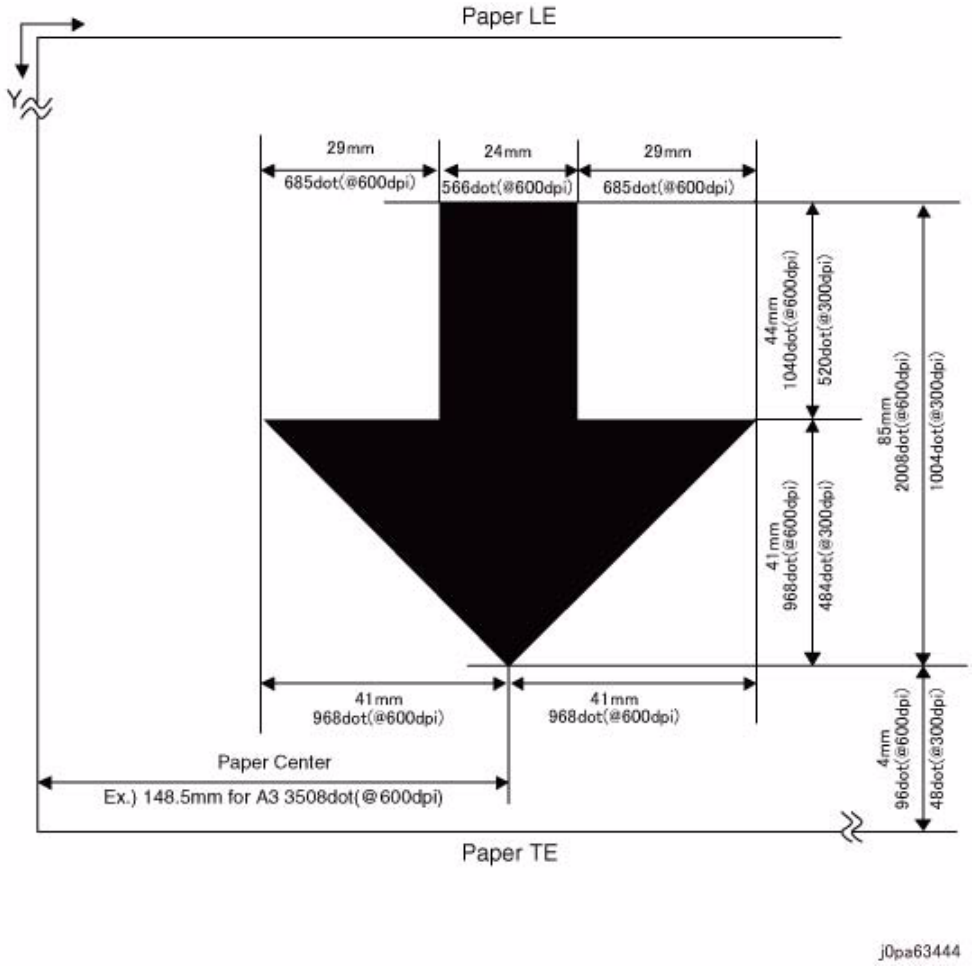


Figure 1 j0pa63444

6.3.5.37 TEDSTotal

Pattern Number: 318

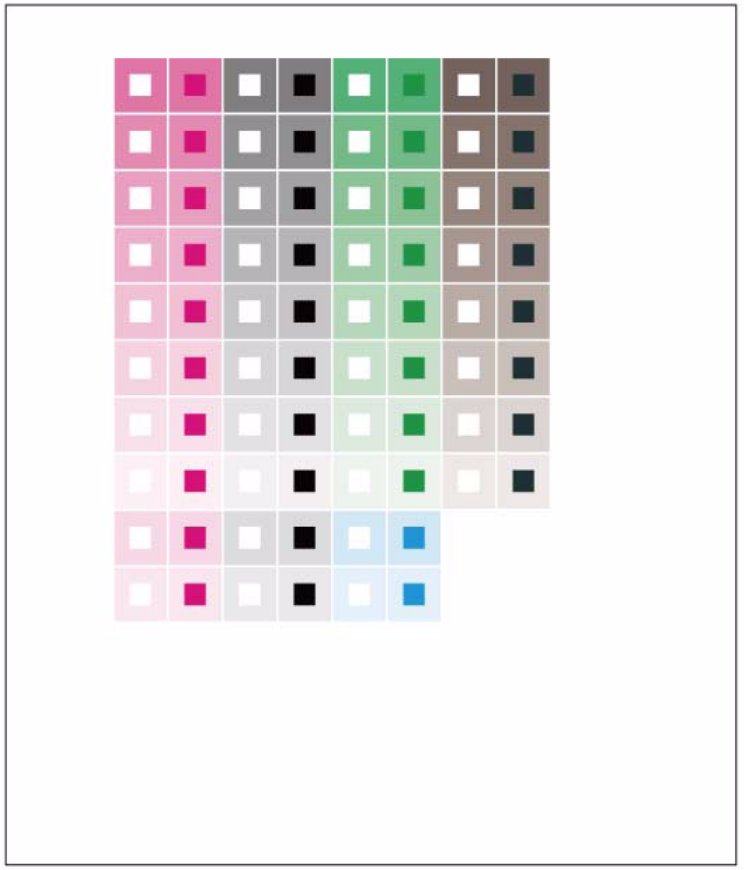


Figure 1 j0pa63445

6.3.5.38 TMA

Pattern Number: 319

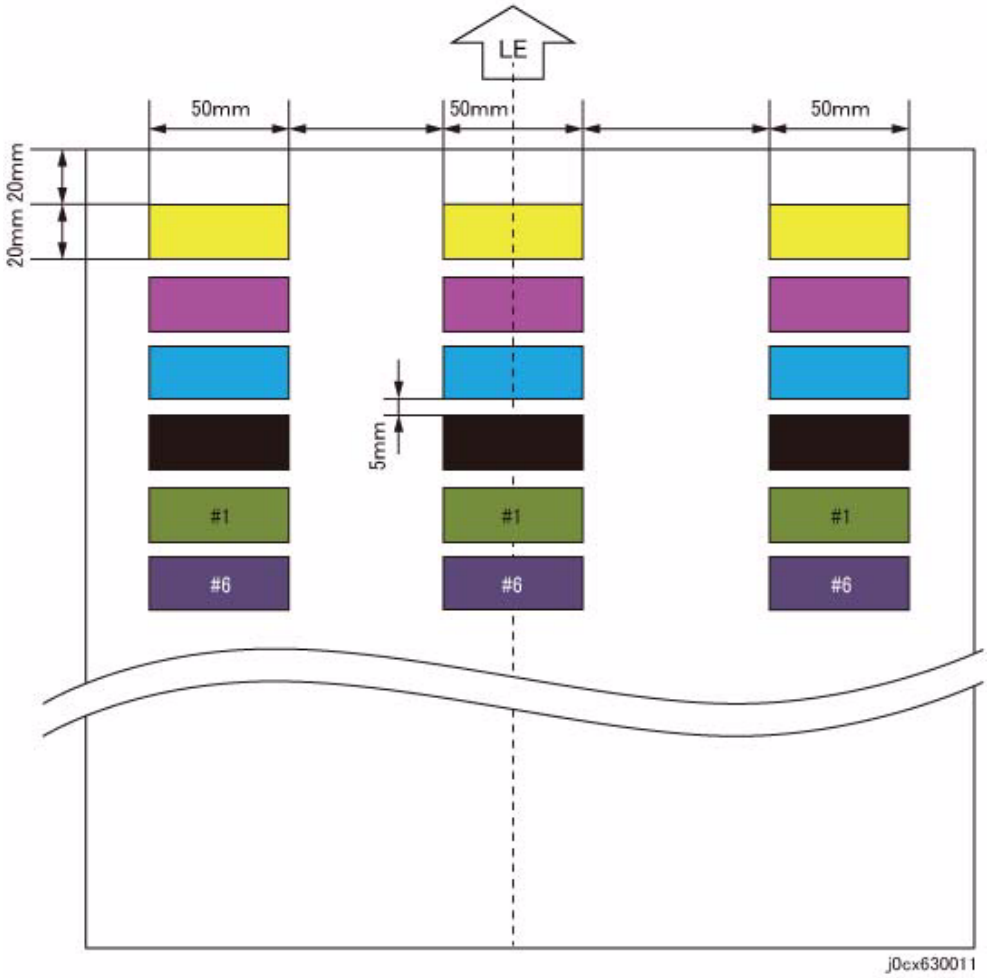
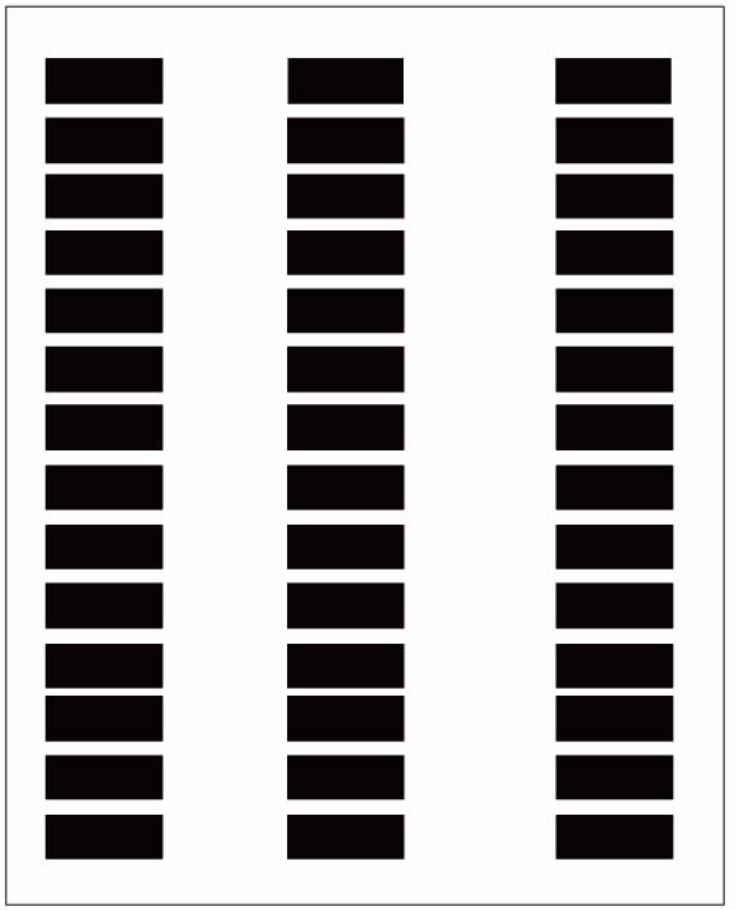


Figure 1 j0cx630011

6.3.5.39 DMA

Pattern Number: 320



j0pa63447

Figure 1 j0pa63447

6.3.5.40 HT GMCK

Pattern Number: 321

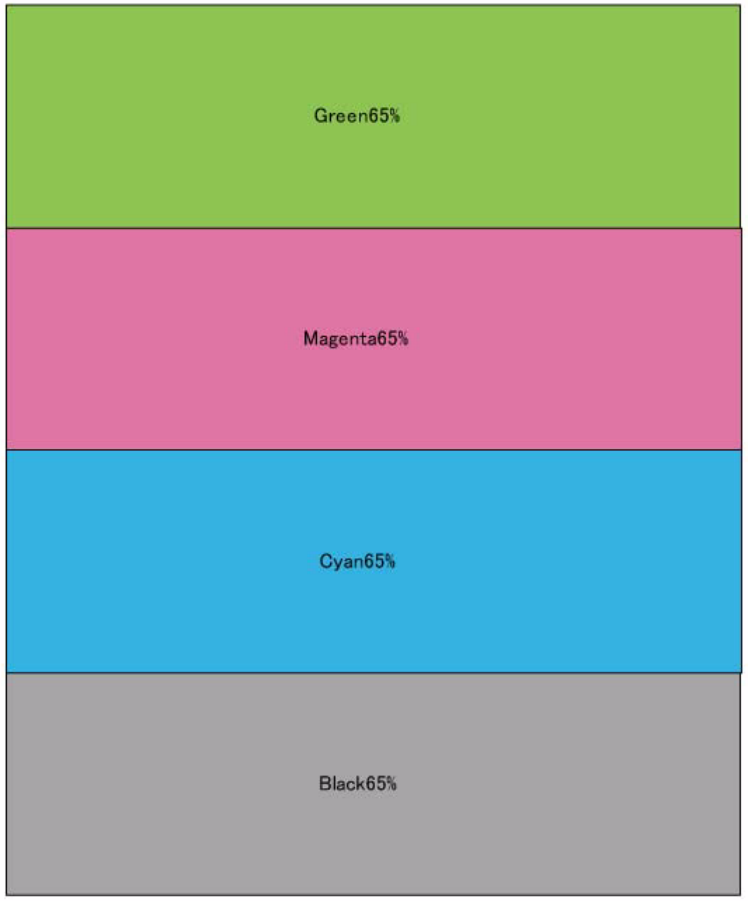


Figure 1 j0pa63448

6.3.5.41 Total Chart 2

Pattern Number: 322

Figure 1 j0pa63449

6.3.5.42 Total Chart 1

Pattern Number: 323

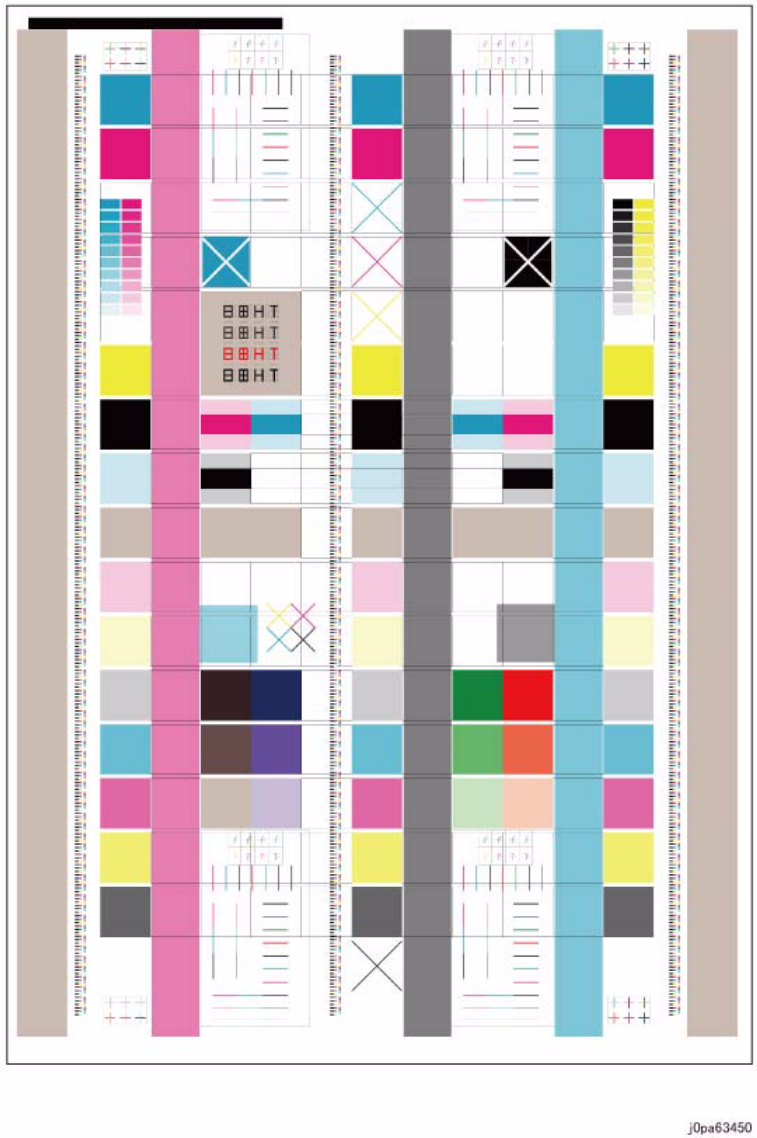


Figure 1 j0pa63450

6.3.5.43 Gradation Check Pattern (16Patch)

Pattern Number: 324

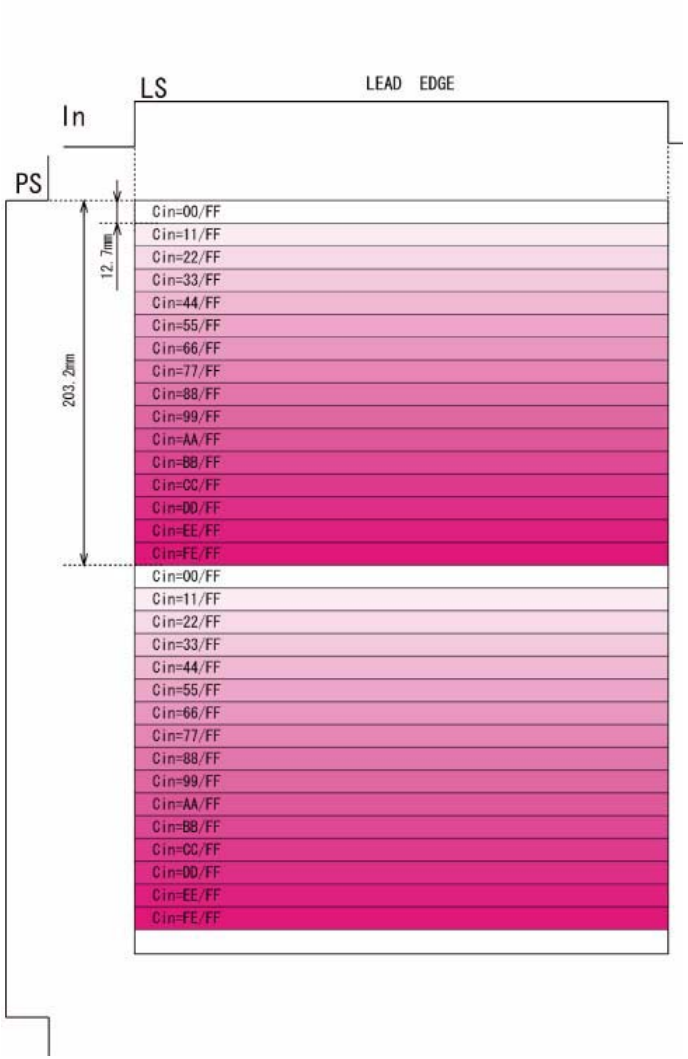
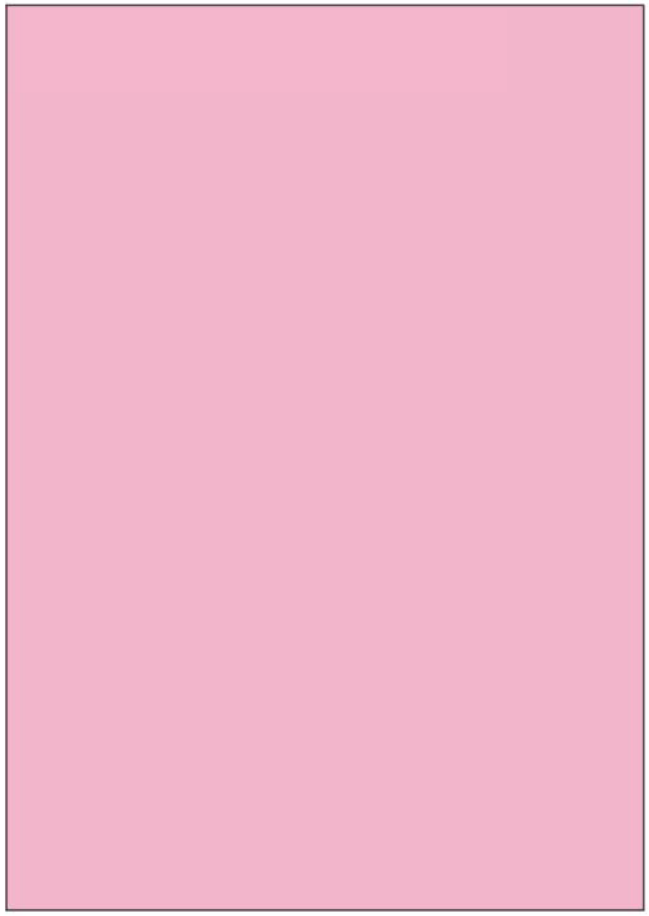


Figure 1 j0pa63451

6.3.5.44 Half Tone

Pattern Number: 325

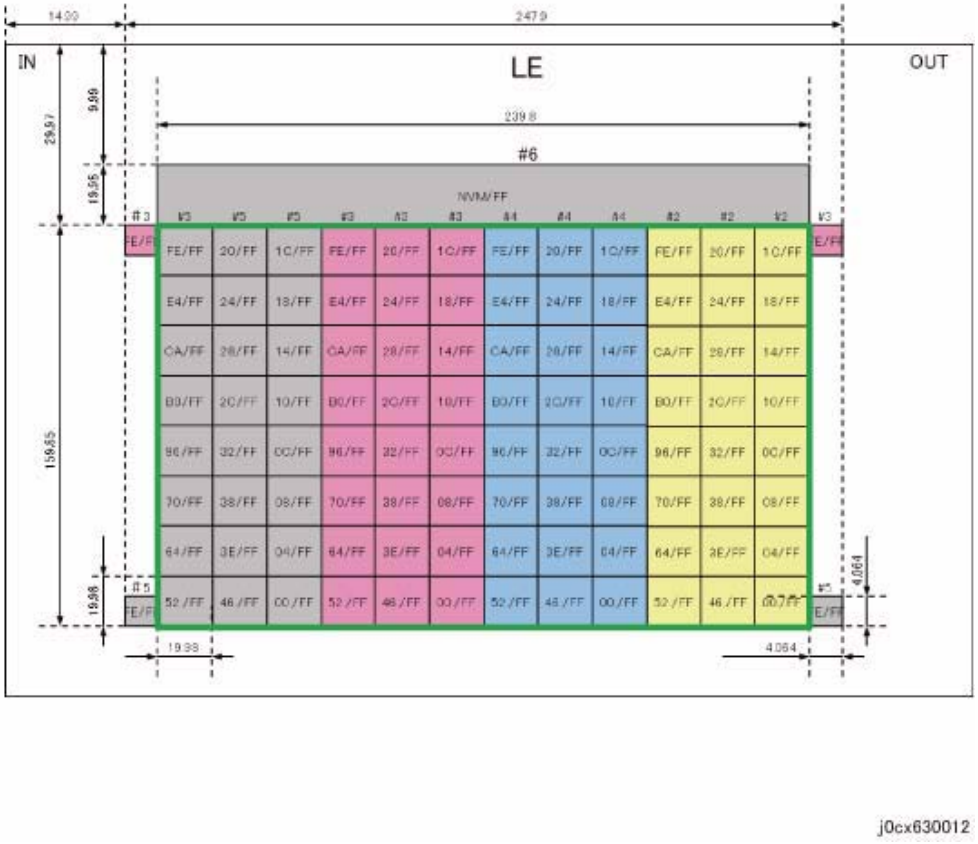


j0pa63452

Figure 1 j0pa63451

6.3.5.45 CTRACS Pattern (for correction/4C/ILS)

Pattern Number: 326


14.00
247.9
IN
LE
OUT
239.8
#6
NVM/FF
29.97
9.99
19.95
159.85
19.98
4.064
19.98
4.064
FE/FF 20/FF 1C/FF FE/FF 20/FF 1C/FF FE/FF 20/FF 1C/FF FE/FF 20/FF 1C/FF
E4/FF 24/FF 18/FF E4/FF 24/FF 18/FF E4/FF 24/FF 18/FF E4/FF 24/FF 18/FF
CA/FF 28/FF 14/FF CA/FF 28/FF 14/FF CA/FF 28/FF 14/FF CA/FF 28/FF 14/FF
B0/FF 2C/FF 10/FF B0/FF 2C/FF 10/FF B0/FF 2C/FF 10/FF B0/FF 2C/FF 10/FF
96/FF 32/FF 0C/FF 96/FF 32/FF 0C/FF 96/FF 32/FF 0C/FF 96/FF 32/FF 0C/FF
70/FF 38/FF 08/FF 70/FF 38/FF 08/FF 70/FF 38/FF 08/FF 70/FF 38/FF 08/FF
64/FF 3E/FF 04/FF 64/FF 3E/FF 04/FF 64/FF 3E/FF 04/FF 64/FF 3E/FF 04/FF
52/FF 46/FF 00/FF 52/FF 46/FF 00/FF 52/FF 46/FF 00/FF 52/FF 46/FF 00/FF

j0cx630012

Figure 1 j0cx630012

NOTE:

#6: The Cin of Lead Edge band can be changed using NVM [default value: 255, setting range: 0 to 255]

All Patch Size: 19.98x19.98 mm

6.3.5.46 CTRACS Pattern (for check/4C/ILS)

Pattern Number: 327

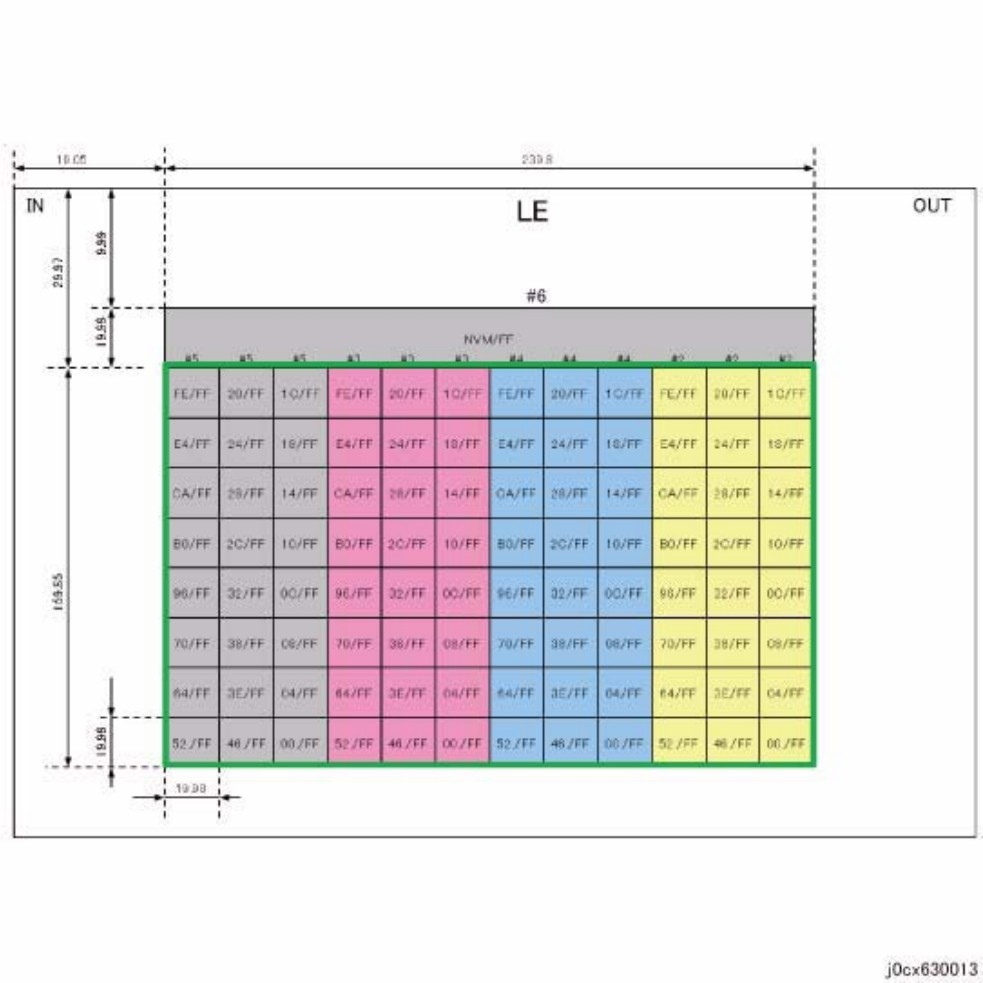


Figure 1 j0cx630013

NOTE:

#6: The Cin of Lead Edge band can be changed using NVM [default value: 255, setting range: 0 to 255]

All Patch Size: 19.98x19.98 mm

6.3.5.47 21 ToneCurveCheck(21 patch)

Pattern Number: 330

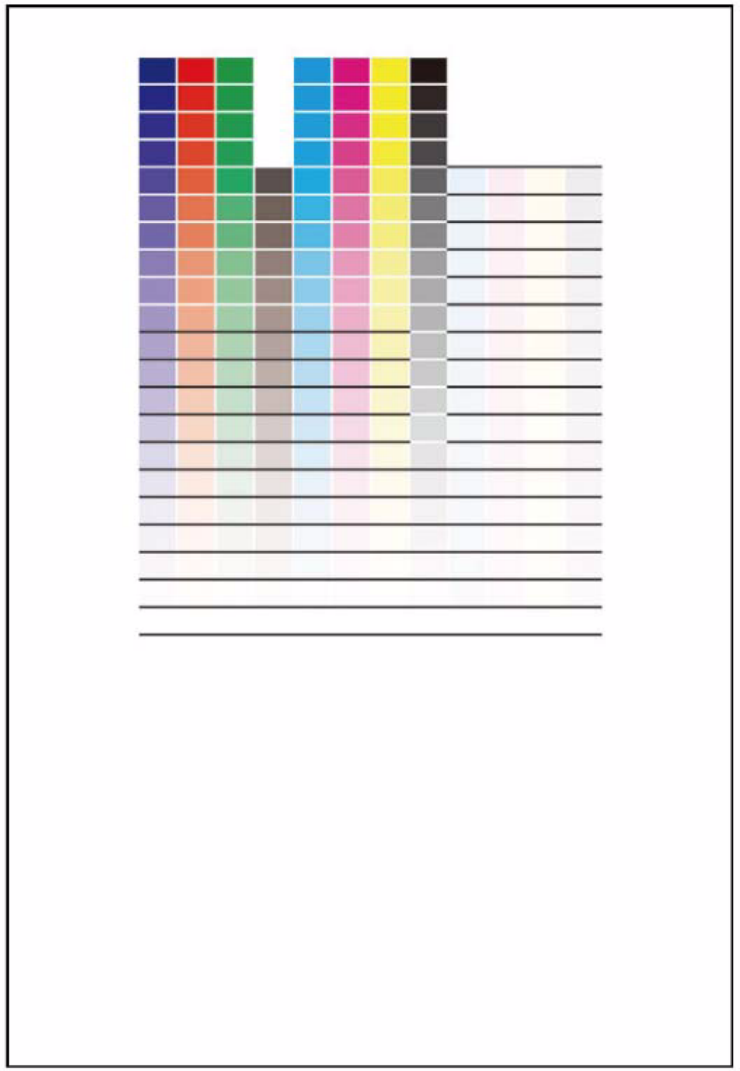


Figure 1 j0pa63457

6.3.5.48 Stability2

Pattern Number: 332

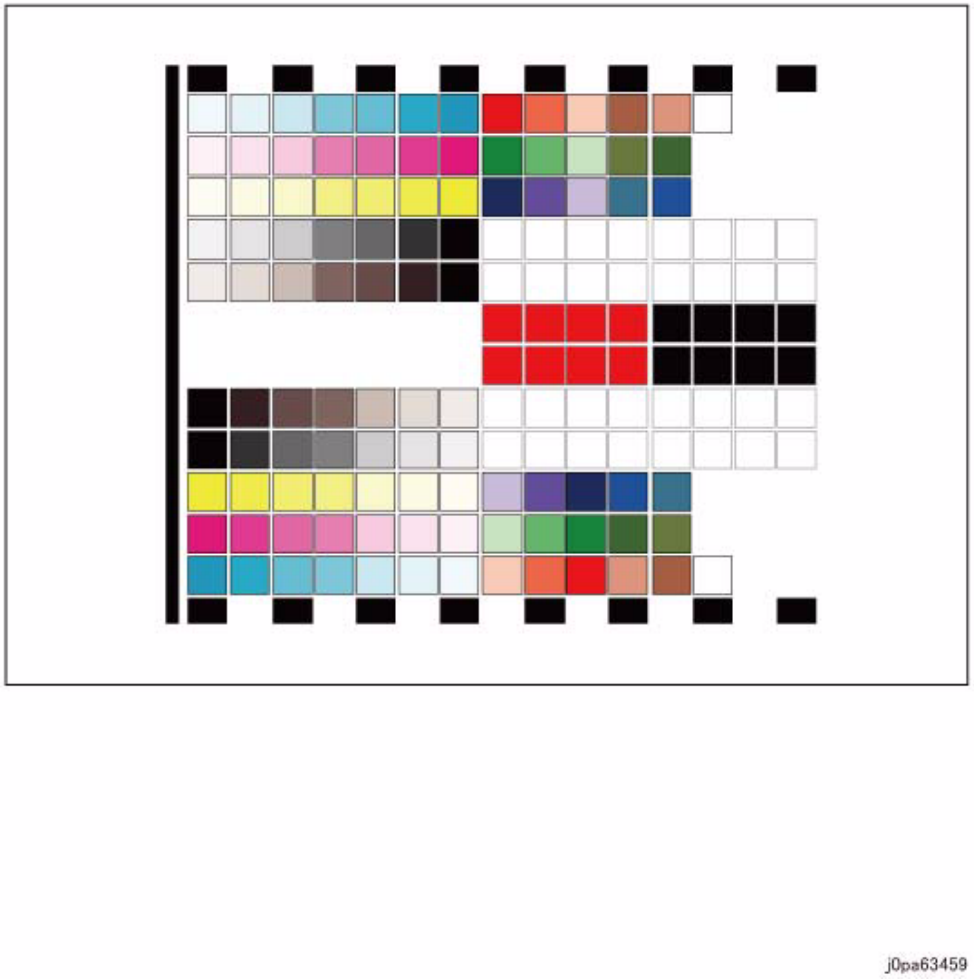


Figure 1 j0pa63459

6.3.5.49 Adjustment Highlight Color

Pattern Number: 333

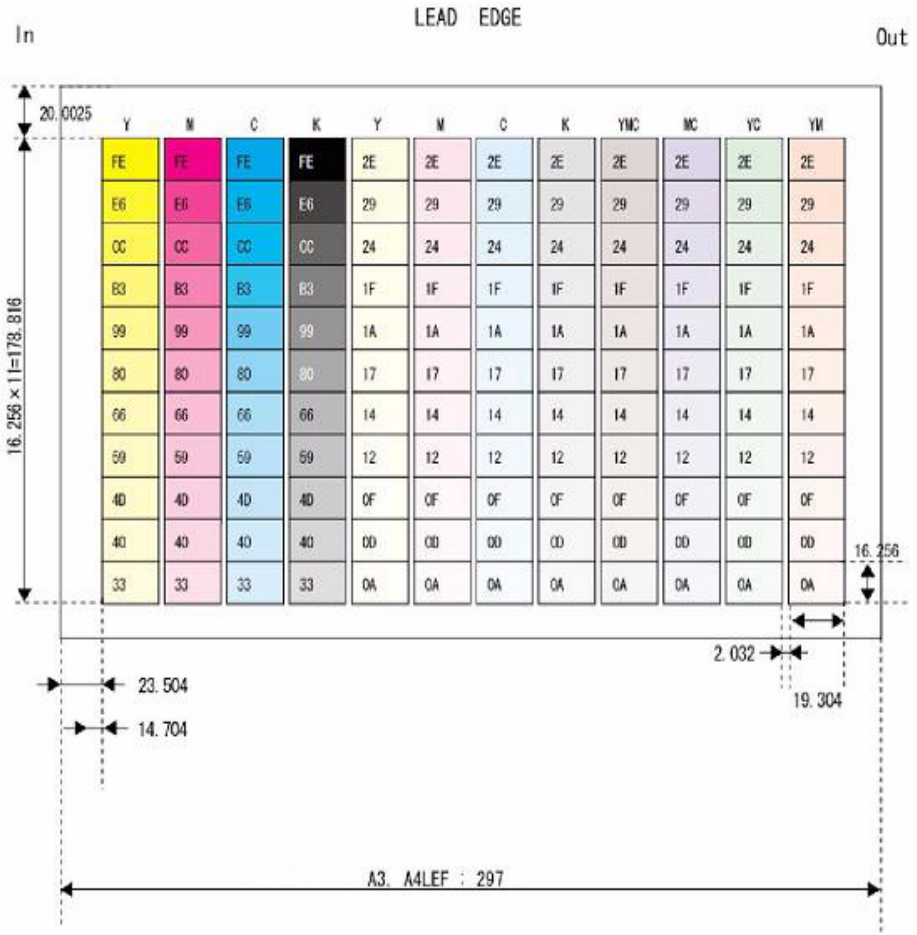
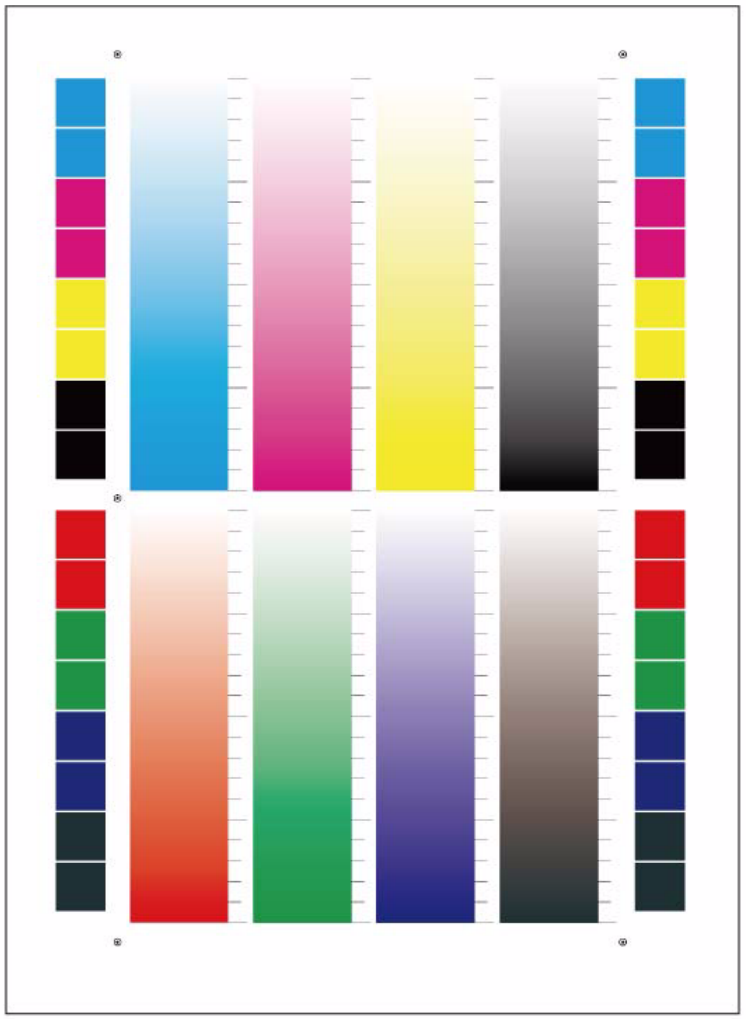


Figure 1 j0cm63513

6.3.5.50 Gradation1

Pattern Number: 334

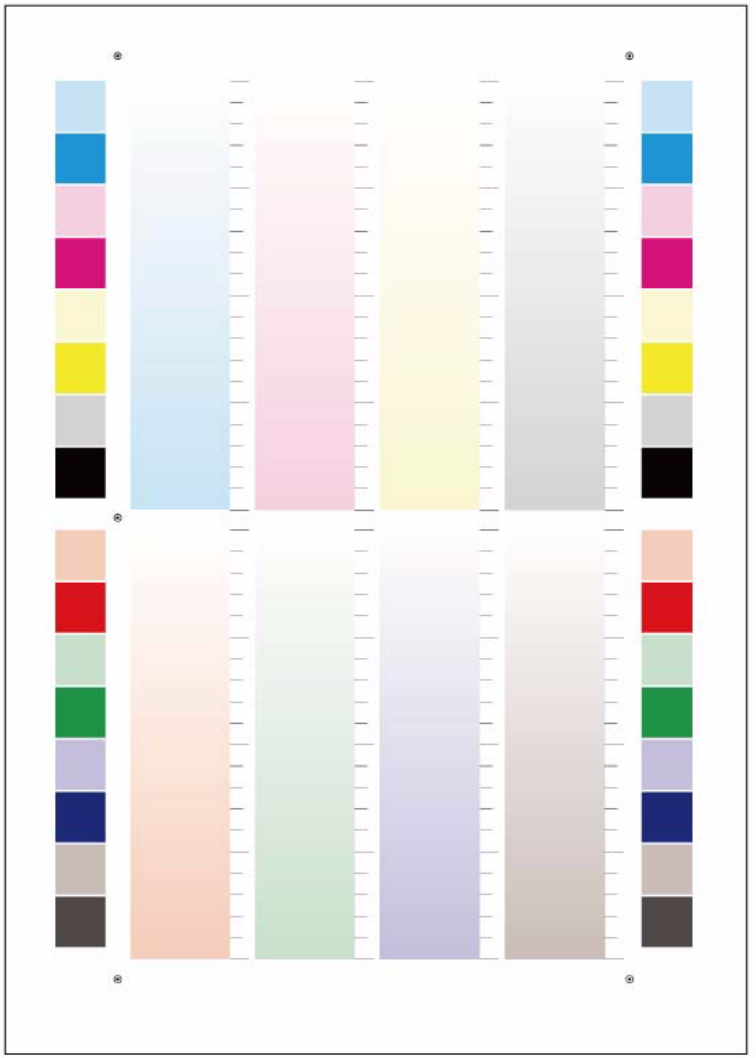


j0pa63461

Figure 1 j0pa63461

6.3.5.51 Gradation2

Pattern Number: 335



j0pa63462

Figure 1 j0pa63462

6.3.5.52 Density Uniformity for FS (CMYK)

Pattern Number: 336

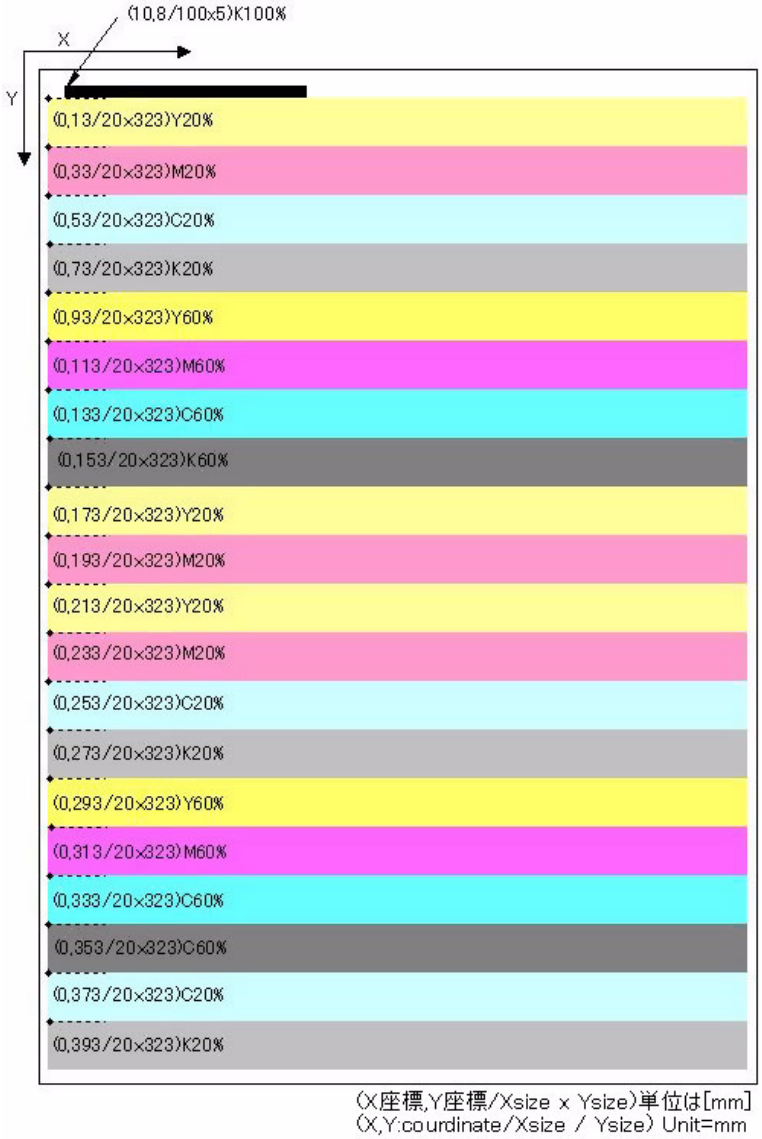


Figure 1 j0cm63530

6.3.5.53 Density Uniformity for FS (RGBPK)

Pattern Number: 337

Figure 1 j0cm63532

6.3.5.54 Density Uniformity for FS (Single Color)

Pattern Number: 338

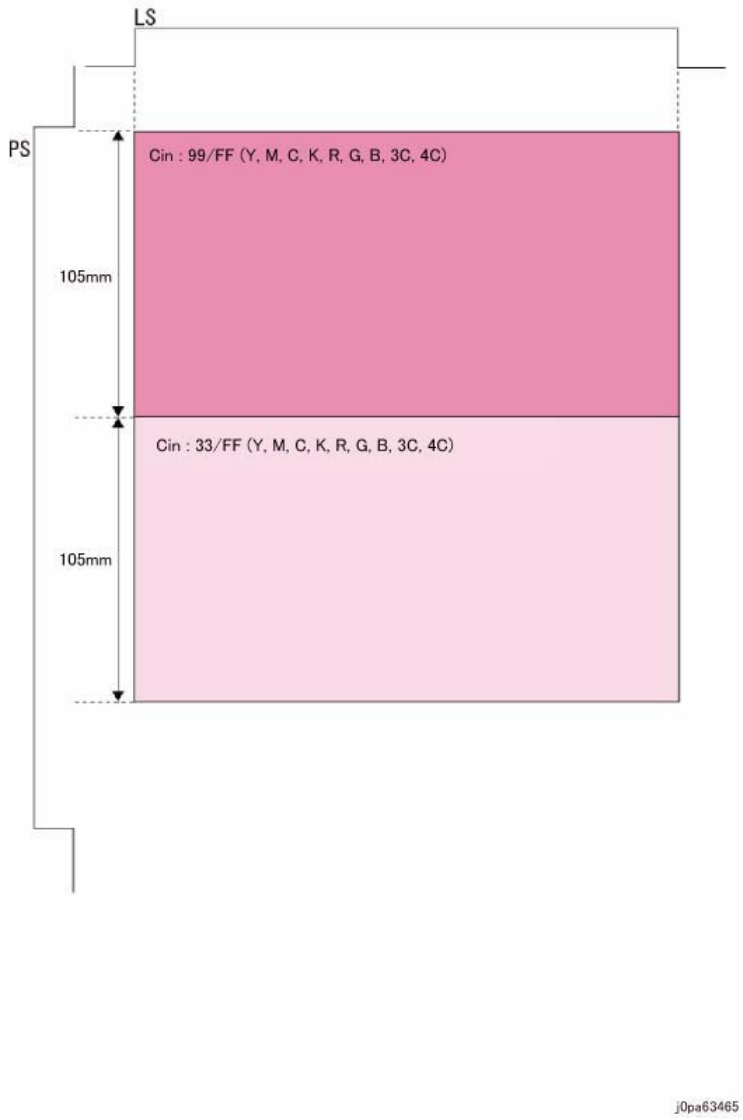


Figure 1 j0pa63465

6.3.5.55 Density Uniformity for SS (YC)

Pattern Number: 339

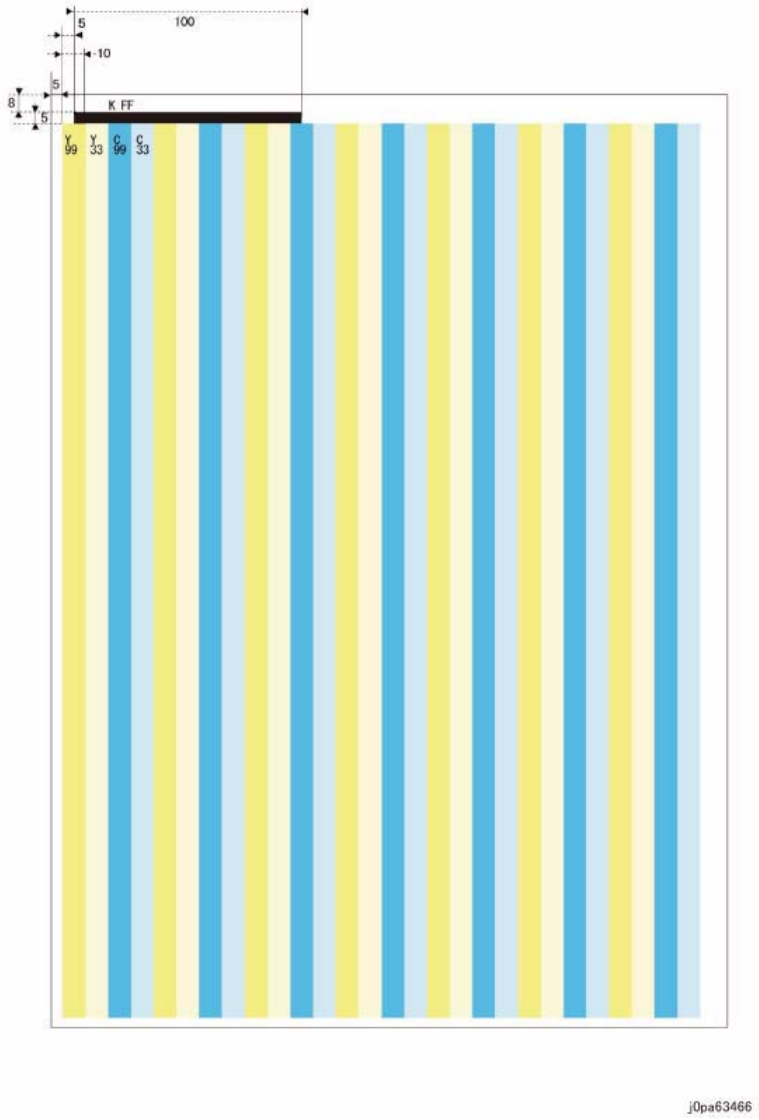


Figure 1 j0pa63466

6.3.5.56 Density Uniformity for SS (MK)

Pattern Number: 340

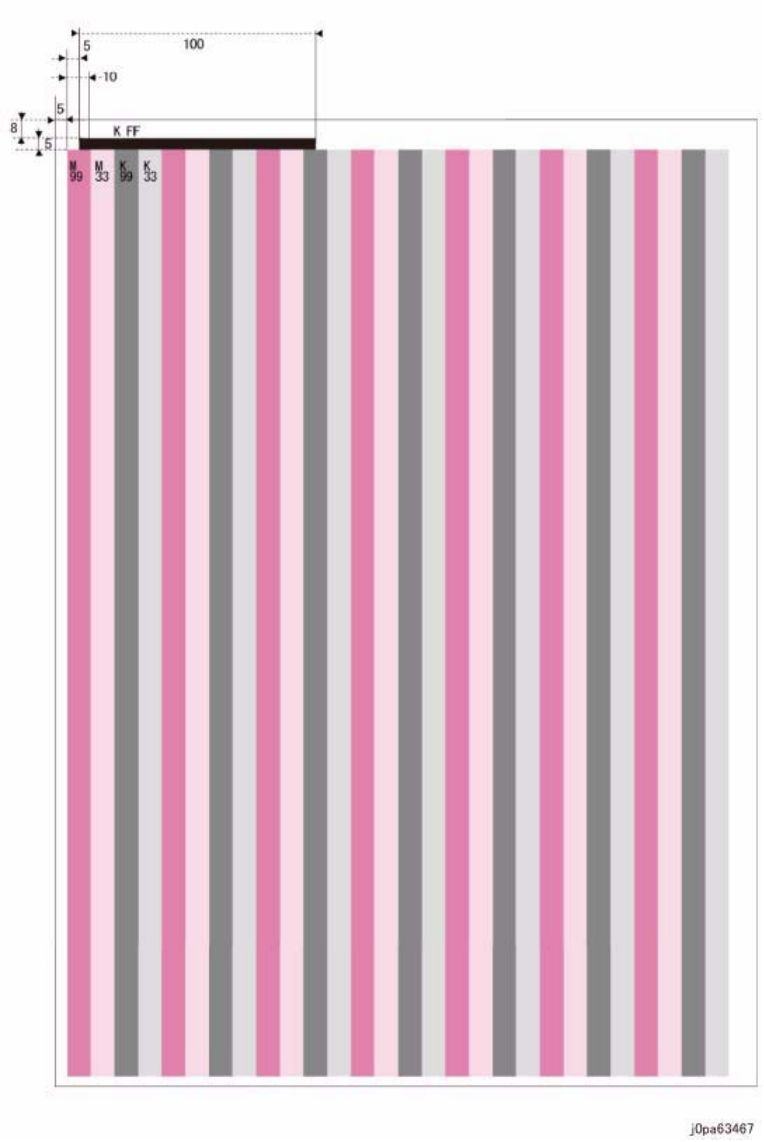


Figure 1 j0pa63467

6.3.5.57 Banding

Pattern Number: 341

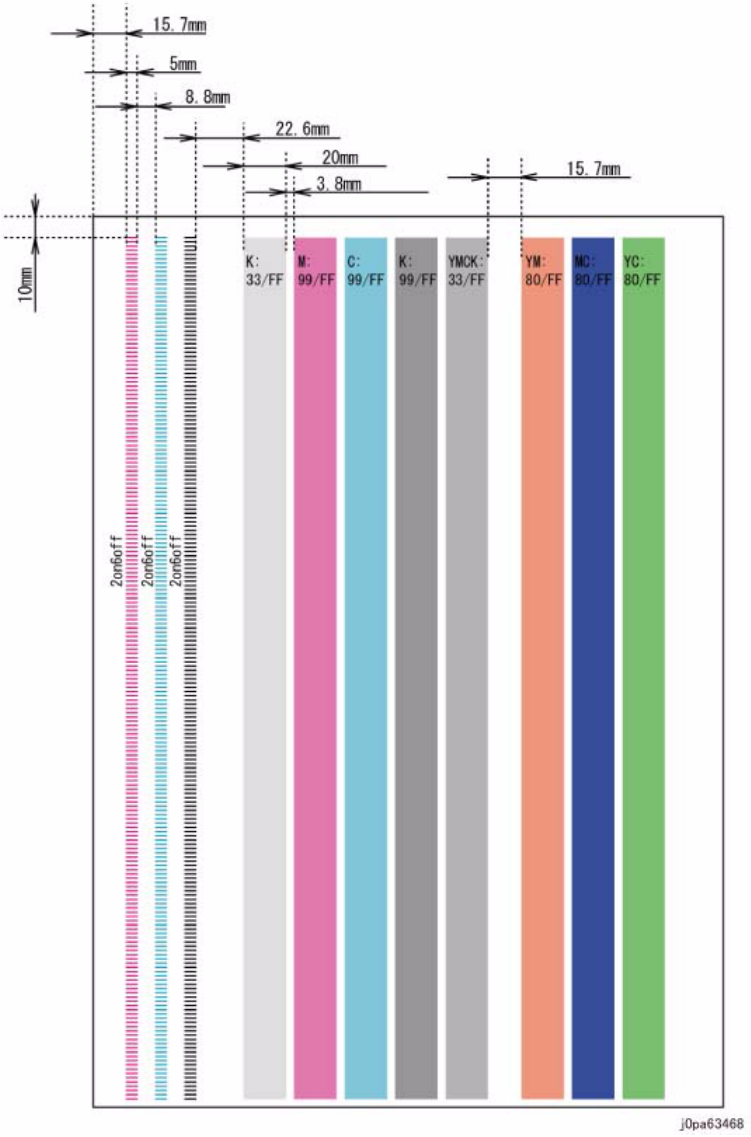


Figure 1 j0pa63468

6.3.5.58 Banding2

Pattern Number: 342

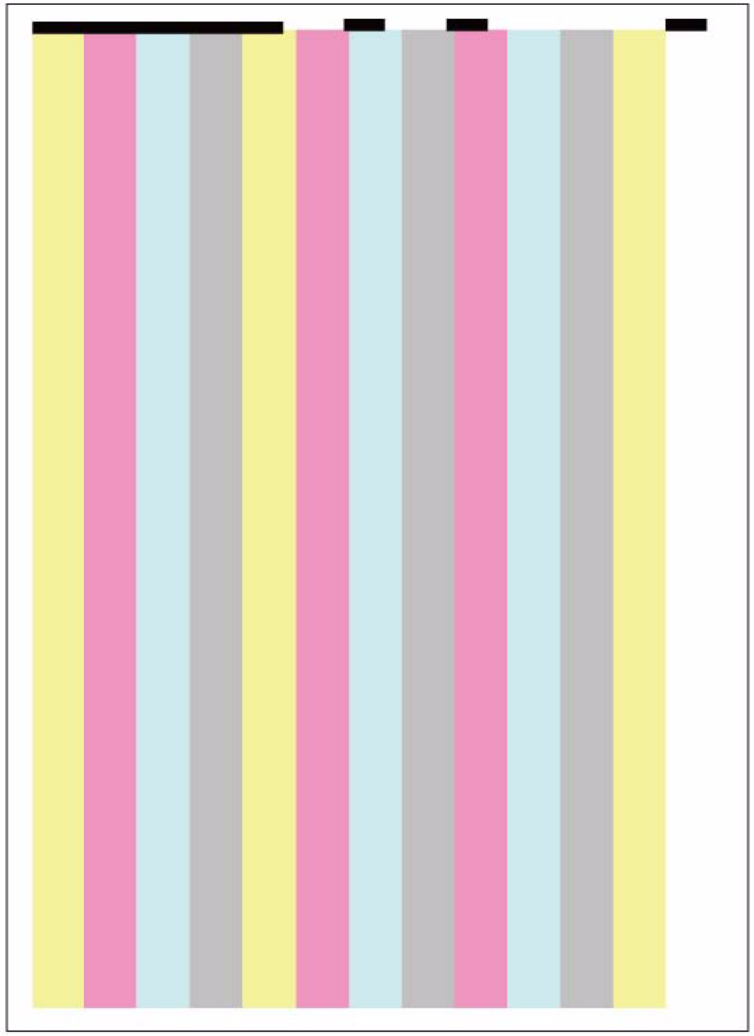


Figure 1 j0pa63469

6.3.5.59 Banding2 (pkrgb)

Pattern Number: 343

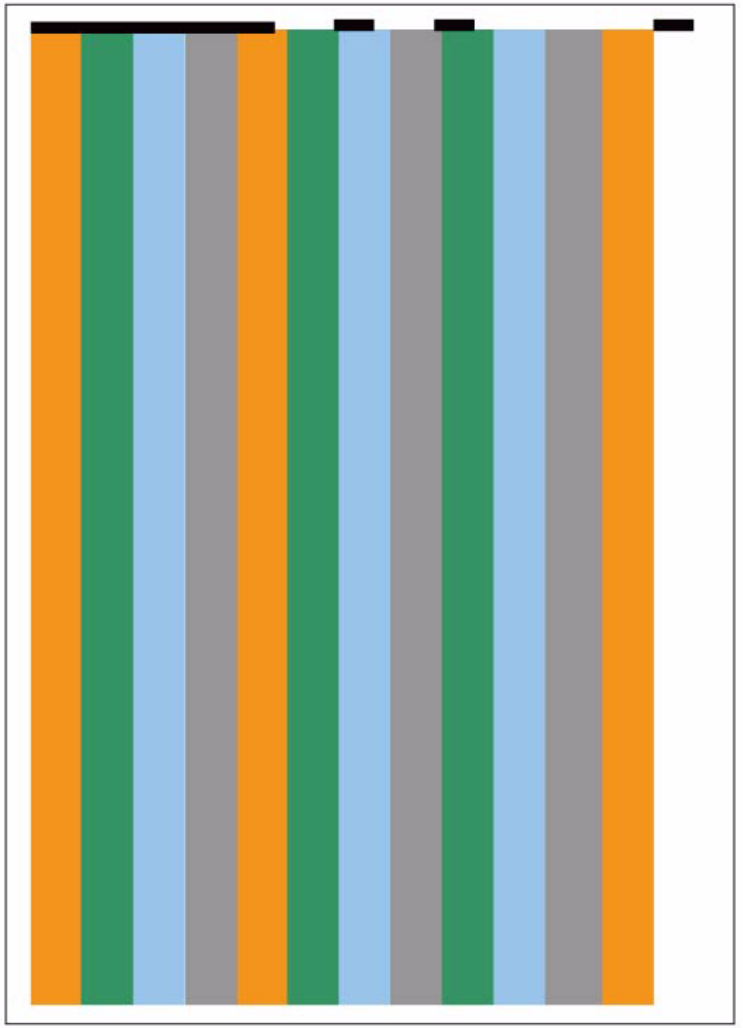
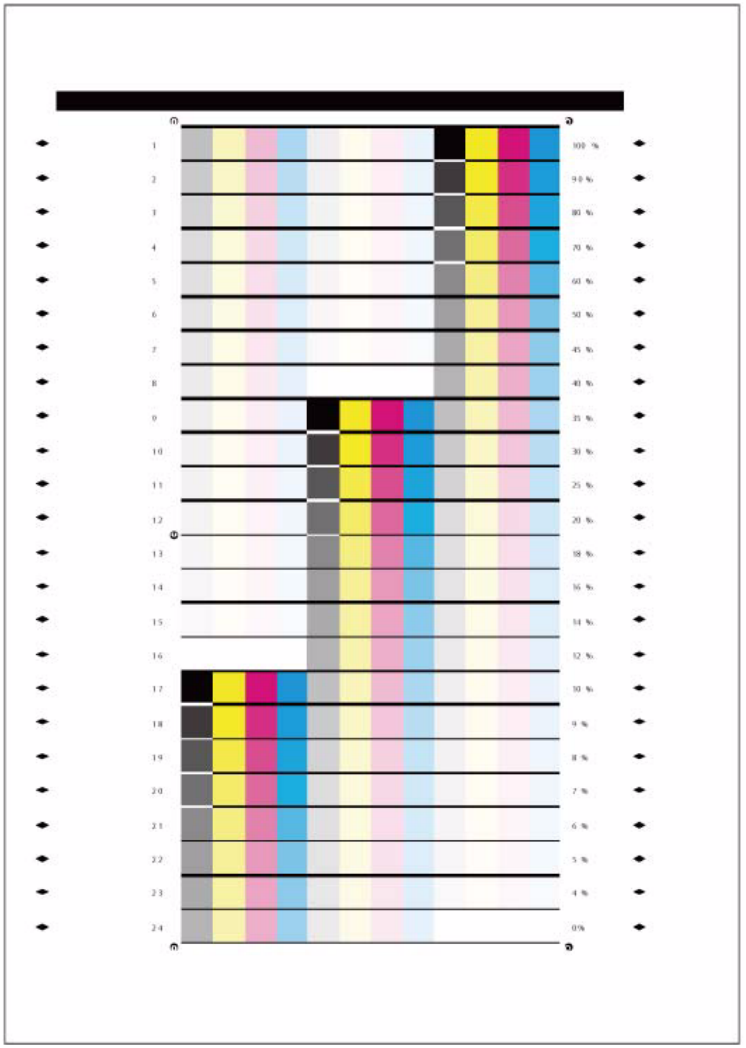


Figure 1 j0pa63470

6.3.5.60 ATCN33

Pattern Number: 344

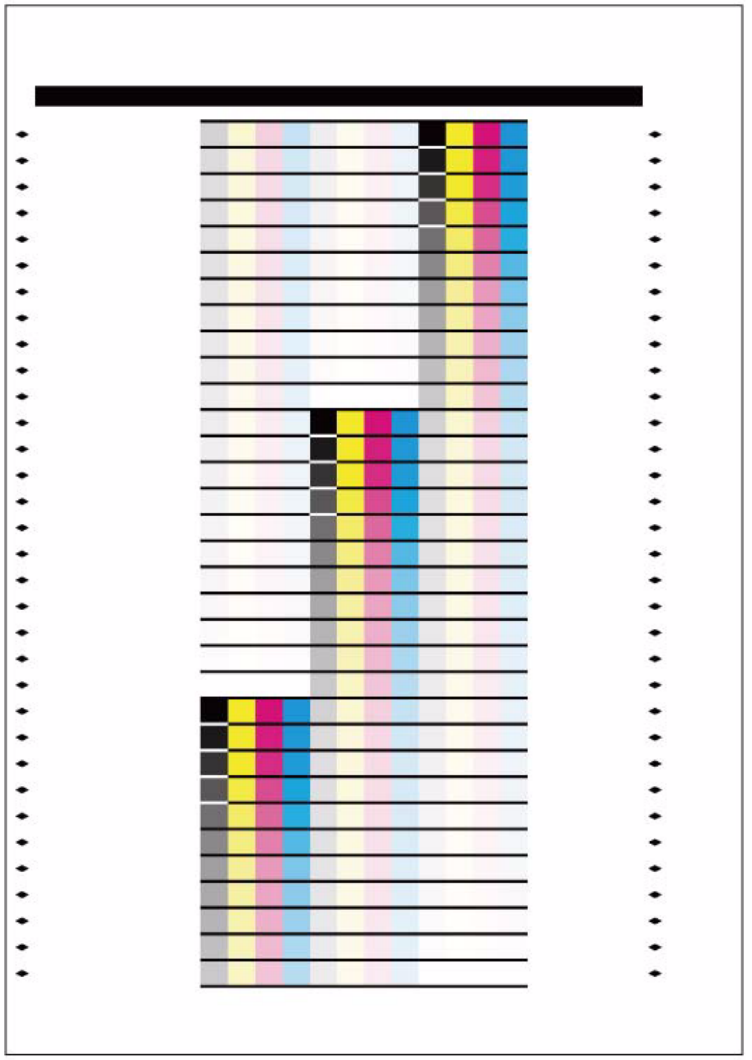


j0pa63471

Figure 1 j0pa63471

6.3.5.61 ATCN24

Pattern Number: 345

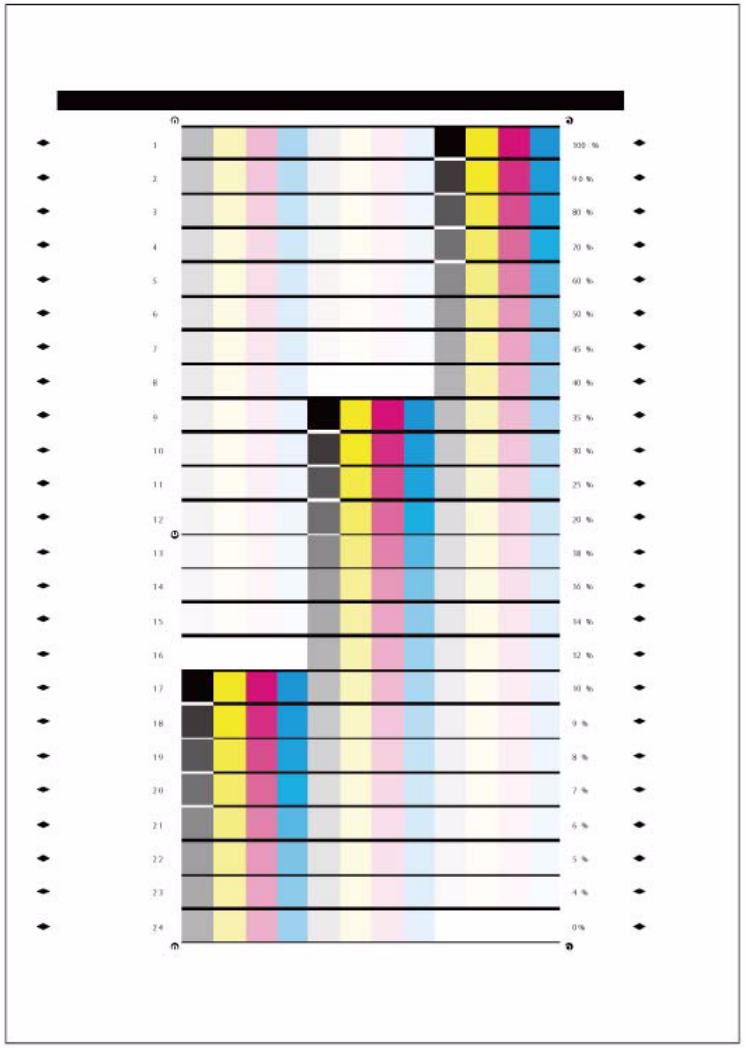


j0pa63472

Figure 1 j0pa63472

6.3.5.62 ATCN123

Pattern Number: 346

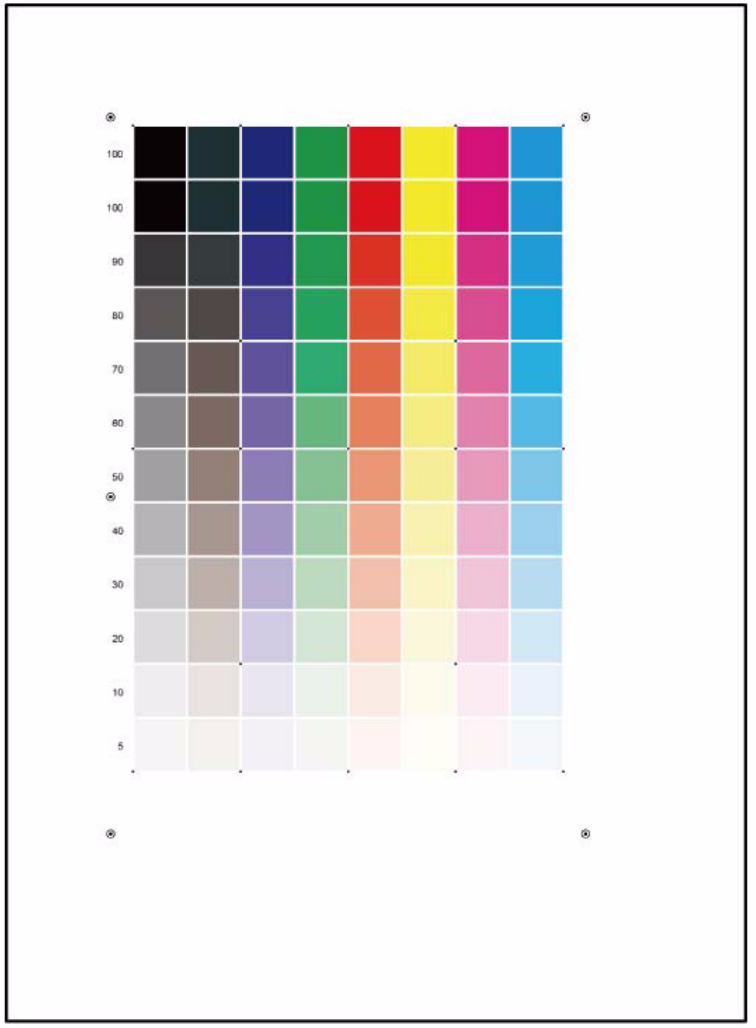


j0pa63473

Figure 1 j0pa63473

6.3.5.63 ATCN1

Pattern Number: 347

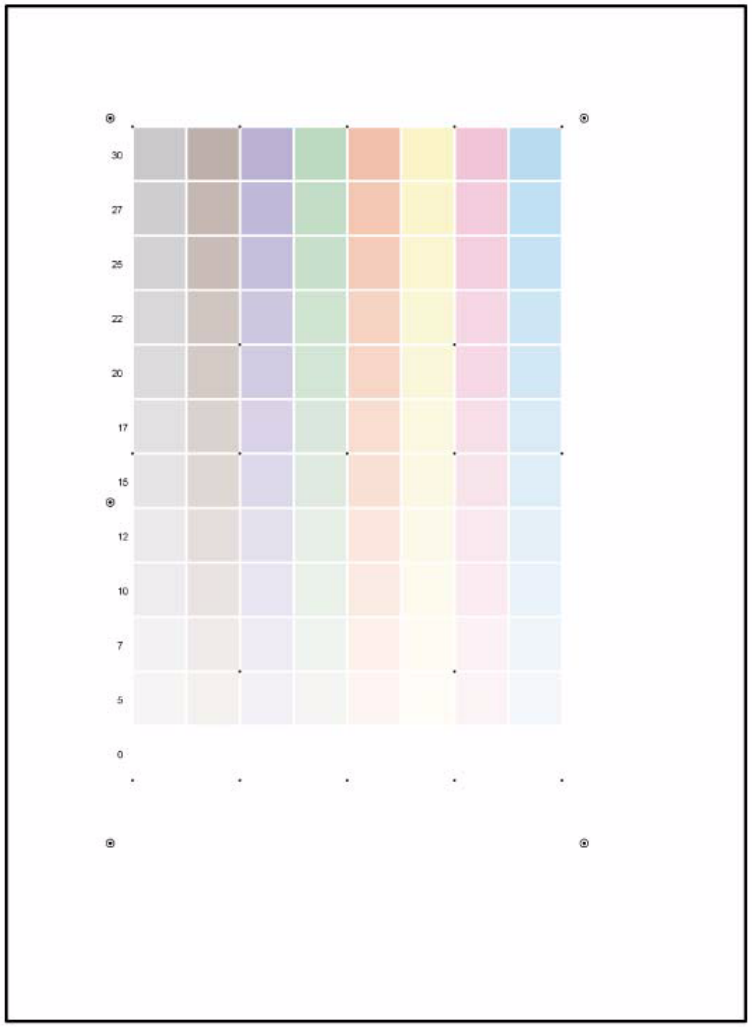


j0pa63474

Figure 1 j0pa63474

6.3.5.64 ATCN2

Pattern Number: 348

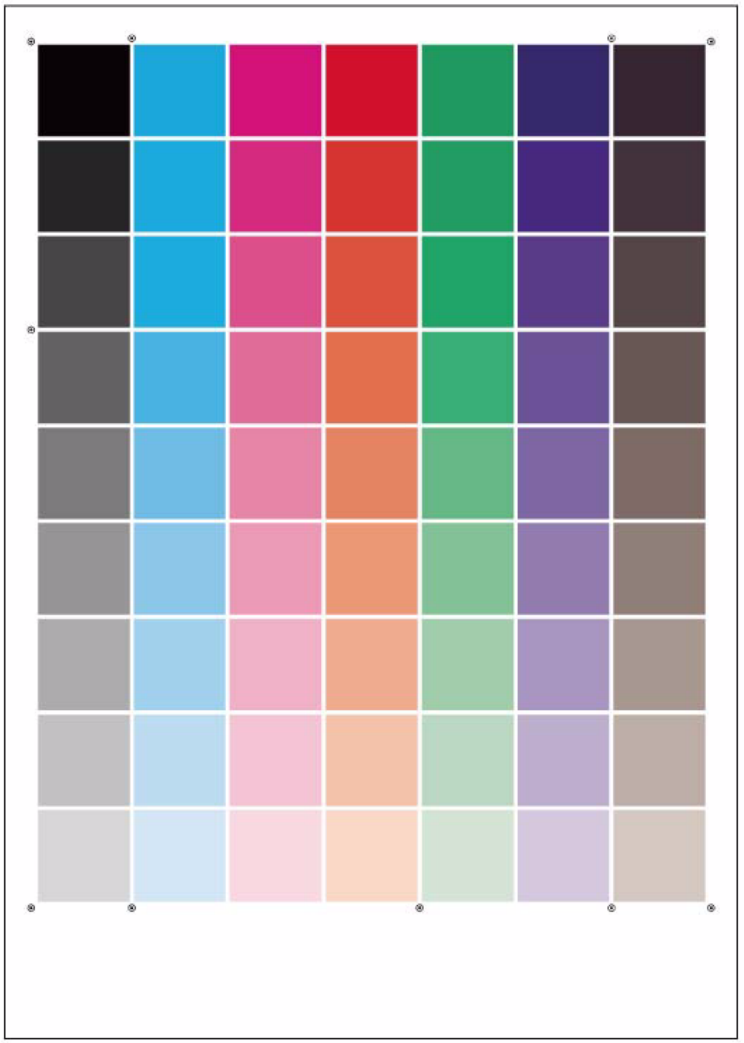


j0pa63475

Figure 1 j0pa63475

6.3.5.65 L-Mottle

Pattern Number: 349

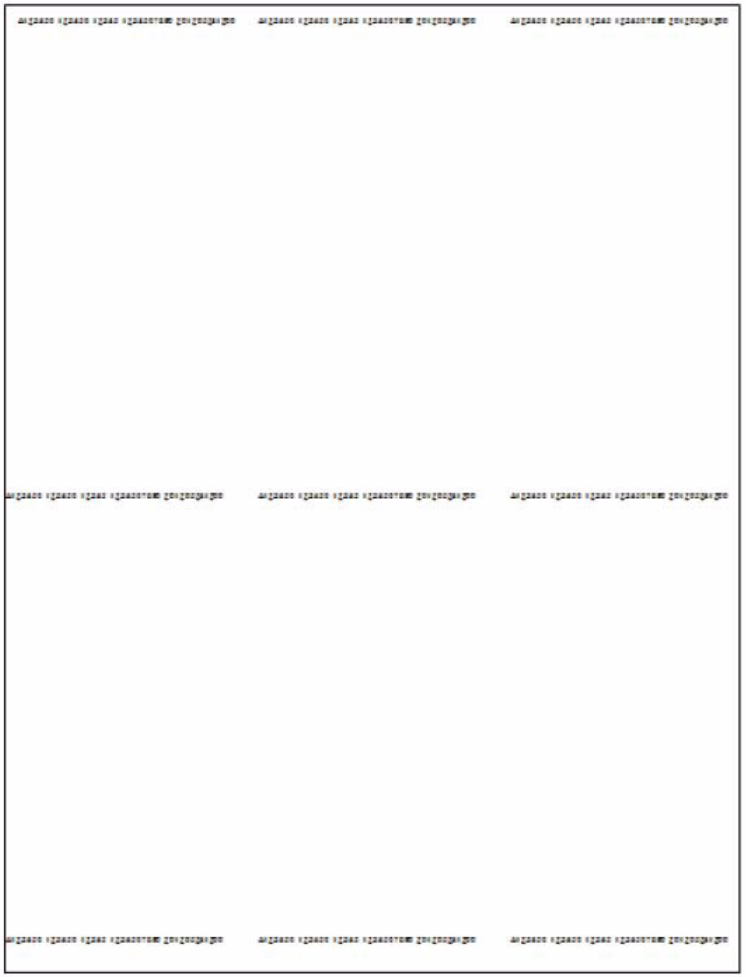


j0pa63476

Figure 1 j0pa63476

6.3.5.66 Page Information Printed Pattern

Pattern Number: 350

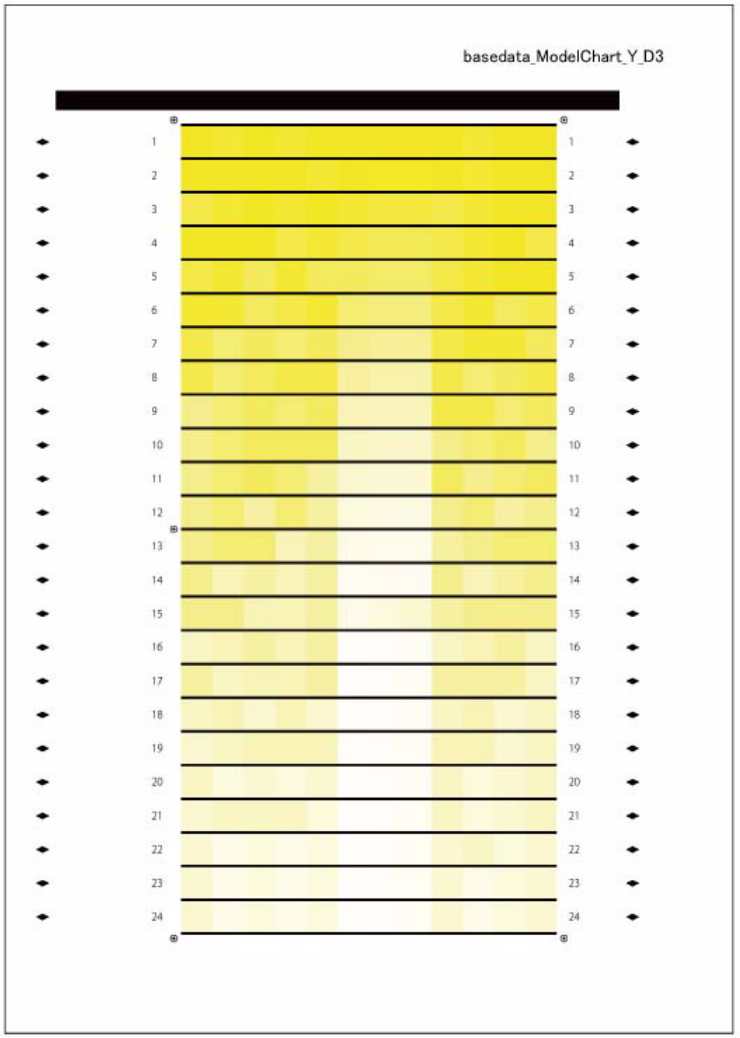


j0pa63477

Figure 1 j0pa63477

6.3.5.67 Base Data Y

Pattern Number: 352



j0pa63479

Figure 1 j0pa63479

6.3.5.68 Base Data M

Pattern Number: 353

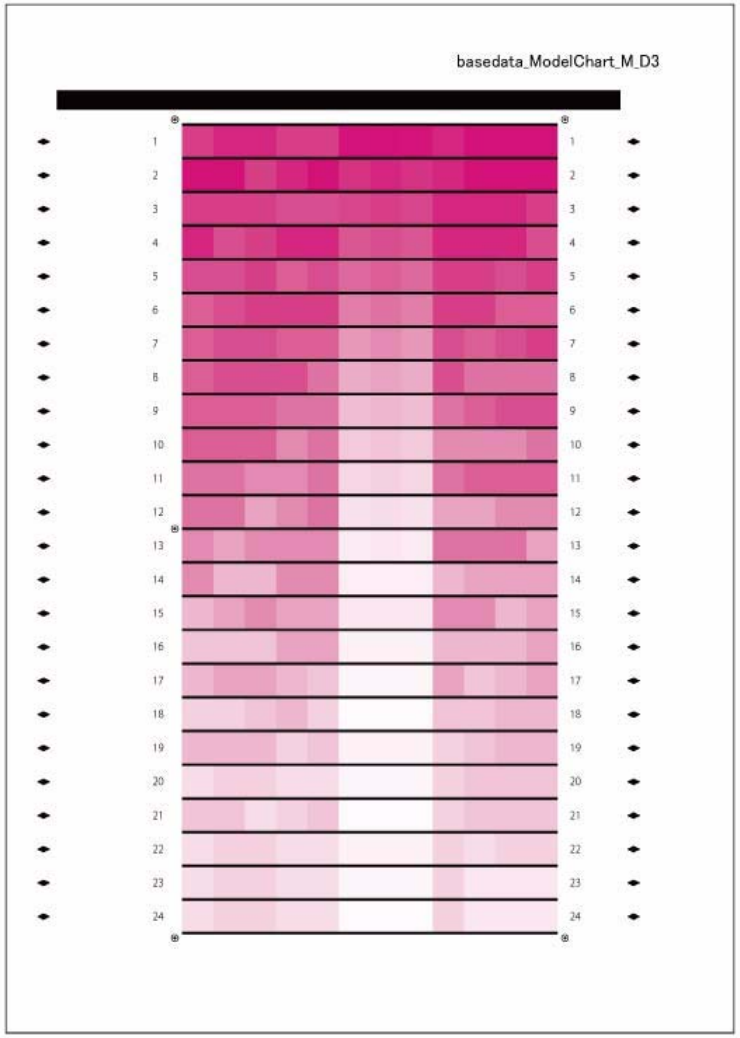


Figure 1 j0pa63480

6.3.5.69 Base Data C

Pattern Number: 354

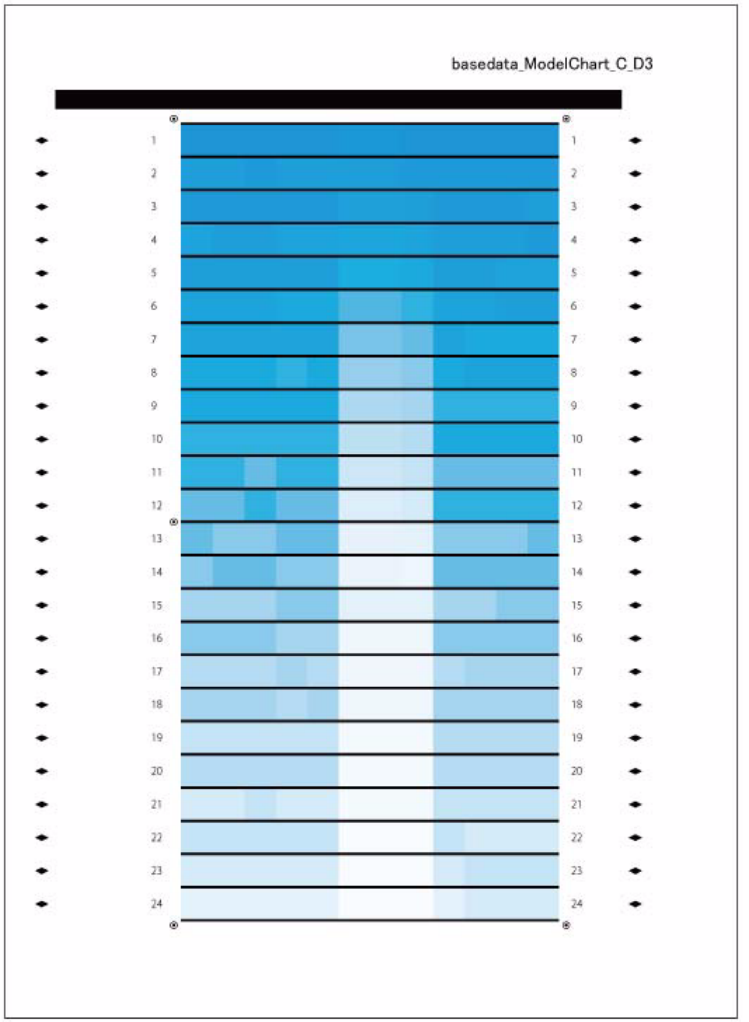


Figure 1 j0pa63481

6.3.5.70 Base Data R

Pattern Number: 355

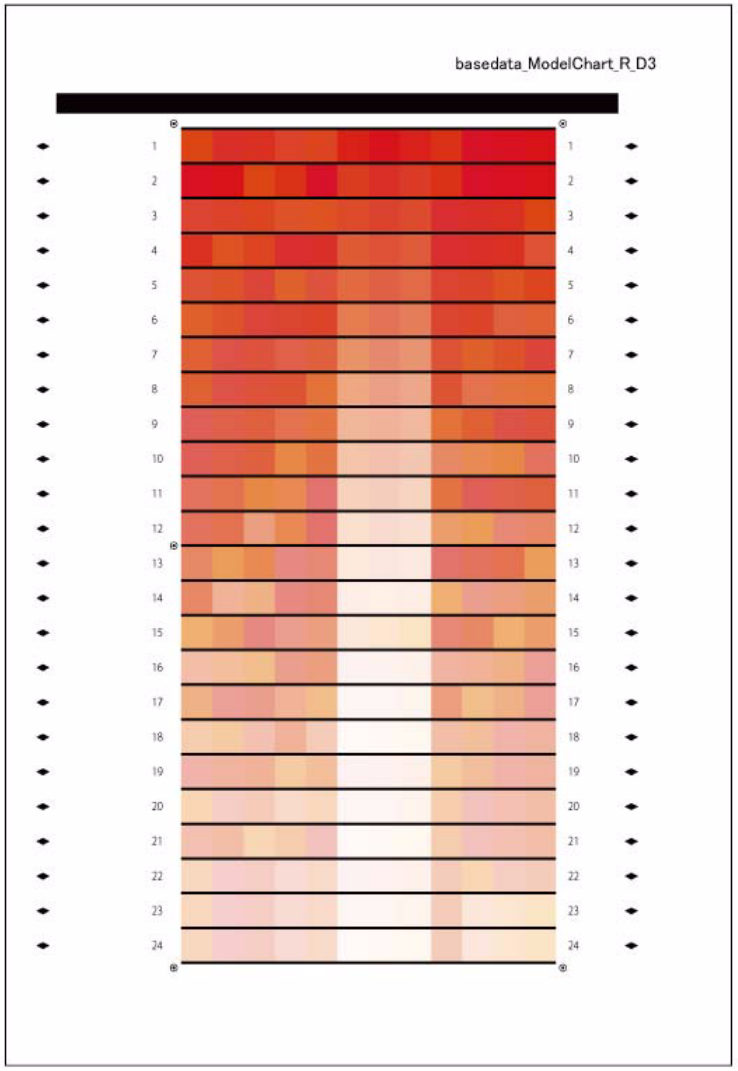


Figure 1 j0pa63482

6.3.5.71 Base Data G

Pattern Number: 356

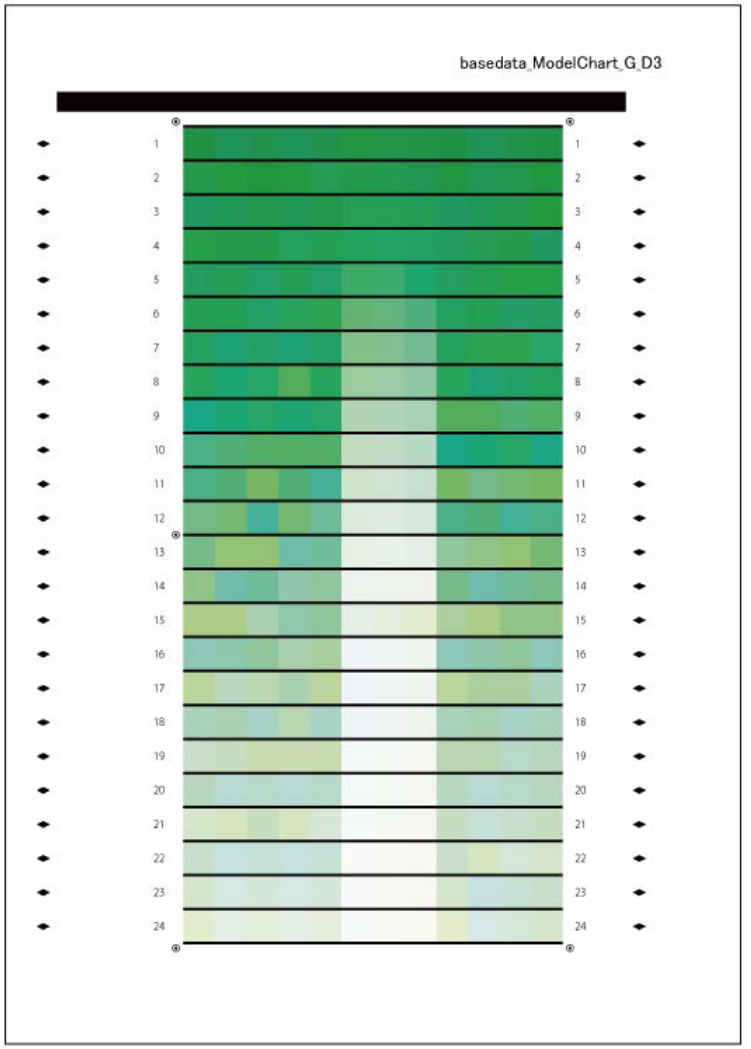


Figure 1 j0pa63483

6.3.5.72 Base Data B

Pattern Number: 357

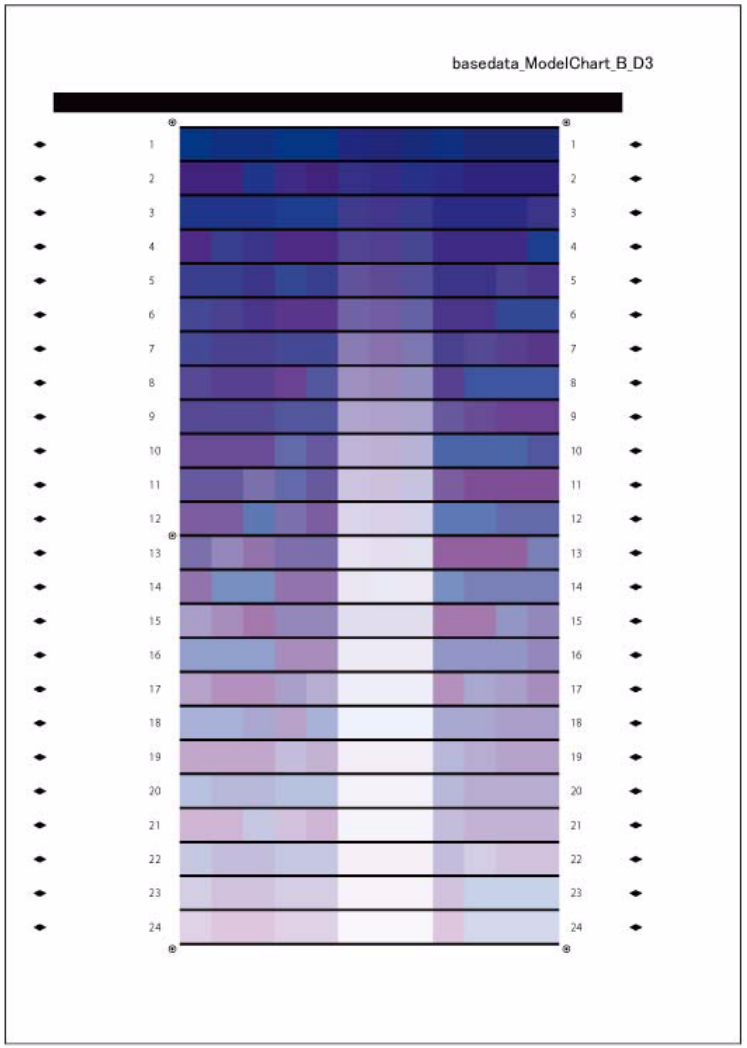


Figure 1 j0pa63484

6.3.5.73 Base Data 3C

Pattern Number: 358

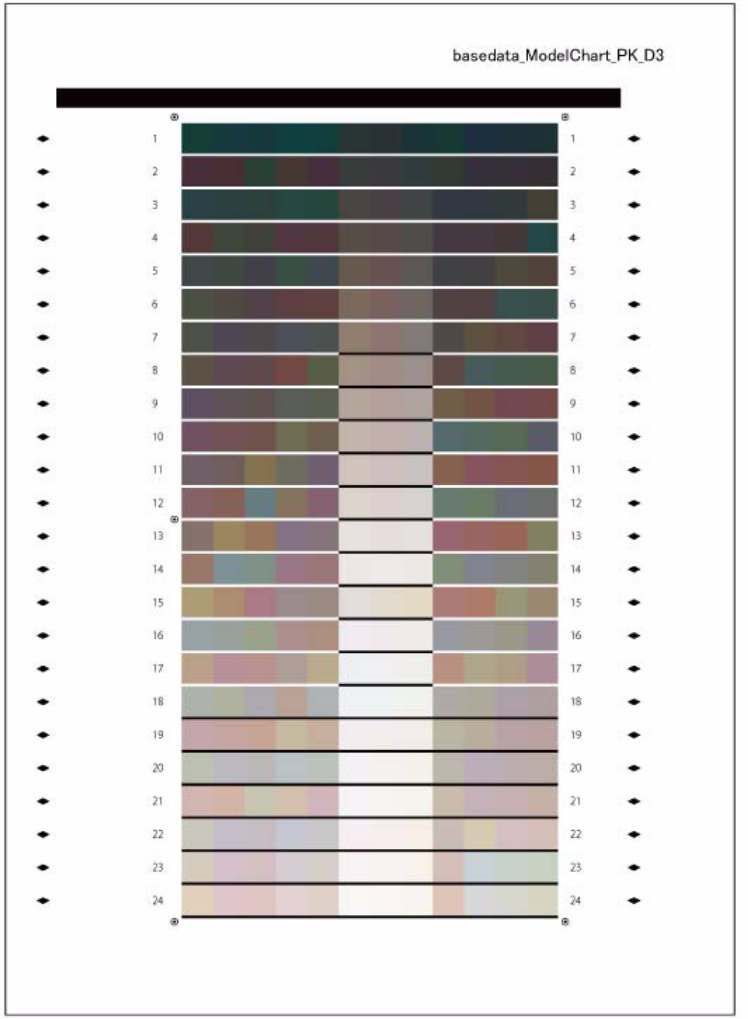


Figure 1 j0pa63485

6.3.5.74 Xfer Voltage Setup Pattern (A3 & 11x17)

Pattern Number: 359

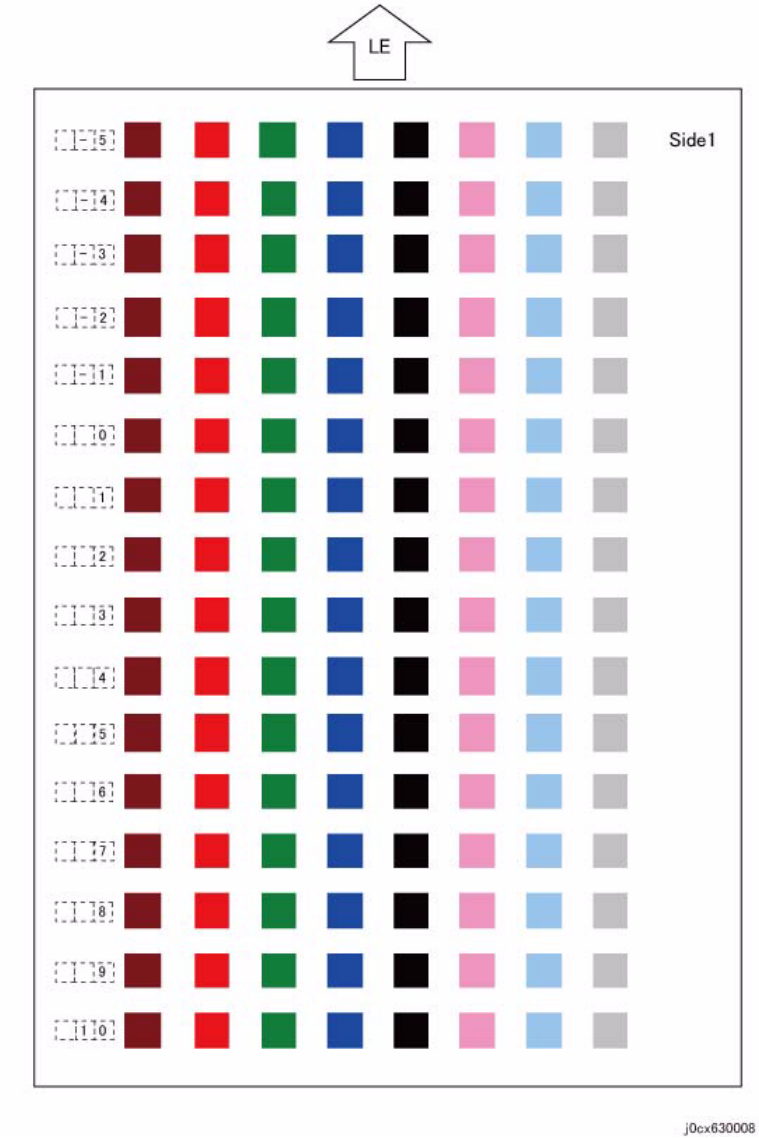


Figure 1 j0cx630008

6.3.5.75 Xfer Voltage Setup Pattern (A4 & Let-1)

Pattern Number: 360

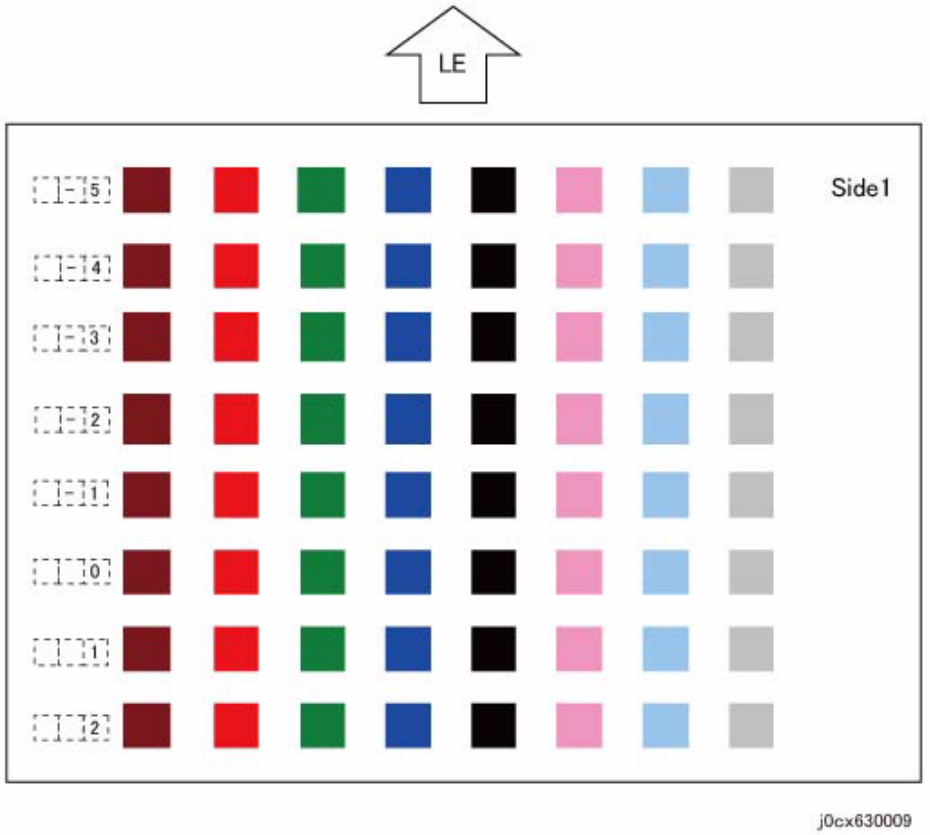


Figure 1 j0cx630009

6.3.5.76 Xfer Voltage Setup Pattern (A4 & Let-2)

Pattern Number: 361

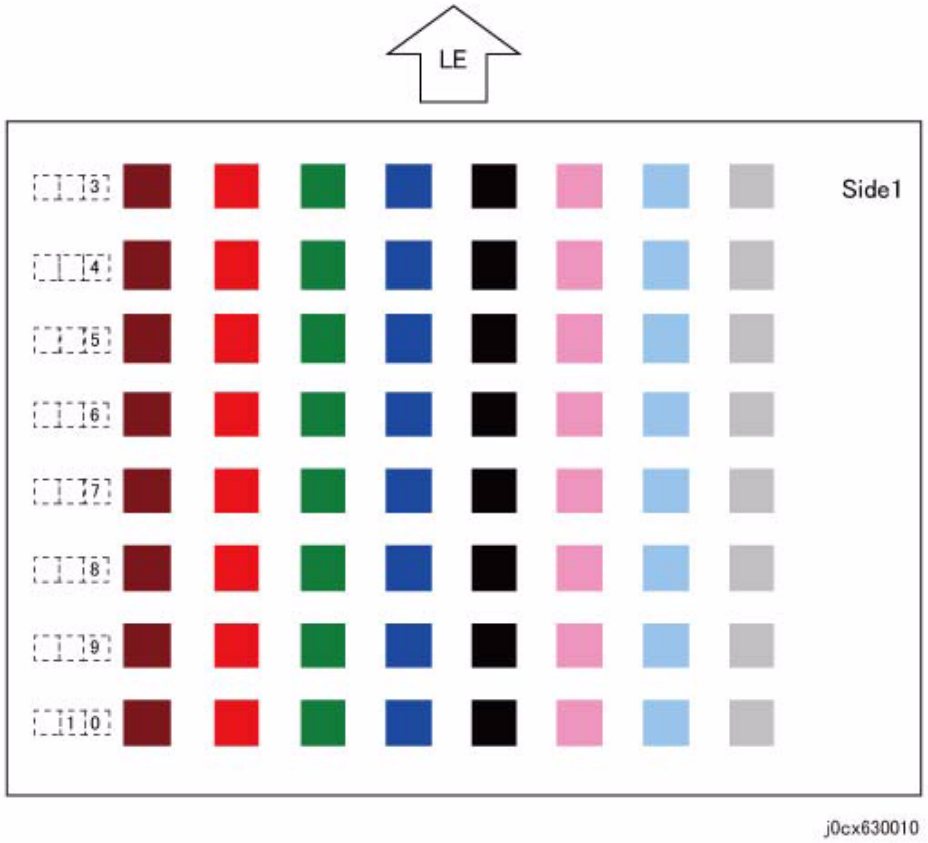


Figure 1 j0cx630010

6.3.5.77 CPC200

Pattern Number: 362

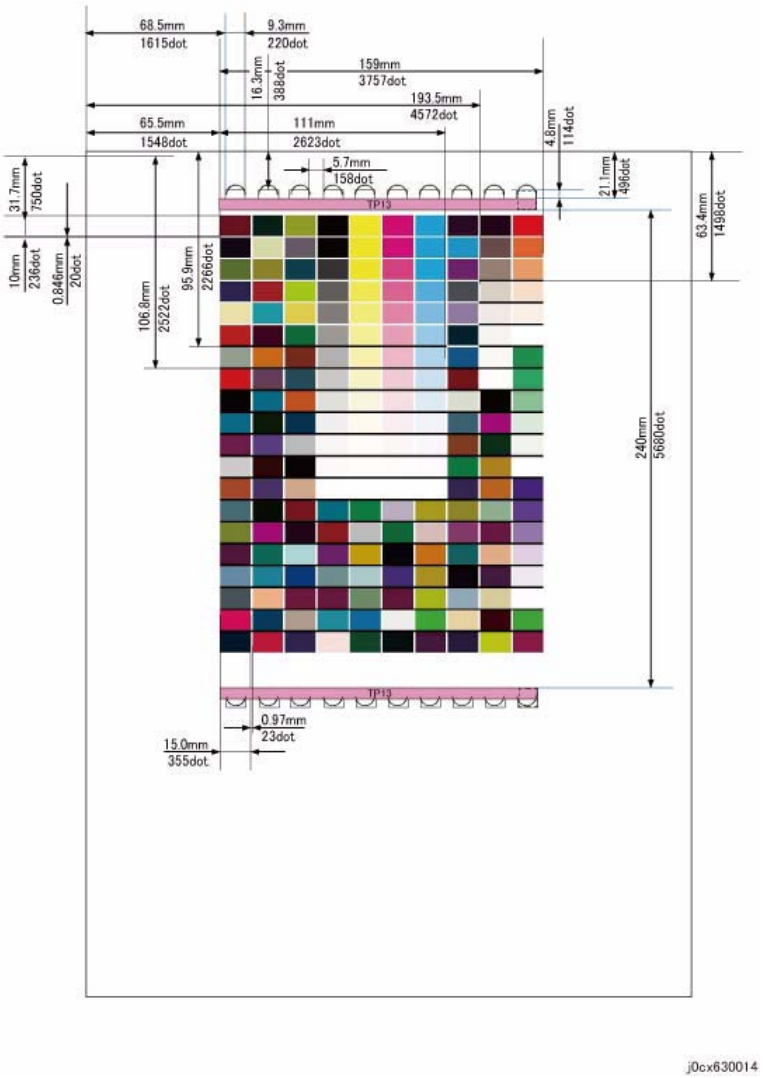


Figure 1 j0cx630014

6.3.5.78 Uniformity Check Pattern1

Pattern Number: 363

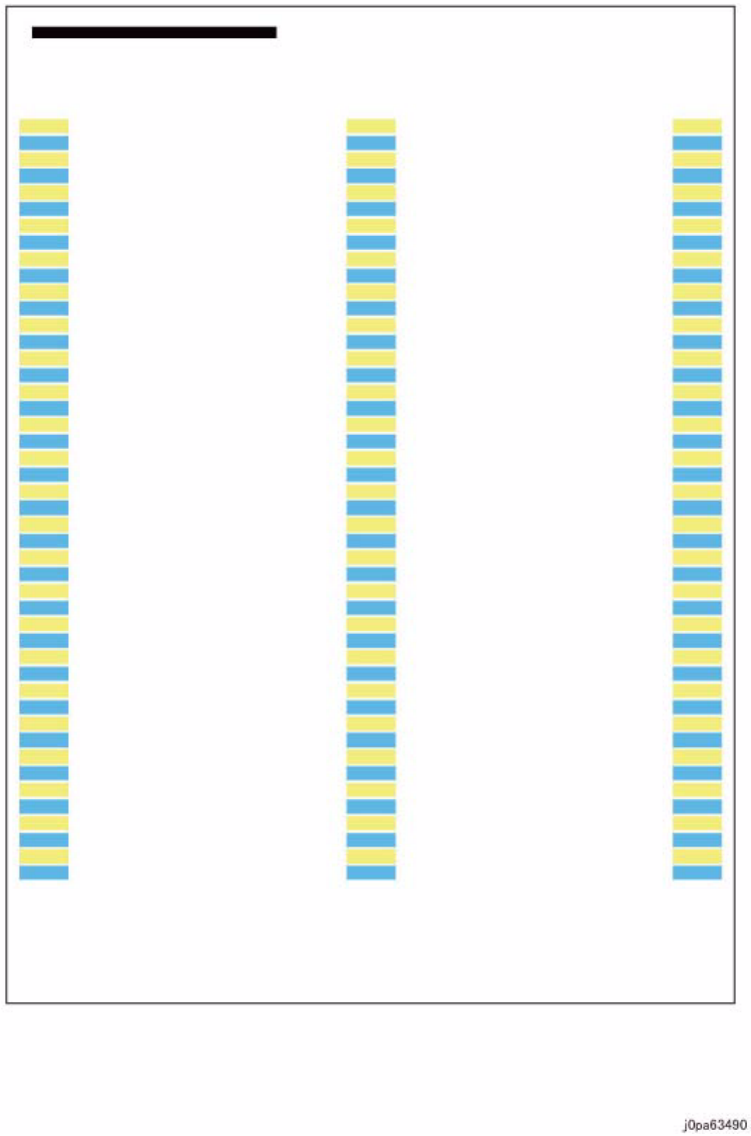


Figure 1 j0pa63490

6.3.5.79 Uniformity Check Pattern2

Pattern Number: 364

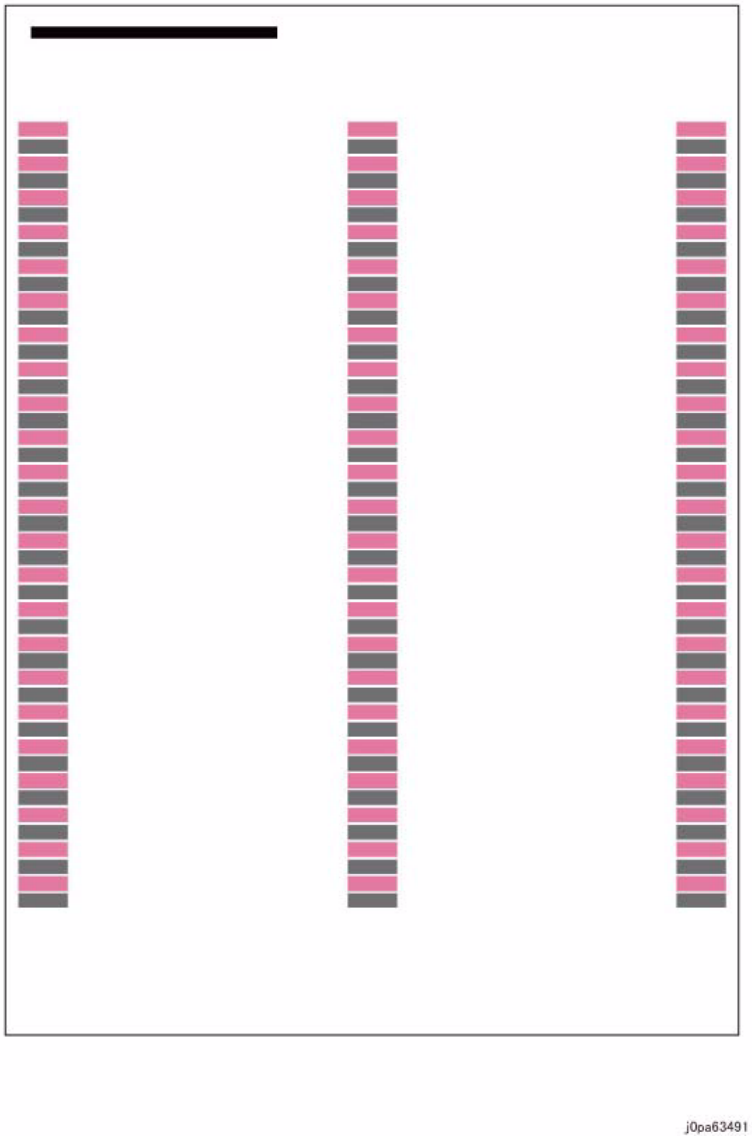


Figure 1 j0pa63491

6.3.5.80 Uniformity Check Pattern3

Pattern Number: 365

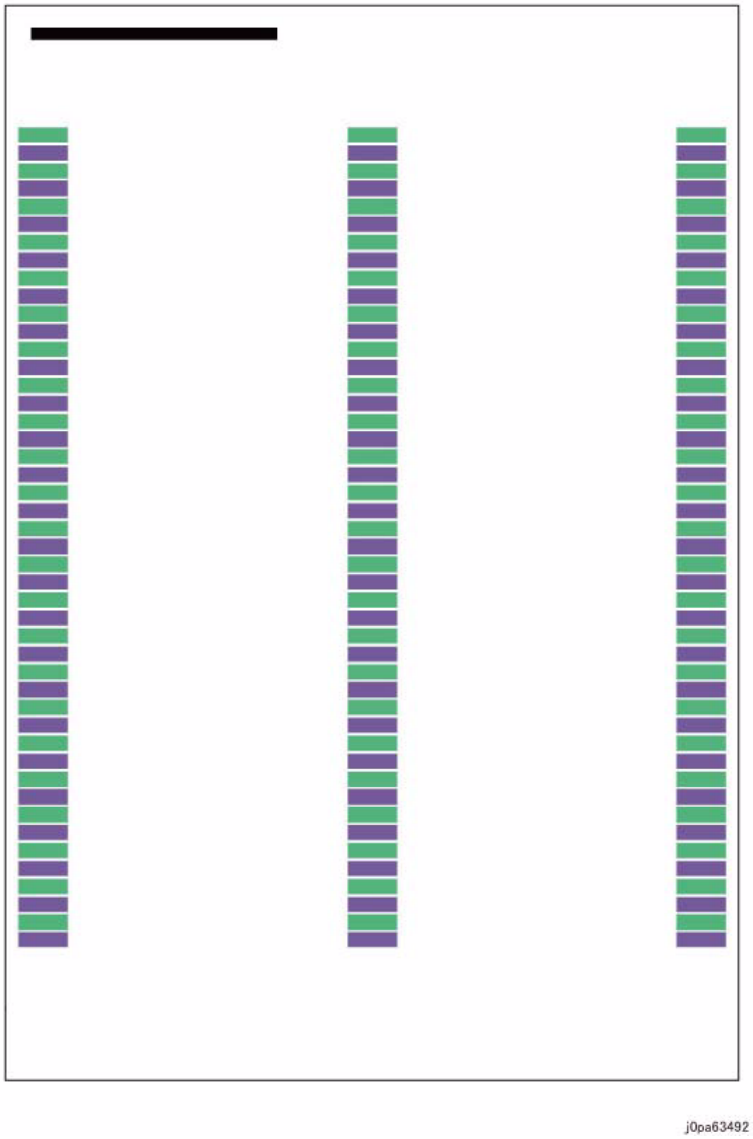


Figure 1 j0pa63492

6.3.5.81 Uniformity Check Pattern4

Pattern Number: 366

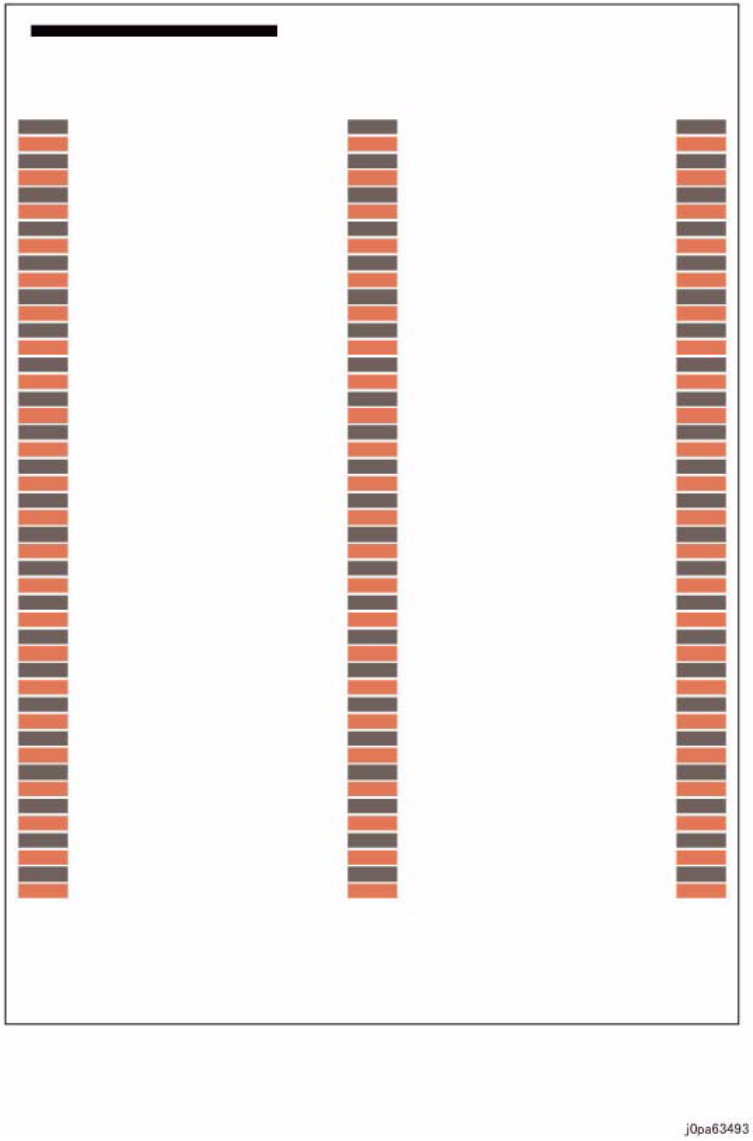


Figure 1 j0pa63493

6.3.5.82 ISO12642 iSis Color Port 600 A4

Pattern Number: 367

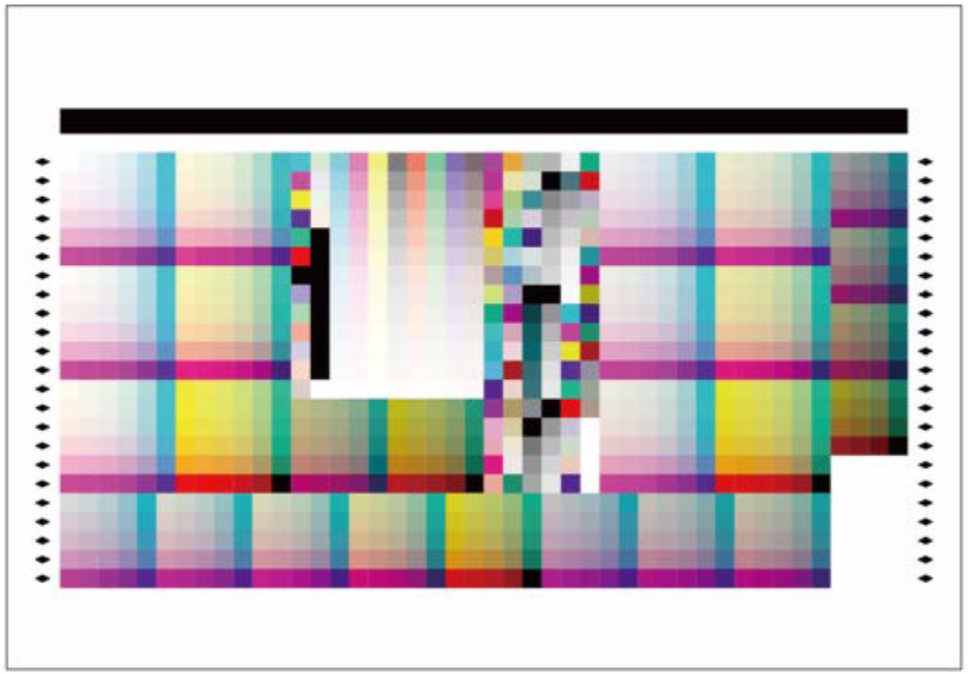


Figure 1 j0pa63494

6.3.5.83 ROS LDF

Pattern Number: 368

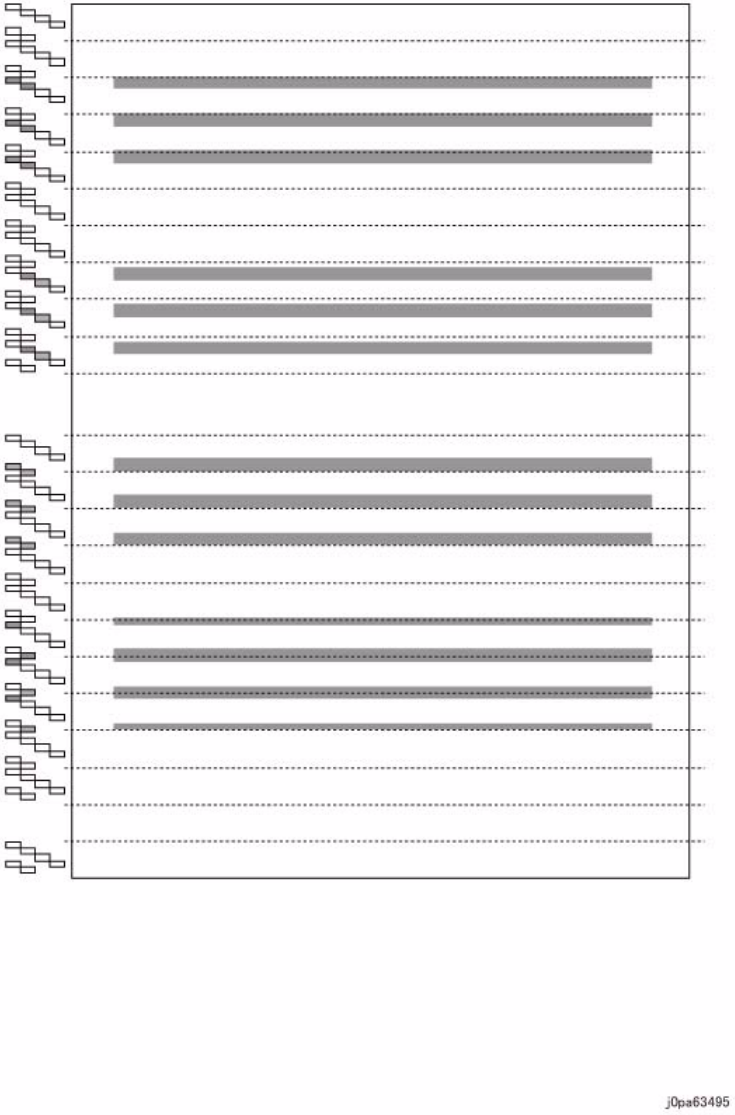


Figure 1 j0pa63495

6.3.5.84 ILS Defect Check PG

Pattern Number: 369

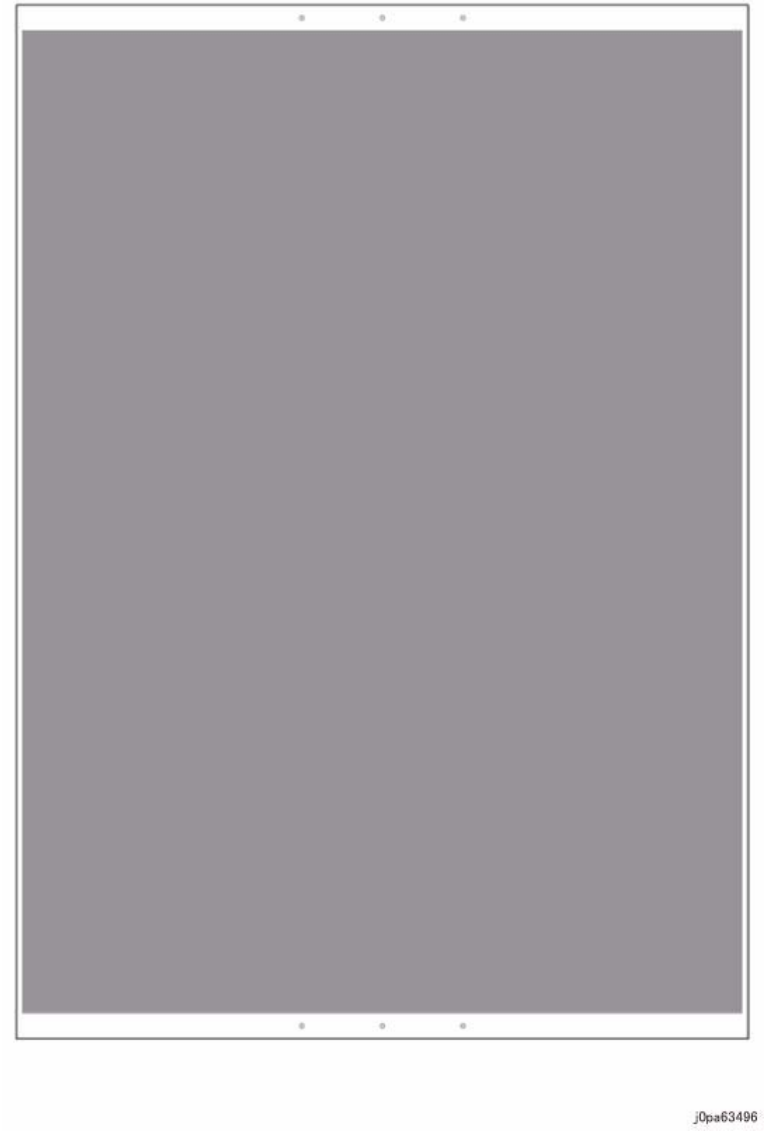


Figure 1 j0pa63496

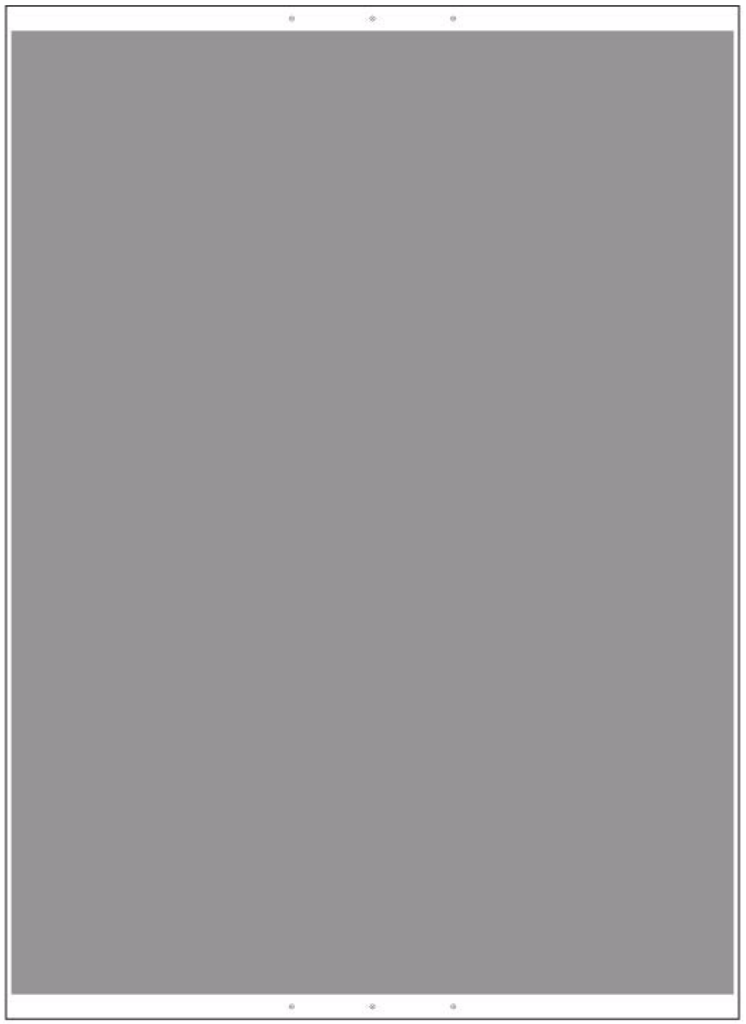
6.3.5.85 ILS Overlay Chart

Pattern Number: 370

TBD

6.3.5.86 IQ defect detection Pattern

Pattern Number: 371

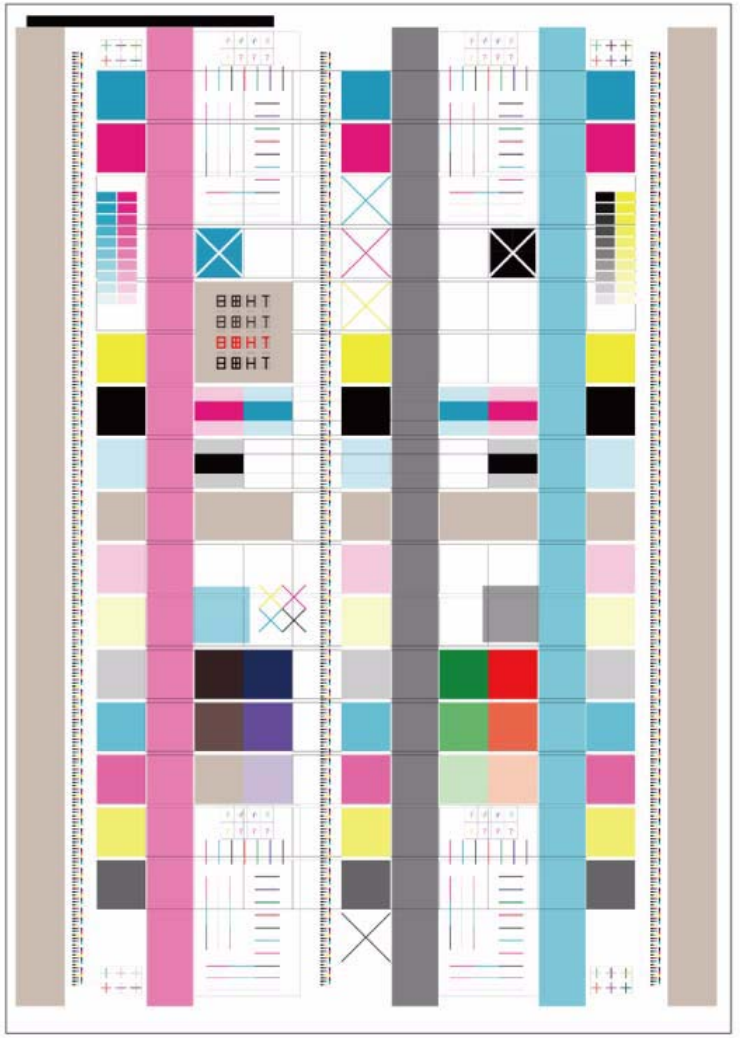


j0pa63498

Figure 1 j0pa63498

6.3.5.87 Total Chart for BW

Pattern Number: 372

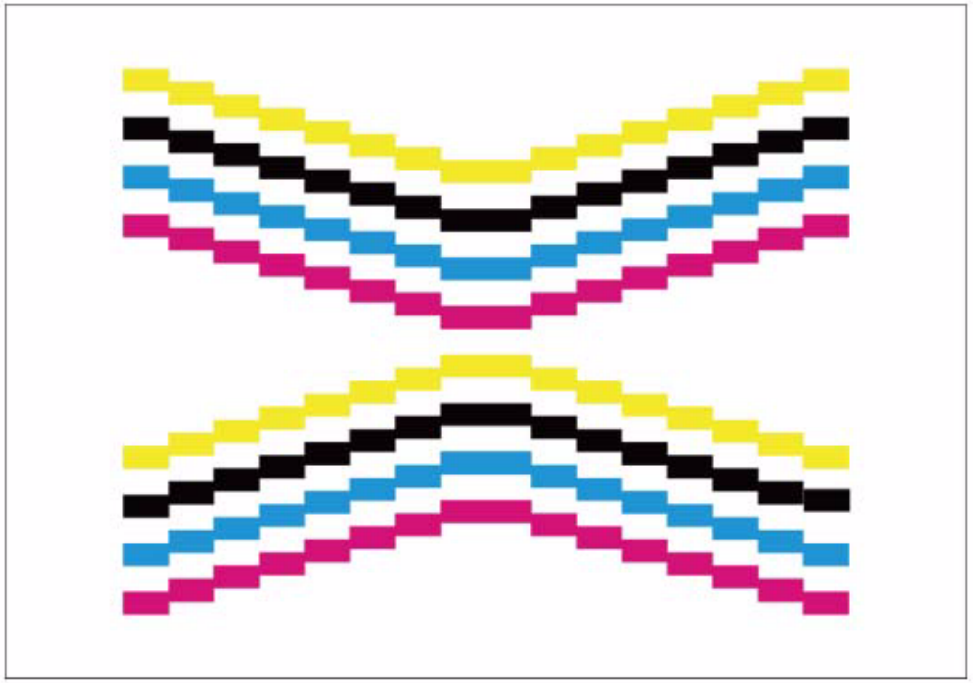


j0pa63499

Figure 1 j0pa63499

6.3.5.88 BA Color

Pattern Number: 377

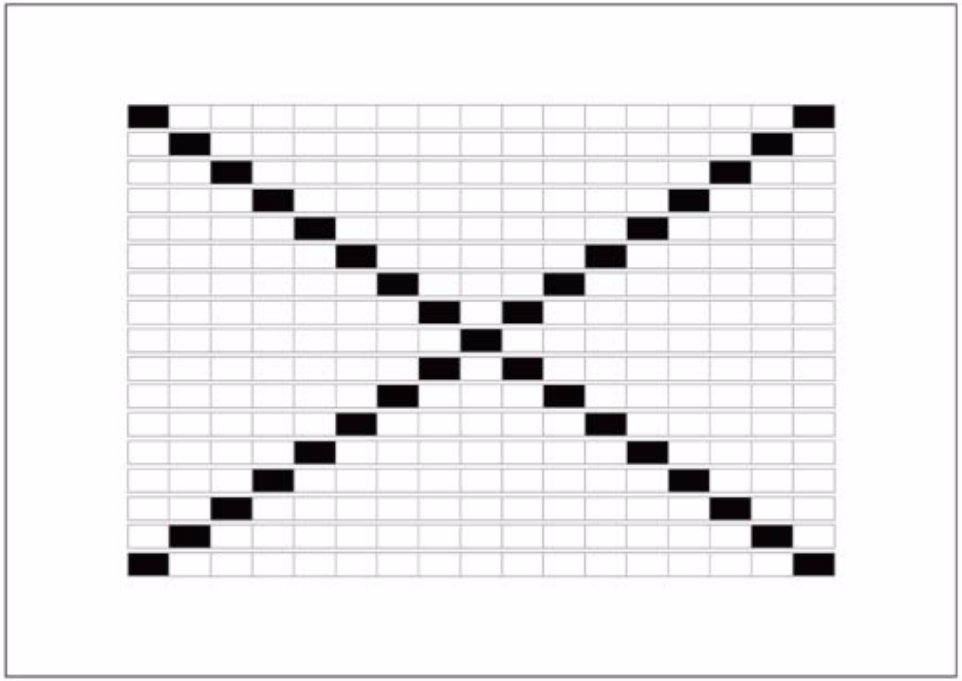


j0pa634104

Figure 1 j0pa634104

6.3.5.89 BA BW

Pattern Number: 378



j0pa634105

Figure 1 j0pa634105

6.3.5.90 Coverage PG

Pattern Number: 379

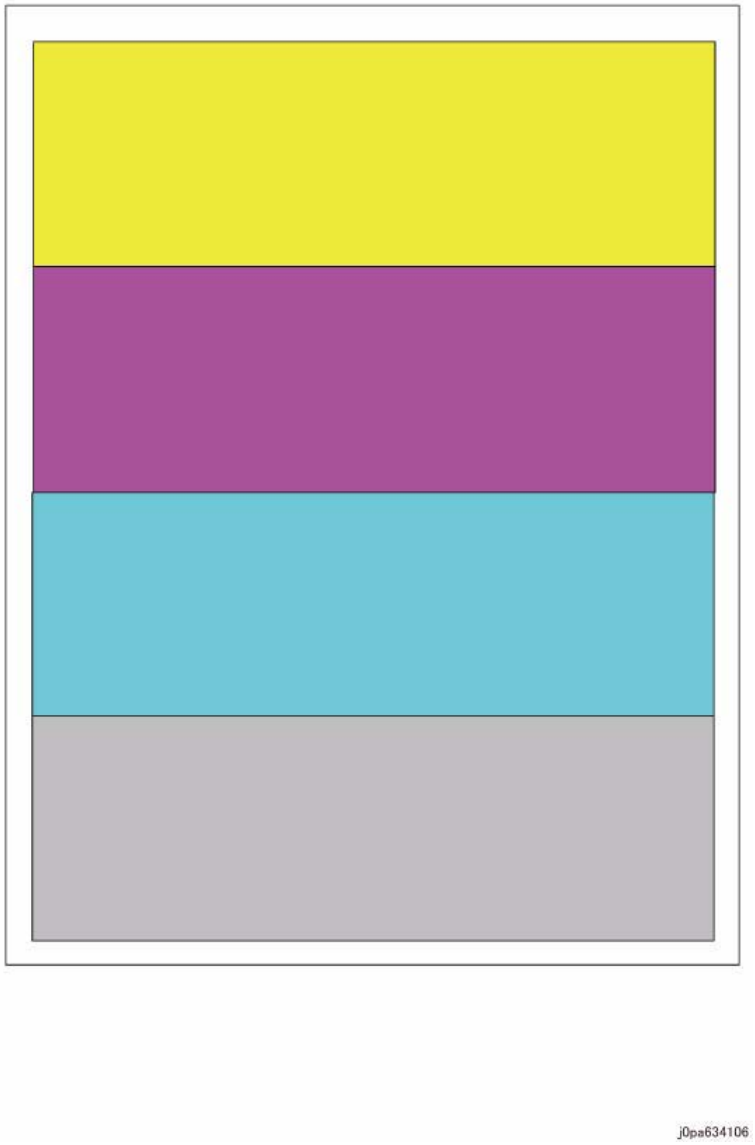


Figure 1 j0pa634106

6.3.5.91 Procon PG #2-5

Pattern Number: 380

TBD

6.3.5.92 Procon PG #1, 6

Pattern Number: 381

TBD

6.3.5.93 IQ diagnostic pattern

Pattern Number: 382

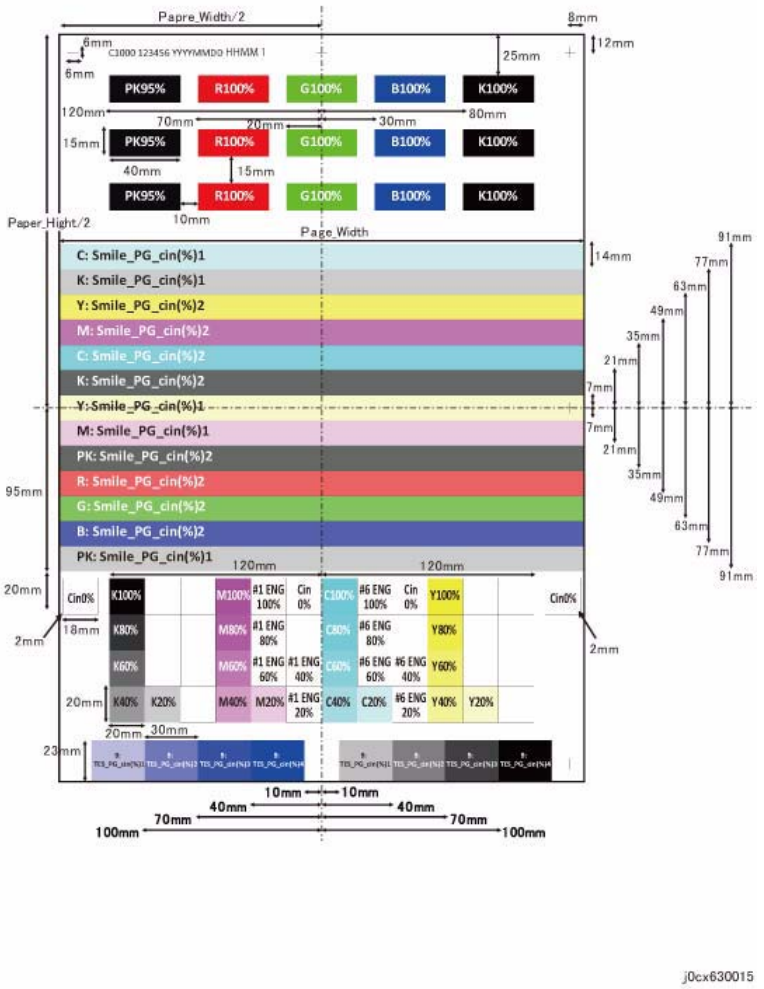


Figure 1 j0cx630015

6.3.5.94 2D-Smile correction Pattern (YC)

Pattern Number: 383

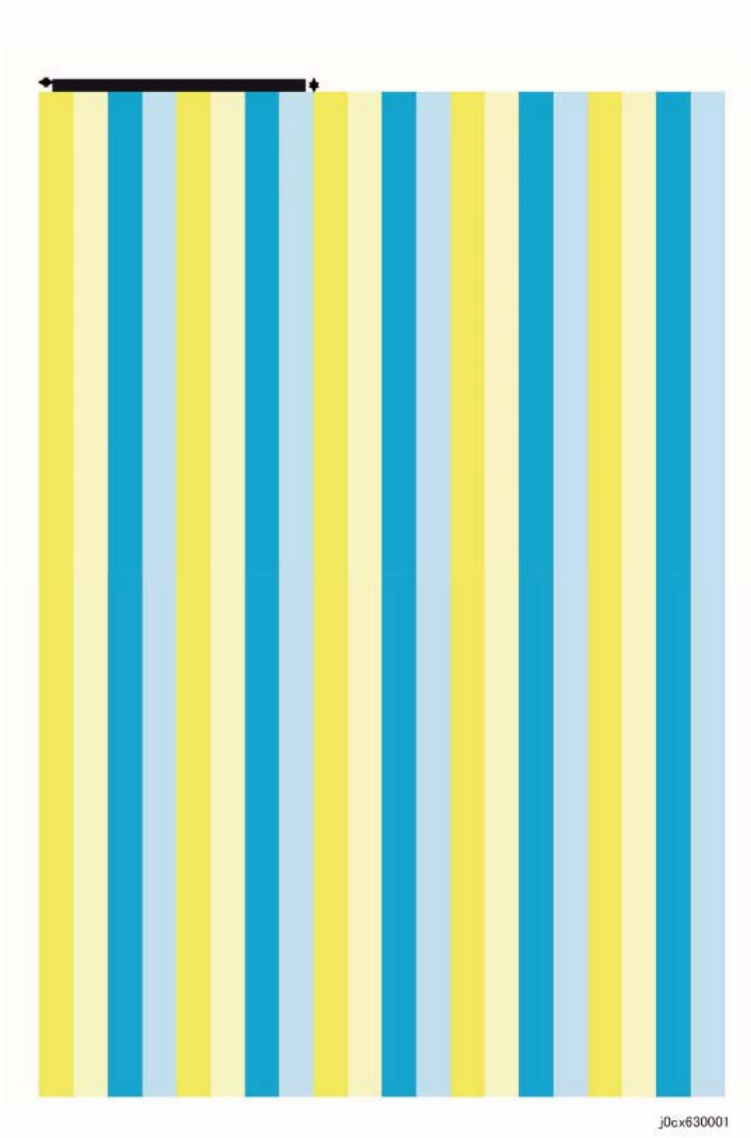


Figure 1 j0cx630001

6.3.5.95 2D-Smile correction Pattern (MK)

Pattern Number: 384

Figure 1 j0cx630002

6.3.5.96 CTRACS Pattern (for correction/6C/ ILS)

Pattern Number: 385

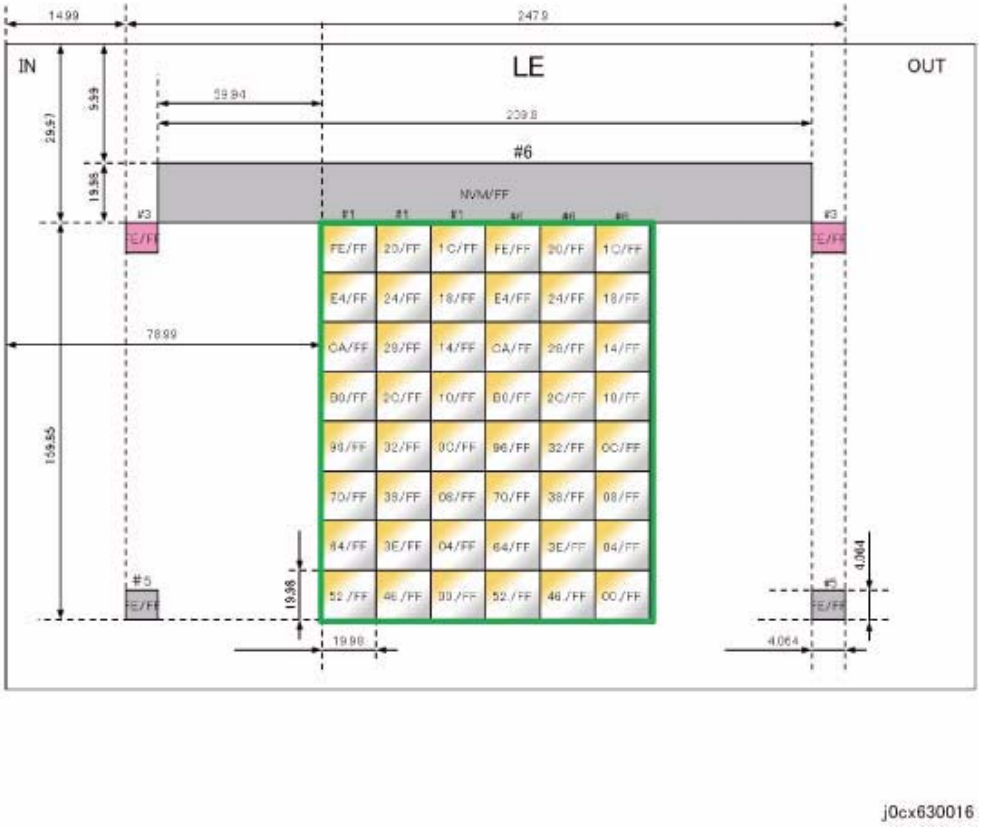


Figure 1 j0cx630016

NOTE:

#6: The Cin of Lead Edge band can be changed using NVM [default value: 255, setting range: 0 to 255]

All Patch Size: 19.98x19.98 mm

6.3.5.97 CTRACS Pattern (for check/6C/ ILS)

Pattern Number: 386

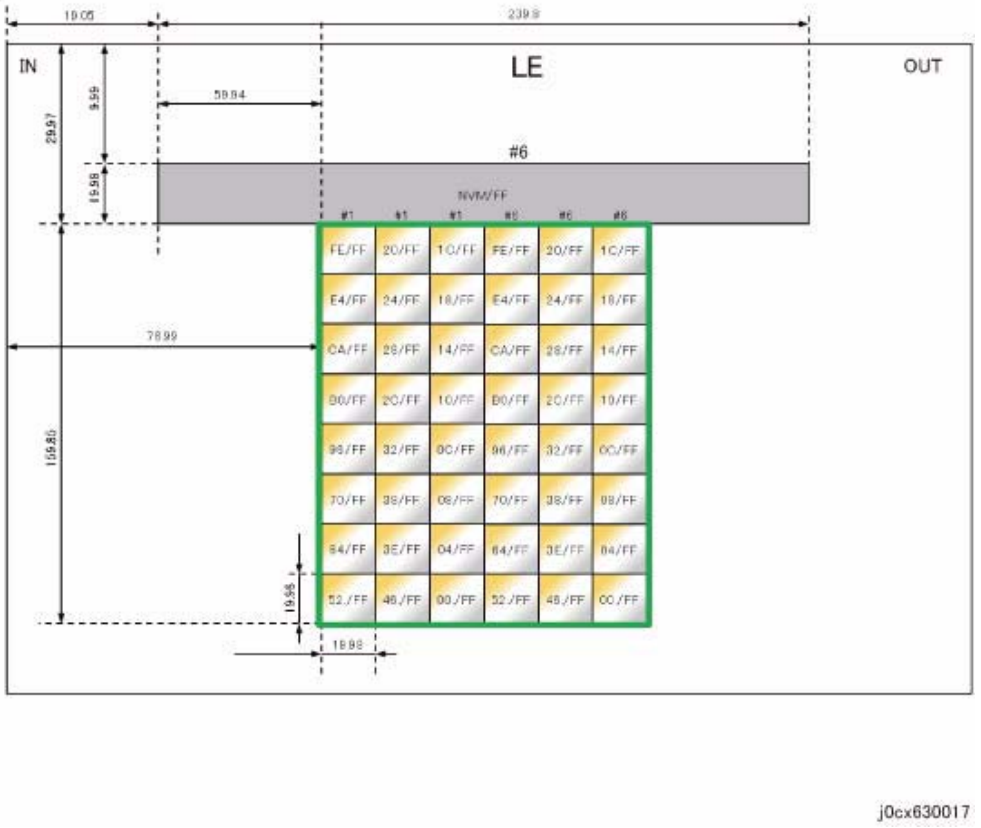


Figure 1 j0cx630017

NOTE:

#6: The Cin of Lead Edge band can be changed using NVM [default value: 255, setting range: 0 to 255]

All Patch Size: 19.98x19.98 mm

6.3.5.98 Xfer Voltage Setup Pattern 2

Pattern Number: 387

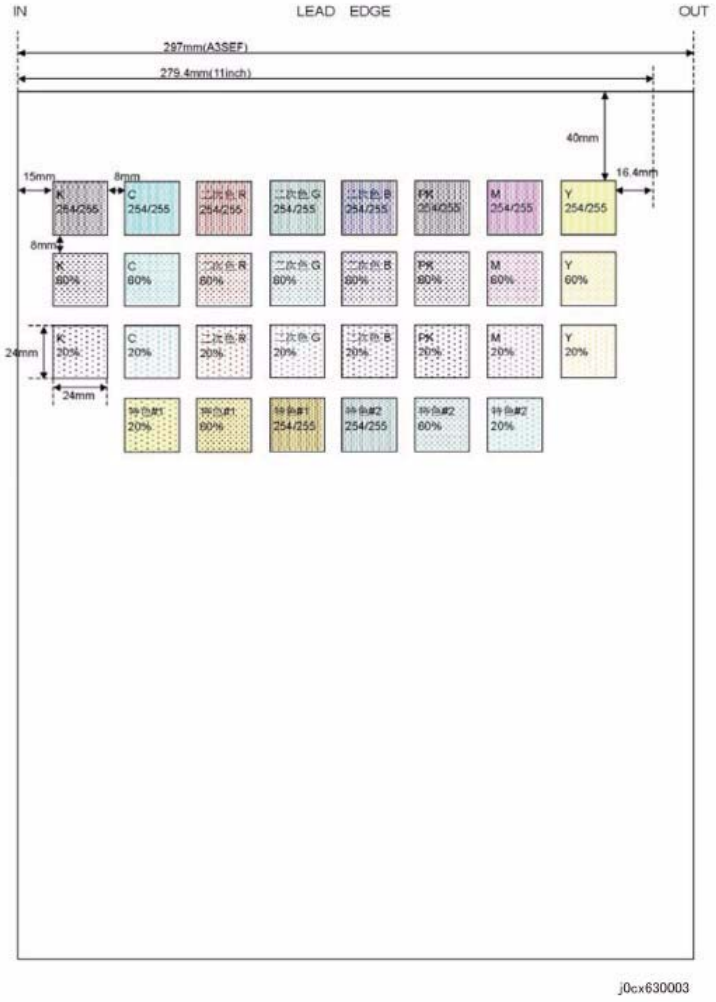


Figure 1 j0cx630003

6.3.5.99 Xfer Voltage Setup Pattern for Custom Paper

Pattern Number: 388

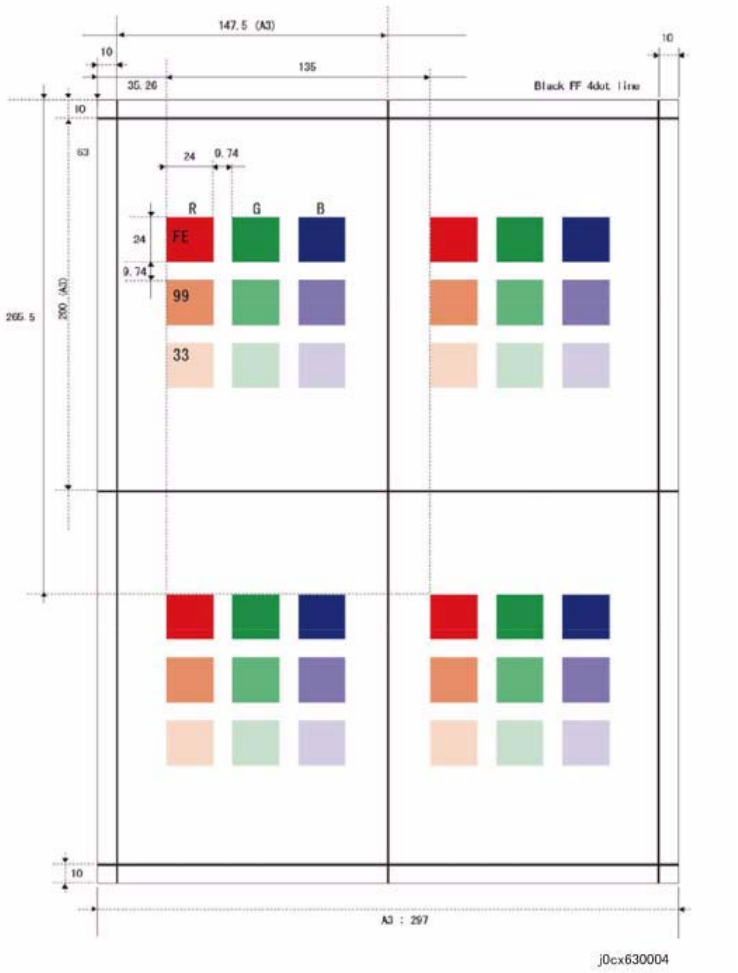


Figure 1 j0cx630004

6.3.5.100 Color Patch PG

Pattern Number: 389

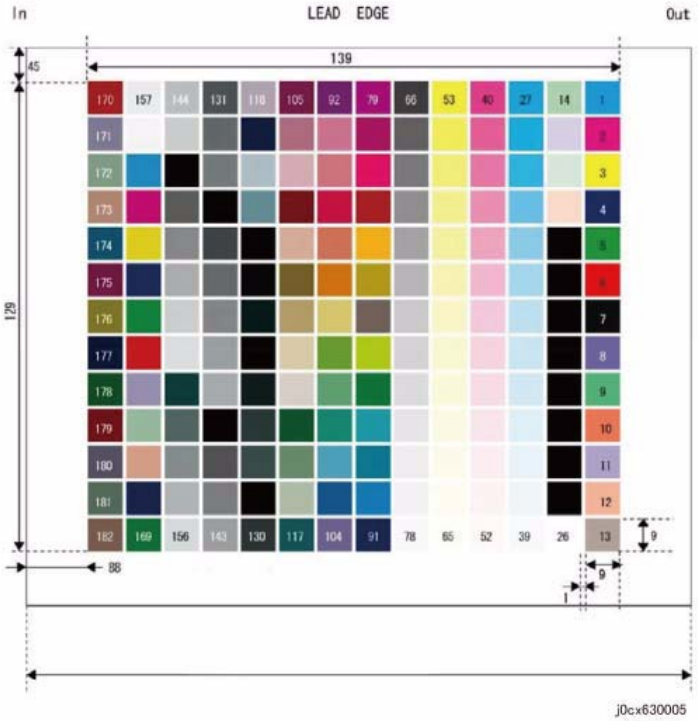


Figure 1 j0cx630005

6.3.5.101 Stability

Pattern Number: 390

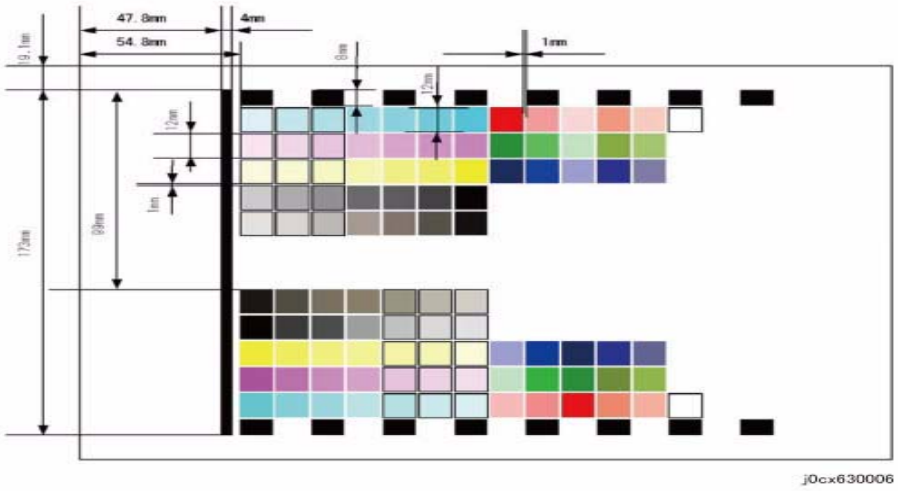


Figure 1 j0cx630006

6.3.5.102 Density Uniformity for FS (Spacific Color)

Pattern Number: 391

Figure 1 j0cx630007

6.3.5.103 Test Patterns for Mfg 8 (2 page)

Pattern Number: 251

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	Density Uniformity for FS (CMYK)	1 Sided	1	4C
2	Density Uniformity for FS (RGBPK)	1 Sided	1	4C

6.3.5.104 Test Patterns for Mfg 2 (27 page)

Pattern Number: 252

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	1	4C
4	H/T 50% G	2 Sided	1	4C
5	H/T 100% K	1 Sided	1	4C
6	H/T 100% M	1 Sided	1	4C
7	H/T 100% C	1 Sided	1	4C
8	H/T 50% K	1 Sided	1	4C
9	H/T 50% C	1 Sided	1	4C
10	H/T 50% M	1 Sided	1	4C
11	H/T 50% Y	1 Sided	1	4C
12	H/T 50% B	1 Sided	1	4C
13	H/T 50% G	1 Sided	1	4C
14	H/T 50% R	1 Sided	1	4C
15	Total Chart1	1 Sided	1	4C
16	H/T 60% B	1 Sided	1	4C
17	H/T 60% G	1 Sided	1	4C
18	H/T 60% R	1 Sided	1	4C
19	Density Uniformity for FS (Single Color)	1 Sided	1	4C
20	2D-Smile correction Pattern (YC)	1 Sided	1	4C
21	2D-Smile correction Pattern (MK)	1 Sided	1	4C
22	Procon_PG#2-5	1 Sided	1	4C
23	H/T 20% K	1 Sided	1	4C
24	H/T 20% C	1 Sided	1	4C
25	H/T 20% M	1 Sided	1	4C
26	H/T 20% Y	1 Sided	1	4C
27	H/T 20% 3C	1 Sided	1	4C

6.3.5.105 Test Patterns for Mfg 2 (19 page)

Pattern Number: 253

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	1	4C
4	H/T 50% G	2 Sided	1	4C
5	H/T 100% K	1 Sided	1	4C
6	H/T 100% M	1 Sided	1	4C
7	H/T 100% C	1 Sided	1	4C
8	H/T 60% B	1 Sided	1	4C
9	H/T 60% G	1 Sided	1	4C
10	H/T 60% R	1 Sided	1	4C
11	Density Uniformity for FS (Single Color)	1 Sided	1	4C
12	2D-Smile correction Pattern (YC)	1 Sided	1	4C
13	2D-Smile correction Pattern (MK)	1 Sided	1	4C
14	Procon_PG#2-5	1 Sided	1	4C
15	H/T 20% K	1 Sided	1	4C
16	H/T 20% C	1 Sided	1	4C
17	H/T 20% M	1 Sided	1	4C
18	H/T 20% Y	1 Sided	1	4C
19	H/T 20% 3C	1 Sided	1	4C

6.3.5.106 Test Patterns for Mfg 2 (24 page)

Pattern Number: 254

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	1	4C
4	H/T 50% G	2 Sided	1	4C
5	H/T 50% K	1 Sided	1	4C
6	H/T 50% C	1 Sided	1	4C
7	H/T 50% M	1 Sided	1	4C
8	H/T 50% Y	1 Sided	1	4C
9	H/T 50% B	1 Sided	1	4C
10	H/T 50% G	1 Sided	1	4C
11	H/T 50% R	1 Sided	1	4C
12	Total Chart1	1 Sided	1	4C
13	H/T 60% B	1 Sided	1	4C
14	H/T 60% G	1 Sided	1	4C
15	H/T 60% R	1 Sided	1	4C
16	Density Uniformity for FS (Single Color)	1 Sided	1	4C
17	2D-Smile correction Pattern (YC)	1 Sided	1	4C
18	2D-Smile correction Pattern (MK)	1 Sided	1	4C
19	Procon_PG#2-5	1 Sided	1	4C
20	H/T 20% K	1 Sided	1	4C
21	H/T 20% C	1 Sided	1	4C
22	H/T 20% M	1 Sided	1	4C
23	H/T 20% Y	1 Sided	1	4C
24	H/T 20% 3C	1 Sided	1	4C

6.3.5.107 Test Patterns for Mfg 2 (16 page)

Pattern Number: 255

Table 1

Output Order	Built-in Pattern	Print Side	Print Quantity	Contact Engine
1	H/T 50% K	1 Sided	1	4C
2	H/T 50% C	1 Sided	1	4C
3	H/T 50% M	1 Sided	1	4C
4	H/T 50% G	2 Sided	1	4C
5	H/T 60% B	1 Sided	1	4C
6	H/T 60% G	1 Sided	1	4C
7	H/T 60% R	1 Sided	1	4C
8	Density Uniformity for FS (Single Color)	1 Sided	1	4C
9	2D-Smile correction Pattern (YC)	1 Sided	1	4C
10	2D-Smile correction Pattern (MK)	1 Sided	1	4C
11	Procon_PG#2-5	1 Sided	1	4C
12	H/T 20% K	1 Sided	1	4C
13	H/T 20% C	1 Sided	1	4C
14	H/T 20% M	1 Sided	1	4C
15	H/T 20% Y	1 Sided	1	4C
16	H/T 20% 3C	1 Sided	1	4C

6.4.1 Service Mode Screen Structure

Selecting a basic screen from the combo box (IQ adjustment / Subsystem check and NVM/EP / History/Comp.Check / Service base) pull-down menu on the PC-Diag screen displays the corresponding screen with the appropriate Diag function buttons.

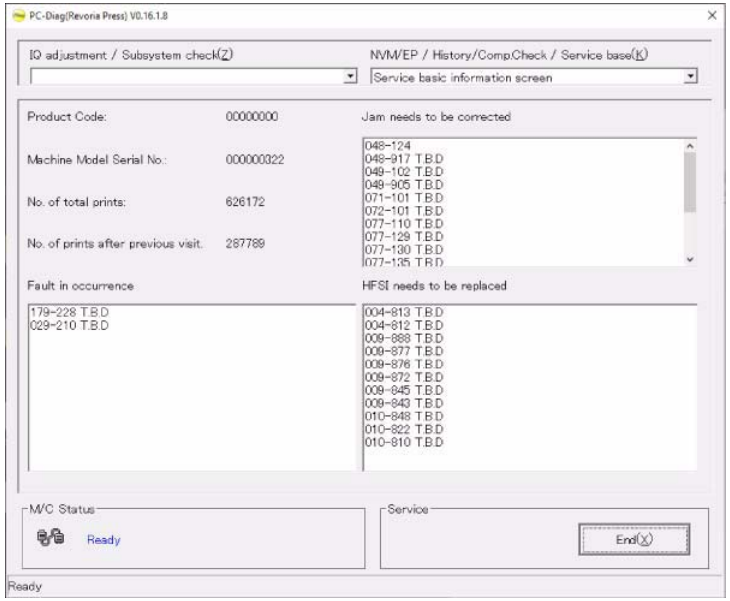


Figure 1 e0ko640001

For example, selecting IQ adjustment from the IQ adjustment / Subsystem check column displays the following screen.

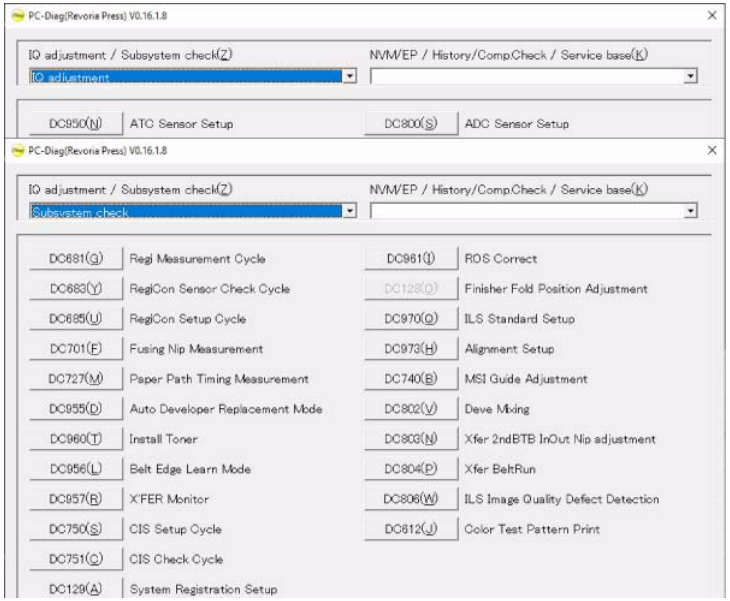

PC-Diag(Revoria Press) V0.16.1.8
IQ adjustment / Subsystem check(Z)
NVM/EP / History/Comp.Check / Service base(K)
IQ adjustment
DC950(N) ATC Sensor Setup
DC800(S) ADC Sensor Setup
PC-Diag(Revoria Press) V0.16.1.8
IQ adjustment / Subsystem check(Z)
NVM/EP / History/Comp.Check / Service base(K)
Subsystem check
DC681(G) Regi Measurement Cycle
DC961(I) ROS Correct
DC683(Y) RegiCon Sensor Check Cycle
DC128(O) Finisher Fold Position Adjustment
DC685(U) RegiCon Setup Cycle
DC970(Q) ILS Standard Setup
DC701(F) Fusing Nip Measurement
DC973(H) Alignment Setup
DC727(M) Paper Path Timing Measurement
DC740(B) MSI Guide Adjustment
DC955(D) Auto Developer Replacement Mode
DC802(V) Deve Mixing
DC960(T) Install Toner
DC803(N) Xfer 2ndBTB InOut Nip adjustment
DC956(L) Belt Edge Learn Mode
DC804(P) Xfer BeltRun
DC957(R) X'FER Monitor
DC806(W) ILS Image Quality Defect Detection
DC750(S) CIS Setup Cycle
DC612(J) Color Test Pattern Print
DC751(C) CIS Check Cycle
DC129(A) System Registration Setup

Figure 2 e0ko640002

The Diag functions in the various screens of the IQ adjustment / Subsystem check and NVM/EP / History/ Comp.Check / Service base combo box are as follows.

1. Service basic information
   - DC100 Service Basic Information (Service Mode Entry)
   - DC188 Service Mode End (Diag Exit)
2. IQ adjustment
   - DC950 ATC Sensor Setup (6.4.36)
   - DC938 PCON Check (6.4.35)
   - DC934 ADC AGC Setup (6.4.34)
   - DC894 ADC TRC Target Set (6.4.30)
   - DC922 Tone Up/Down (6.4.33)
   - DC900 TRC Manual Adjustment (6.4.32)
   - DC895 Dmax Setup (6.4.31)
   - DC951 ESV Sensitivity Setup (6.4.37)
   - DC971 ILS CTRACS Adjustment (6.4.46)
   - DC974 ILS CTRACS Manual Adjustment (6.4.47)
   - DC975 ILS CTRACS User Target Set (6.4.48)
   - DC972 Within Page Density Adjustment Cycle (6.4.49)
   - DC800 ADC Sensor Setup (6.4.25)
   - DC801 User Dmax Adjustment (6.4.26)
   - DC805 Cooling Module BeltSteering Information (6.4.50)
   - DC807 White ADC Sensitivity Correction Cycle (6.4.52)
   - DC808 White ADC Adjust User Target Set Cycle (6.4.53)
   - DC612 Color Test Pattern Print (6.4.16)
3. Subsystem Check
   - DC681 Registration Measuring Cycle (6.4.17)
   - DC683 Registration Control Sensor Check Cycle (6.4.18)
   - DC685 Registration Control Setup Cycle (6.4.19)
   - DC701 Fusing Nip Measurement (6.4.20)
   - DC727 Paper Path Timing Measurement (6.4.21)
   - DC955 Automatic Developer Replacement Mode (6.4.38)
   - DC960 Install Toner (6.4.41)
   - DC956 Belt Edge Learn Mode (6.4.39)
   - DC957 Xfer Monitor (6.4.40)
   - DC750 CIS Setup Cycle (6.4.23)
   - DC751 CIS Check Cycle (6.4.24)
   - DC129 System Registration Setup (6.4.8)
   - DC961 ROS Correct (6.4.42)
   - DC128 Finisher Fold Position Adjustment (6.4.7)
   - DC970 ILS Standard Setup (6.4.43.1)
   - DC973 Alignment Setup (Paper Measurement Check) (6.4.44)
   - DC973 Alignment Setup (Alignment Adjustment) (6.4.45)
   - DC740 MBT Guide Adjustment (6.4.22)
   - DC802 Deve Mixing (6.4.27)
   - DC803 Xfer 2nd BTB In/Out Nip Adjustment (6.4.28)
   - DC804 Xfer Belt Run (6.4.29)
   - DC806 ILS Image Quality Defect Detection Screen (6.4.51)
   - DC612 Color Test Pattern Print (6.4.16)
4. NVM/EP Accessory
   - DC301 NVM Initialize (6.4.13)
   - DC131 NVM Read/Write (6.4.9)
   - DC361 NVM Save/Restore (6.4.15)
   - DC132 Color Machine Serial No. Setup (6.4.10)
5. History/Component Check
   - DC135 HFSI Counter (6.4.11)
   - DC118 Jam Counters (6.4.4)
   - DC120 Fail Counters (6.4.5)
   - DC122 Shutdown History (6.4.6)
   - DC330 Component Control (6.4.14)
   - DC140 Analog Monitor (6.4.12)

6.4.2.1 Check Procedure and How to Enter

Check Procedure

Inform customers that "The machine cannot be used as servicing will be started". (To suspend copy jobs and local print jobs.)

Procedure

The following procedure shows how to run the Service Mode without using the Electronic Manual but only using the PC-Diag.

1. After making sure that no copies or prints are being output ([Ready to print] is displayed), perform the following:
   - Double-click the "PCDiagToolsUI" icon on the desktop.
     The password confirmation screen will be displayed.
   - Enter the password "1.3.7.9" and click [OK].
   - The [Connected machine/Dummy manual select] screen is displayed.
     At Start up mode (Machine connection), select the Designation of machine to be connected and click [Execute].
   - The Main Unit will change from [Ready to print] to [Connecting the PSW] screen display.
     If you cannot enter the Service Mode, the message: "[!] Main Unit cannot enter Service Mode. Wait and enter again." is displayed on the screen.

     NOTE: *The Main Unit counts jams detected in the Service Mode, including the System Operation Mode.*
     Therefore, to exit the Service Mode, select and execute [Exit when work completed].
     Selecting [Exit when work incompleted] retains the jam history in the Main Unit.
   - The model information entered at Service Mode Entry on the Main Unit will be displayed on the Service basic information screen once it is retrieved.
     (When the model is identified, the corresponding DC codes and component names (parts name) will be customized.) Once the retrieval of model information is completed, [Ready] will be displayed on the bottom left of the M/C Status column.

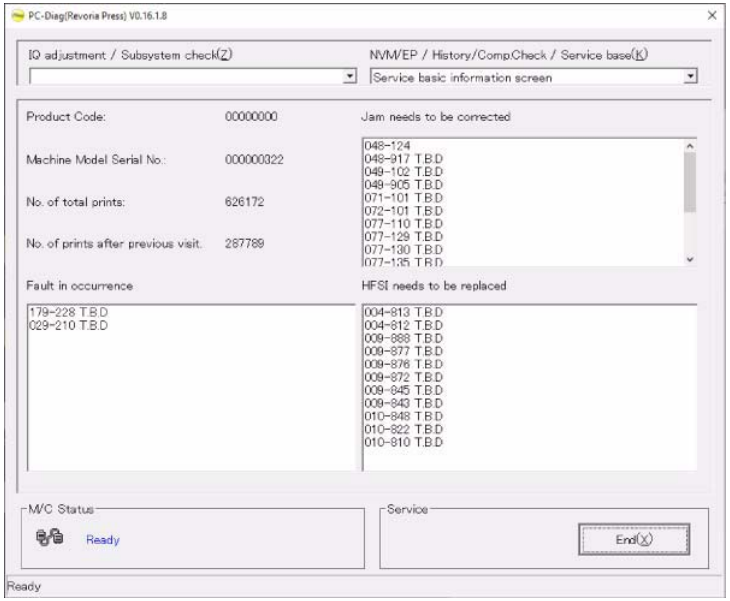


Figure 1 e0ko640001

NOTE:

- *Functions not used in the Service Mode will show a dimmed display.*
- *You can retrieve information for jams that require repair, HFSI that requires replacements, and model information such as HFSI counter, jam counter, failure counter, and shutdown history when you access the screen of individual functions.*

Table 1

Model information	Contents
Product Code	Displays the code assigned for each model (MINK Code).
Machine Model Serial No.	Displays the 10-digits number (0 to 9) which are numbered per model, to identify the model.
No. of total prints	Displays the total number of prints made.
No. of prints after previous visit	Displays the total number of prints since the previous call by CE.
Jam needs to be corrected	Displays the jam with the frequency over the reference value (over the limit value).
HFSI needs to be replaced	Displays the parts (HFSIs that have exceeded their Spec Life) that need to be replaced.
Fault in occurrence	Displays the faults that occur on the machine now.

6.4.2.2 Dummy by Models in the Service Mode

How to Start Up

About the Dummy Mode

- Dummy Mode is a method used to start Service Mode by loading model information of the dummy machine (by model) without using an actual machine.

Procedure

1. Double-click the "PCDiagToolsUI" icon on the desktop.
   The password confirmation screen will be displayed.
2. Enter the password "1.3.7.9" and click [OK].
3. On the Connected machine / Dummy manual select screen, select Start up mode (Dummy), select the applicable model under Designation of machine to be connected, and click [Execute]. (Figure 1)

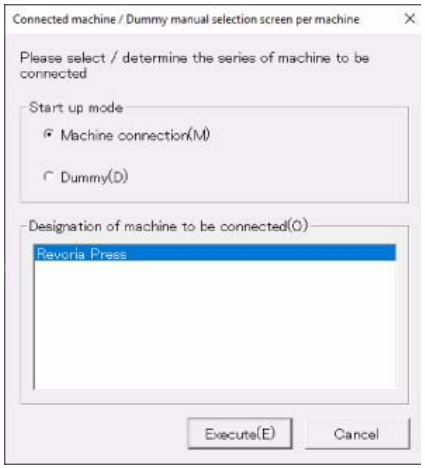

Connected machine / Dummy manual selection screen per machine
Please select / determine the series of machine to be connected
Start up mode
Machine connection(M)
Dummy(D)
Designation of machine to be connected(O)
Revoria Press
Execute(E)
Cancel

Figure 1 j0cx640003

4. When the following message is displayed on the Information screen, select [OK].
   PWB has been replaced. (Or error is found in saved data in PWB.) Use [DC132] Billing data matching & Serial No. setting to perform recovery task. Along with [OK].
5. The Service Mode screen is displayed.

6.4.2.3 How to Exit Service Mode

Procedure

1. On the Service Mode Basic screen, click [End] at the Service column.
   - The PSW opens the Diag Exit screen. Select [Exit when work completed], [Exit when work incompleted] or [Forcibly terminate Service Mode in PSW alone]. (Figure 1)

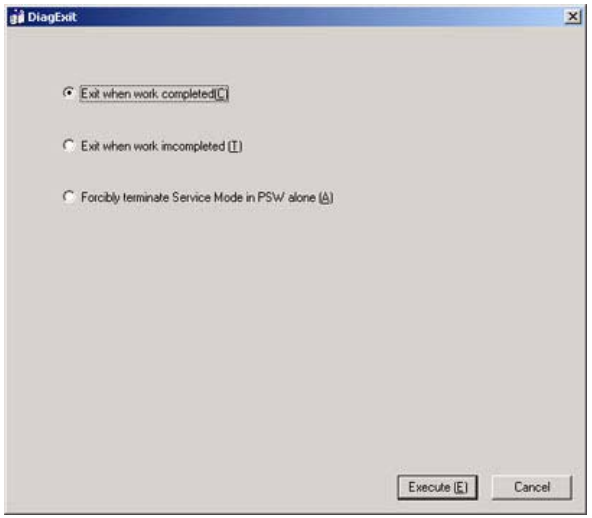


Figure 1 j0cm64005

2. Select and execute [Exit when work completed].
   - The PSW displays [The Error Log History in the Main Unit will be cleared. Are you sure?], [Yes] and [No].
     (1) If you select [Yes], the PSW resets the Shutdown History (DC122), Fail Counter (DC120), Jam Counter (DC118) and No. of copies after previous visit, and exits the Service Mode.
     (2) If you select [No], the PSW returns to the Diag Exit screen. If you select [Cancel] on the Diag Exit screen, the PSW returns to the screen shown immediately before the Diag Exit screen was opened.
   - In case the PSW cannot notify [Exit when work completed] to the Main Unit, the PSW Caution screen will show [Main Unit is unable to exit from the Service Mode.
     Check the connection between PSW and Main Unit, and the power supply to Main Unit. Select [Retry].
     Main Unit is unable to exit from the Service Mode if it is not connected to the PSW.].
3. Select and execute [Exit when work incompleted].
   - The PSW displays [The Error Log History in the Main Unit cannot be cleared. Are you sure?], [Yes] and [No].
     (1) If you select [Yes] the PSW does not reset the Shutdown history (DC122), Fail Counter (DC120), and Jam Counter (DC118). The PSW exits the Service Mode without resetting the No. of copies after previous visit.

(2) If you select [No], the PSW returns to the Diag Exit screen. If you select [Cancel] on the Diag Exit screen, the PSW returns to the screen shown immediately before the Diag Exit screen was opened.

- In case the PSW cannot notify [Exit when work incompleted] to the Main Unit, the PSW Caution screen will show [Main Unit is unable to exit from the Service Mode.

  Check the connection between PSW and Main Unit, and the power supply to Main Unit. Select [Retry].

  Main Unit is unable to exit from the Service Mode if it is not connected to the PSW.].

4. Select and execute [Forcibly terminate Service Mode in PSW alone].
   - The PSW displays [Main Unit is unable to exit from the Service Mode. Are you sure?], [Yes] and [No].
     (1) If you select [Yes], the PSW can exit the Service Mode, even if it is separated from the machine. (This is the procedure when a system error occurs due to the Main Unit power being turned OFF or the PSW connector getting disconnected, etc. and recovery became impossible.)
     (2) If you select [No], the PSW returns to the Diag Exit screen. If you select [Cancel] on the Diag Exit screen, the PSW returns to the screen shown immediately before the Diag Exit screen was opened.

6.4.3 ASCII Code List

Table 1

Decimal	Hexadecimal	Characters (Numeral)
32	20	SP (Space)
48	30	0
49	31	1
50	32	2
51	33	3
52	34	4
53	35	5
54	36	6
55	37	7
56	38	8
57	39	9
65	41	A
66	42	B
67	43	C
68	44	D
69	45	E
70	46	F
71	47	G
72	48	H
73	49	I
74	4A	J
75	4B	K
76	4C	L
77	4D	M
78	4E	N
79	4F	O
80	50	P
81	51	Q
82	52	R
83	53	S
84	54	T
85	55	U
86	56	V
87	57	W
88	58	X
89	59	Y
90	5A	Z

6.4.4 DC118 Jam Counters

Purpose

Displays the number of times jams had occurred since the previous reset due to [Exit when work completed] up to now.

- The following screen is displayed on the Jam Counter screen.

NOTE: *As this does not have the functions for occurrence interval and limit value, their displays are dimmed.*

NOTE: *Jams detected in the Service Mode are also counted.*

Procedure

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC118.
3. The Paper Jam Counter or Document Jam Counter is displayed.
   - Based on the data acquired from the Main Unit, the PSW displays the Jam Name and Number of occurrences.
   - Displays the Count from the previous exit from the Service Mode with [Exit when work completed] up to now.
   - The Count is reset when exiting from the Service Mode by using [Exit when work completed].
4. After the Paper Jam Counter check is completed, select [Close] to return to the History/Component Check screen.

6.4.5 DC120 Fail Counters

Purpose

Displays the number of times each fail had occurred since the previous reset due to [Exit when work completed] up to now.

- The following screen is displayed on the Fail Counter screen. (Default is to display in the order of the number of occurrences.)
  A. Display in the order of the number of occurrences
  B. Display in the order of Chain-Link No.
  C. Designate Chain No.

NOTE: *Does not count failures detected in the Service Mode. The Interlock Open detected when the Main Unit is not in operation is not counted either.*

Procedure

A. Display in the order of the number of occurrences. (Displays the list starting with a failure having occurred most frequently.)

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC120.
3. Select [Display in the order of the number of occurrences].
4. The screen displays in the order of number of occurrences. (Figure 1)
   - The display shows the number of occurrences in the order of failures that had occurred most frequently based on the data acquired from the Main Unit. If the Number of occurrences of some failures is the same, the PSW displays them in the order of Chain-Link No.

     NOTE: *The data acquisition timing is at the moment the screen is opened.*

   - Displays the Count from the previous exit from the Service Mode with [Exit when work completed] up to now.
   - The Count is reset when exiting from the Service Mode by using [Exit when work completed].

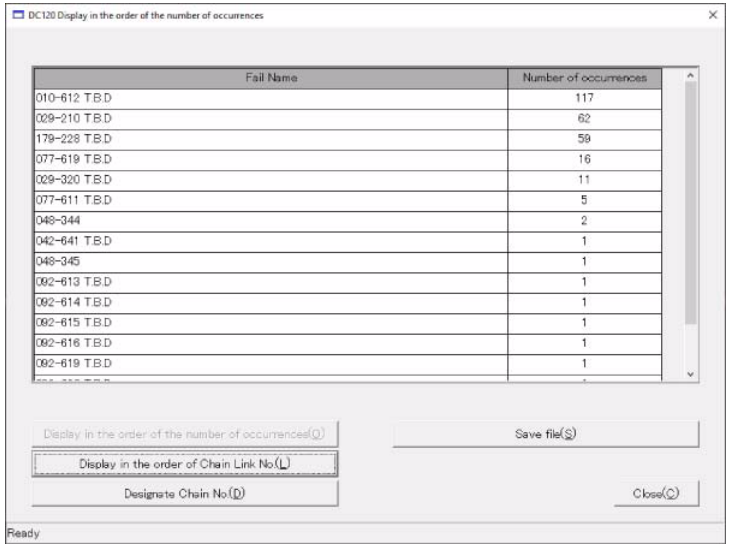


Figure 1 e0ko640004

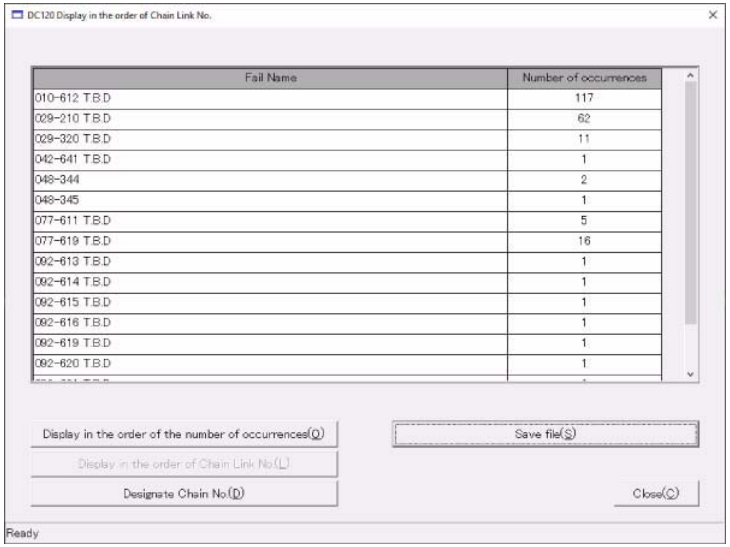


Figure 2 e0ko640005

5. After the Display in the order of the number of occurrences check is completed, select [Close] to return to the History/Component Check screen.

5. After the Display in the order of Chain-Link No. check is completed, select [Close] to return to the History/Component Check screen.

B. Display in the order of Chain-Link No. (Displays the list in the order of Chain-Link No.)

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC120.
3. Select [Display in the order of Chain-Link No.].
4. The screen displays in the order of Chain-Link No. (Figure 2)
   - The display shows the data of failures in the order of their Chain-Link No. based on the data acquired from the Main Unit.

     NOTE: *The data acquisition timing is at the moment the screen is opened.*

   - Displays the Count from the previous exit from the Service Mode with [Exit when work completed] up to now.
   - The Count is reset when exiting from the Service Mode by using [Exit when work completed].

C. Designate Chain No. (Displays by specifying the Chain No.)

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC120.
3. Select [Designate Chain No.].
4. The Designate Chain No. screen is displayed. (Figure 3)

Figure 3 j0cm64009

5. Enter the Chain No. using the keyboard and select [OK].
6. The screen displays Designate Chain No.
   - The display shows the data of only the applicable failures in the order of Chain-Link No. based on the data acquired from the Main Unit.

NOTE: *The data acquisition timing is at the moment the screen is opened.*

- Displays the Count from the previous exit from the Service Mode with [Exit when work completed] up to now.
- The Count is reset when exiting from the Service Mode by using [Exit when work completed].

7. After the Designate Chain No. check is completed, select [Close] to return to the History/Component Check screen.

6.4.6 DC122 Shutdown History

Purpose

- To display the history in 2 categories: Paper Jam and Fail.
- To display the Last 40 Faults History without categorizing.

NOTE: *•Does not count failures detected in the Service Mode. The Interlock Open detected when the Main Unit is not in operation is not counted either.*

- *Selecting [Exit when work completed] on the Diag Exit screen (DC188) to exit the Service Mode clears all the data in the Shutdown History.*

Procedure

<Fail History>

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC122.
3. The Shutdown History screen is displayed. (Default: Failure screen)
   - Displays the Shutdown History of failure based on the data acquired from the Main Unit.
   - Displays the latest 20 Fails that had occurred in the Customer Mode since the previous clear due to [Exit when work completed] up to now.
   - The display items are: File Name, Occurrence Date/Time, and Total PV.
4. After the Fail check is completed, select [Close] to return to the History/Component Check screen.

<Paper Jam>

1. On the Shutdown History screen, select [Paper Jam].
2. The Paper Jam screen is displayed.
   - Displays the Shutdown History of Paper Jam based on the data acquired from the Main Unit.
   - Displays the latest 20 Paper Jams that had occurred in the Customer Mode since the previous clear due to [Exit when work completed] up to now.
   - The display items are: Jam Name, Occurrence Date/Time, and Total PV.
3. After the Paper Jam check is completed, select [Close] to return to the History/Component Check screen.

<Last 40 Faults>

1. Select [Last 40 Faults] on the Shutdown History screen.
2. The Last 40 Faults Screen is displayed.
   - Displays the Shutdown History of Last 40 Faults based on the data acquired from the Main Unit.
   - Displays the latest 40 Faults that had occurred in the Customer Mode since the previous clear due to [Exit when work completed] up to now.
   - The display items are: Fault Name, Occurrence Date/Time, and Total PV.
3. After the Last 40 Faults check is completed, select [Close] to return to the History/Component Check screen.

6.4.7 DC128 Finisher Fold Position Adjustment

Purpose

To perform the following fold position adjustment in Finisher group options.

- Booklet Fold Position/Staple Position Adjustment (DC128)
  - A. Booklet Slant Adjustment
  - B. Booklet Staple Position and Fold Position Adjustment
  - C. Booklet Side Direction Staple Position Adjustment

  NOTE: *Perform this adjustment in the sequence of A. Booklet Slant Adjustment, B. Booklet Staple Position and Fold Position Adjustment, and C. Booklet Side Direction Staple Position Adjustment.*
- C Fold Position Adjustment (DC128)
- Z Fold Half Sheet, Z Fold Position Adjustment (DC128)
- Crease (Single Fold) Position Adjustment (DC128)
- Crease (Z Fold/C Fold/Z Fold Half Sheet) Position Adjustment (DC128)
- Crease (Gate Fold/3-Fold Accordion Fold/Double Parallel) Position Adjustment (DC128)
- Crease (4-Fold Accordion Fold) Position Adjustment (DC128)
- Crease (5-Fold Accordion Fold) Position Adjustment (DC128)
- Crease (Custom) Position Adjustment (DC128)
- Crease (Common) Position Adjustment (DC128)

NOTE: *For details on the procedure, refer to the following Adjustment No. in Chapter 4 Adjustment of Finisher Group Service Manual.*

Table 1

No.	Adjustment	Adjustment No.
1	Booklet Fold Position/Staple Position Adjustment (DC128)	ADJ 27.31.1
2	C Fold Position Adjustment (DC128)	ADJ 50.1.1
3	Z Fold Half Sheet, Z Fold Position Adjustment (DC128)	ADJ 50.1.2
4	Crease (Single Fold) Position Adjustment (DC128)	ADJ 47.3.1
5	Crease (Z Fold/C Fold/Z Fold Half Sheet) Position Adjustment (DC128)	ADJ 47.3.2
6	Crease (Gate Fold/3-Fold Accordion Fold/Double Parallel) Position Adjustment (DC128)	ADJ 47.3.3
7	Crease (4-Fold Accordion Fold) Position Adjustment (DC128)	ADJ 47.3.4
8	Crease (5-Fold Accordion Fold) Position Adjustment (DC128)	ADJ 47.3.5
9	Crease (Custom) Position Adjustment (DC128)	ADJ 47.3.6
10	Crease (Common) Position Adjustment (DC128)	ADJ 47.3.7

6.4.8 DC129 System Registration Setup

Purpose

To output samples and operate the screen to simplify the following adjustments when there is a need to adjust the paper alignment.

- Lead Regi
- Side Regi
- Lateral magnification (FS Magnification Ratio)
- Axial magnification (SS Magnification Ratio)
- Perpendicularity (Parallelogram deformed)
- FS Skew

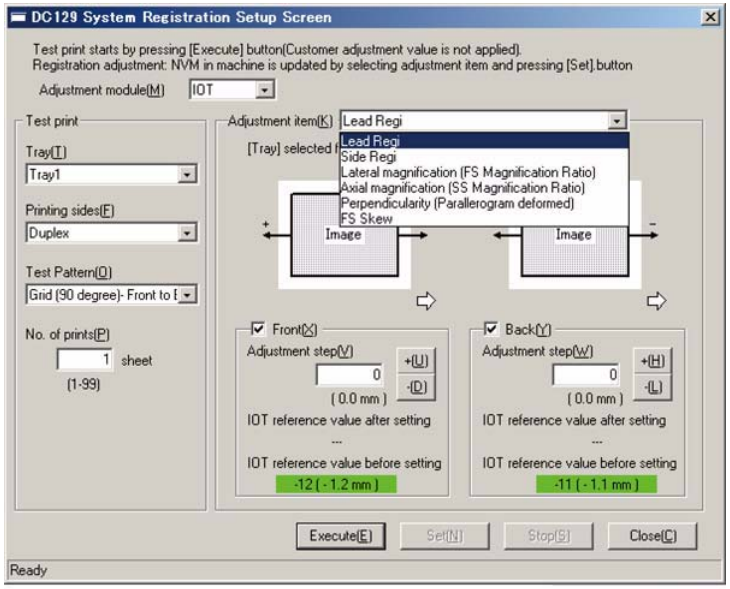
NOTE: *For details on the adjustment, refer to the following Adjustment No. in Chapter 4 of this manual.*

Table 1

No	Adjustment	Reference ADJ No.
1	Alignment Adjustment Procedure Flow	ADJ 15.6.1
2	Lead Regi/Side Regi (Side 1)	ADJ 15.6.6
3	Lead Regi/Side Regi (Side 2)	ADJ 15.6.7
4	Lateral magnification (FS Magnification Ratio), Axial magnification (SS Magnification Ratio)	ADJ 15.6.5
5	Perpendicularity (Parallelogram deformed)	ADJ 15.6.4
6	FS Skew	ADJ 15.6.3

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC129. (Figure 1)



j0cx640006

Figure 1 j0cx640006

3. Items that can be selected in the above screen and their adjustment ranges are as follows.

Table 2

No	Item	Selectable Items
1	Adjustment Module	IOT
2	Adjustment Item	Lead Regi, Side Regi, Lateral magnification (FS Magnification Ratio), Axial magnification (SS Magnification Ratio), Perpendicularity (Parallelogram deformed), FS Skew
3	Printing sides	Duplex, Simplex
4	Tray*1	Tray 1 and Tray 2, with Tray 3 to Tray 6 and MBT*2 as options
5	Test Pattern	Grid (90 degrees) - Both Sides, Grid (90 degrees) - 204, PH REGI
6	Adjustment Step	Reduce/Enlarge Ratio: 0.025%, Perpendicularity: 0.05 mm, Others: 0.1 mm

NOTE:

**1: Tray can only be adjusted when [Lead Regi] is selected in Adjustment Item.*

**2: Tray 3, Tray 4, and MBT are selectable when the HCF A3 option is installed, while Tray 5 and Tray 6 are selectable when the 2nd HCF A3 option is installed.*

4. The following describes an overview of the adjustment method.

   For each adjustment, obtain the sample printout for checking purposes with the following settings.

   - Paper Size: A3
   - Printing sides: 1 Sided
   - Test Pattern: Grid (90 degrees)
   - No. of prints: 3 sheets (evaluate using the 3rd sample)

   Also, put a check mark at [Front] in the screen when adjusting for Side 1 and at [Back] when adjusting for Side 2.

Table 3

No	Adjustment	Overview
1	Lead Regi Adjustment	Look on the output surface in SEF direction and adjust by horizontal movement with the paper center as reference. To move the image in + direction relative to the sample, click [+] as many times as the number of steps to move. To go the other way, click [-] as many times as the number of steps to move. (1 count = 0.1 mm)
2	Side Regi Adjustment	Look on the output surface in SEF direction and adjust by vertical movement with the paper center as reference. To move the image in + direction relative to the sample, click [+] as many times as the number of steps to move. To go the other way, click [-] as many times as the number of steps to move. (1 count = 0.1 mm)
3	Lateral magnification (FS Magnification Ratio)	Look on the output surface in SEF direction and adjust by vertical stretching/shrinking with the paper center as reference. The adjustment amount is a proportion of the measured length against the reference Fast Scan length. To move the image in + direction relative to the sample, click [+] as many times as the number of steps to move. To go the other way, click [-] as many times as the number of steps to move. (1 count = 0.025%)
4	Axial magnification (SS Magnification Ratio)	Look on the output surface in SEF direction and adjust by horizontal stretching/shrinking with the paper center as reference. The adjustment amount is a proportion of the measured length against the reference Slow Scan length. To move the image in + direction relative to the sample, click [+] as many times as the number of steps to move. To go the other way, click [-] as many times as the number of steps to move. (1 count = 0.025%)
5	Perpendicularity (Parallelogram deformed)	Look on the output surface in SEF direction and adjust by rotation with the reference point at the Lead Edge as the center. To move the image in + direction relative to the sample, click [+] as many times as the number of steps to move. To go the other way, click [-] as many times as the number of steps to move. (1 count = 0.05 mm)
6	FS Skew	Look on the output surface in SEF direction and adjust by sliding with the paper center as reference. To move the image in + direction relative to the sample, click [+] as many times as the number of steps to move. To go the other way, click [-] as many times as the number of steps to move. (1 count = 0.1 mm)

5. After each adjustment, obtain the sample again and adjust until the desired alignment is achieved.

6.4.9 DC131 NVM Read/Write

Purpose

To refer to the NVM data and set/modify and save it.

NOTE: *•All the NVM data including the NVM for the Key Operator are accessible. However, Billing, Counterfeit Prevention, Authentication and Accounting, Administration Password and cannot be rewritten.*

- *The display items are: NVM Name, NVM Code, Current Value.*

NOTE: *For details on the NVM, refer to 6.3.6 onwards in Chapter 6.*

Procedure

<Designate a Module>

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC131.
3. The NVM Read/Write screen is displayed.
4. Select the module name from the Module column.
   - The modules available for selection in Designate module are as follows. (The default is Designate direct code)

Table 1

Designate Module Items	Chain No. Allocation*1
DC131_All (IOT, SYS, UI) *2	DC131_IOT, DC131_SYS, DC131_UI
DC131_Finisher & Trimmer	763
DC131_CDM, SEM	769
DC131_ILS	782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 507, 516
DC131_HCS1	991
DC131_HCS2	992
DC131_IOT_Deve	754, 755
DC131_IOT_Drive	749, 750, 764
DC131_IOT_Fusing	741, 520, 535
DC131_IOT_HCF36	546
DC131_IOT_HVPS	
DC131_IOT_IM	740, 540
DC131_IOT_PH	742, 743, 517, 518 (HCF A3)
DC131_IOT_Procon	765, 766, 767, 770, 771, 772, 773, 774, 775, 776, 777, 778, 780, 781, 514, 515
DC131_IOT_RegiCon	753, 508
DC131_IOT_ROS	756, 758, 759
DC131_IOT_EPG_Cleaner	751, 505
DC131_IOT_Xfer	746, 747, 748, 513
DC131_RMT	999
DC131_SYS	700, 720
DC131_TCBM	506 (TCBM)

Table 1

Designate Module Items	Chain No. Allocation*1
DC131_UI	705

NOTE:

**1: Undisclosed NVMs are not listed.*

**2: DC131_ILS related NVMs are not included.*

5. Select [Read].
   - To cancel the NVM read, select [Stop].
6. NVM data of the selected module is displayed.
7. Select the target NVM to write from the table. (Default: First row)
8. The current value of the target NVM to write is displayed in the column of New Value box.
   - [Write] is possible while figures are being displayed in the Direct Input column.
   - Selecting [Clear] deletes the displayed NVM.
9. Enter the new value.
10. Select [Write] of the New Value box.
    - When the Write is OK (Input Value being within the valid range): NVM value of the target NVM Code of the Main Unit will be rewritten by the new value.
11. After rewriting of the specified NVM code is completed, the completion message will be displayed and the Current Value will be replaced by the value from the New Value column.

<Designate direct code>

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC131.
3. The NVM Read/Write screen is displayed.
4. Select [Designate direct code] from the Module column.
5. Enter the NVM Code into the Chain-Link column of the Designate direct code box.
6. Select [Read].
7. NVM data is displayed.
8. Select the target NVM to write from the table.
9. The current value of the target NVM to write is displayed in the New Value column.
   - [Write] is possible while figures are being displayed in the New Value column.
10. Enter the new value into the New Value column.
11. Select [Write] of the New Value box.
    - When the Upper Limit Value is not informed from the Main Unit, the Input Value is limited to the same number of digits as the Current Value.
    - When the Write is OK (Input Value being within the valid range): NVM value of the target NVM Code of the Main Unit will be rewritten by the new value.
12. After rewriting of the specified NVM code is completed, the completion message will be displayed and the value in the Current Value column will be replaced by the value from the New Value column.

<Save/Restore>

Description

Writes/saves multiple NVMs or the CSV file in one go.

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC131.
3. On the NVM Read/Write screen, click [Save/Restore]. (Figure 1)

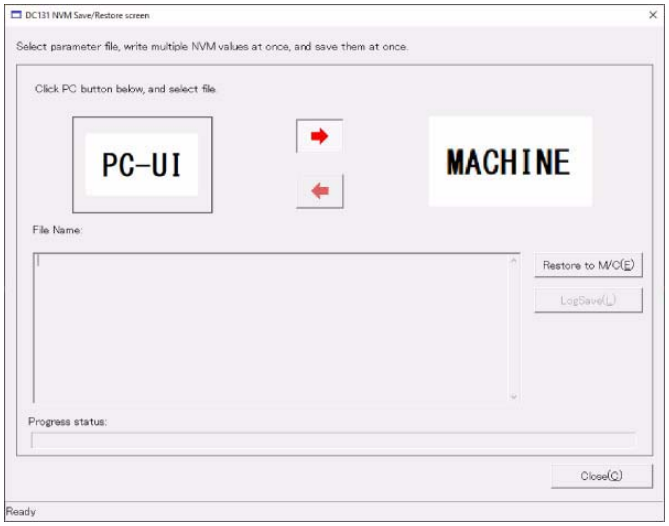


Figure 1 e0ko640006

4. On the Save/Restore screen, click [PC].
5. The [Open File] screen is displayed. Select the parameter file and click [Open].
   - The File Names are displayed under [PC].
6. Click the [Arrow].
   - Right Arrow (Restore to M/C): performs batch write of parameter files from PSW to the machine.
   - Left Arrow (Save to PC): performs batch save of parameter files from the machine to PSW.
7. Click [Restore to M/C] or [Save to PC].
   - After clicking [Restore to M/C], a Confirmation screen is displayed. Follow the message and select [Yes] or [No]. Selecting [Yes] starts the data restoration to the machine. Selecting [No] stops the operation.
   - After clicking and executing [Save to PC], the [Save as] screen is displayed. Enter a file name and click [Save].
8. Click [LogSave]. The [Save As] screen is displayed.
9. Enter a file name and click [Save] to save the log data.
10. Click [Close]. Return to the NVM Read/Write screen.

6.4.10 DC132 Color Machine Serial No. Setup

Purpose

To check the applicable PWB and sets up the Machine Serial No. after replacing the PWB that has the Machine Serial No. and Billing Count Value in the field.

Perform this after replacing any of the following PWBs.

- PWBA-PH NVM
- PWBA-MK-Drive NVM
- PWBA-MK-EPG NVM

NOTE:

- *This function can only be used when the following Fails have occurred. (This function is supposed to be available with the failure active.)*
  - *Billing Fail (124-315),*
  - *Serial Number Fail (124-316)*
  - *Usage Counter Fail (124-317)*
  - *All CRUM Fail 3 (124-321)*
  - *All CRUM Fail 21 (124-322)*
  - *All CRUM Fail 22 (124-323)*
  - *IOT PWB CRUM Restoration Fail 3 (124-324)*
  - *IOT PWB CRUM Restoration Fail 21 (124-325)*
  - *IOT PWB CRUM Restoration Fail 22 (124-326)*
  - *MK Drive CRUM Restoration Fail 3 (124-327)*
  - *MK Drive CRUM Restoration Fail 21 (124-328)*
  - *MK Drive CRUM Restoration Fail 22 (124-329)*
  - *MK EPG CRUM Restoration Fail 3 (124-330)*
  - *MK EPG CRUM Restoration Fail 21 (124-331)*
  - *MK EPG CRUM Restoration Fail 22 (124-332)*
- *When exiting the Service Mode after setting up the Serial No., the Billing Fail will be canceled. (The Print Test Pattern is not available with the Billing Fail active.)*

The PWB names on the PC-Diag screen and in the Manual differs as follows.

Refer to the following comparison table and make sure to perform the correct replacements.

Table 1

PWB Name on PC-Diag Screen	PWB Name in Manual
PWBA-PH NVM	NVM PWB on the PH Core PWB
PWBA-MK-Drive NVM	NVM PWB on the MK DRIVE Core PWB
PWBA-MK-EPG NVM	NVM PWB on the MK EPG Core PWB

Procedure

<Setting the Machine Serial No.>

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC132.
3. The Billing data matching & Serial No. setting screen is displayed. (Figure 1)

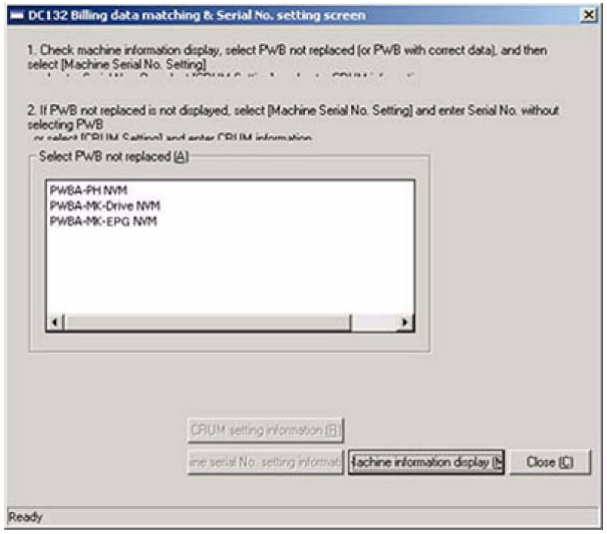

DC132 Billing data matching & Serial No. setting screen
1. Check machine information display, select PWB not replaced (or PWB with correct data), and then select [Machine Serial No. Setting]
2. If PWB not replaced is not displayed, select [Machine Serial No. Setting] and enter Serial No. without selecting PWB
Select PWB not replaced (A)
PWBA-PH NVM
PWBA-MK-Drive NVM
PWBA-MK-EPG NVM
CRUM setting information (B)
Machine information display (C)
Close (D)
Ready

Figure 1 e0ko640011

4. Select PWBA-PH NVM or PWBA-MK-Drive NVM.
   The [Machine serial No. setting information] button becomes enabled.
5. Click [Machine serial No. setting information].
   The Enter Machine Serial No. screen is displayed.
6. Enter the Machine Serial No. using the keyboard and click [OK].
   - Range of input value: 1 to 999999 (up to 6 digits)
7. Enter the Machine Serial No. again using the keyboard and click [OK].
   The machine checks if the entered Serial No. matches the No. that was entered first.
   - If the result is OK, the message: "Execution Completed" is displayed on the screen.
   - If the result is NG: The re-enter screen is displayed.

<Checking the Machine Information>

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC132.
3. On the Billing data matching & Serial No. setting screen, click [Machine information display]. (Figure 2)

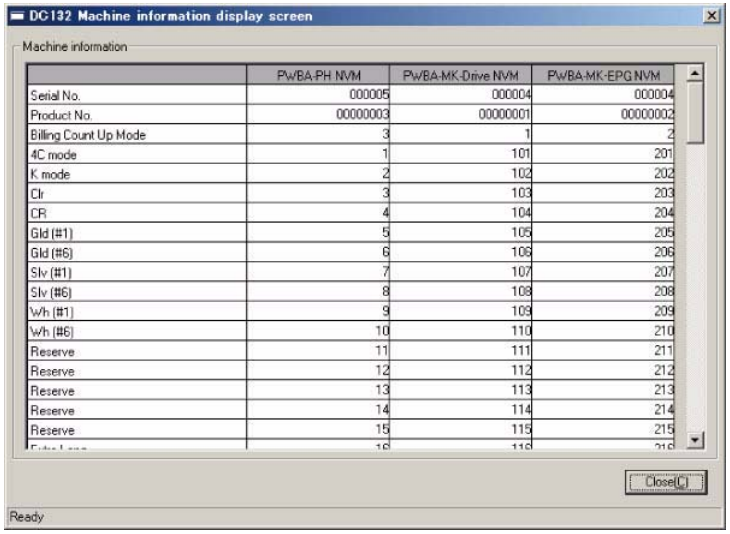

DC132 Machine information display screen
Machine information
PWBA-PH NVM
PWBA-MK-Drive NVM
PWBA-MK-EPG NVM
Serial No. 000005 000004 000004
Product No. 00000003 00000001 00000002
Billing Count Up Mode 3 1 2
4C mode 1 101 201
K mode 2 102 202
Clr 3 103 203
CR 4 104 204
Gld (#1) 5 105 205
Gld (#6) 6 106 206
Slv (#1) 7 107 207
Slv (#6) 8 108 208
Wh (#1) 9 109 209
Wh (#6) 10 110 210
Reserve 11 111 211
Reserve 12 112 212
Reserve 13 113 213
Reserve 14 114 214
Reserve 15 115 215
Close(C)
Ready

Figure 2 e0ko640012

4. Check the PWB that requires replacement. Or, check the results of Machine Serial No. Setup.

<CRUM Setting Information>

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC132.
3. The Billing data matching & Serial No. setting screen is displayed. (Figure 1)
4. Select PWBA-MK-EPG NVM. Do not execute unless PWBA-MK-EPG NVM is displayed.
   The [CRUM setting information] button becomes enabled.
5. Click [CRUM setting information].
   The Enter CRUM setting information screen is displayed. (Figure 3)

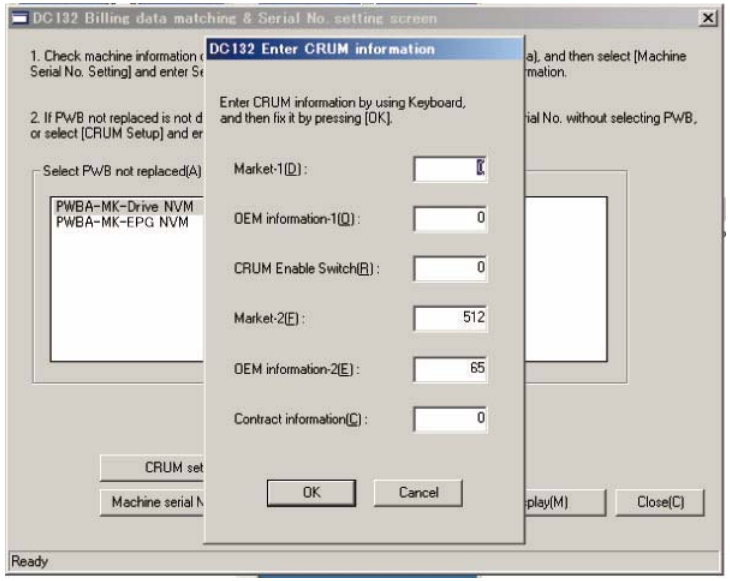


Figure 3 e0ko640013

6. The CRUM setting information is as follows.

Table 2

CRUM Information	Setting Information
Market - 1	5 digits (0 to 65535)
OEM Destination Information - 1	3 digits (0 to 255)
CRUM Enable Switch	
Market - 2	5 digits (0 to 65535)
OEM Information - 2	3 digits (0 to 255)
Contact Information	3 digits (0 to 255)

7. Enter the CRUM information using the keyboard and click [OK].
   The machine checks if the entered CRUM information matches the CRUM information that was entered first.
   - If the result is OK, the message: "Execution Completed" is displayed on the screen.
   - If the result is NG: The re-enter screen is displayed.

6.4.11 DC135 HFSI Counter

Purpose

- To display the Spec Life (threshold value) and the Current Value (usage status) of the periodic replacement parts. You can change the Spec Life and reset the Current Value.
- The following screen is displayed on the HFSI Counter screen. (Default is set to Part that reached time for replacement)

  A. Part that reached time for replacement

  B. All HFSI

  C. Next Visit Schedule

NOTE: *For details on the HFSI list, refer to* 6.3.3 *in Chapter 6.*

Procedure

A. Part that reached time for replacement (identifying the parts that has to be replaced)

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC135.
3. The HFSI Counter Screen: Part that reached time for replacement is displayed.
   - Displays only the items which Current Value has exceeded the Spec Life.

   NOTE: *If the Current Value for an item exceeds its Spec Life, the item is displayed yellow. The selected HFSI is displayed in blue and the first row is selected by default.*
4. In case you want to reset the current value after replacing the parts, select the appropriate HFSI items.
5. Select [Reset current value].
6. The screen indicating the reason for resetting the current value is displayed.
7. Select the reason for the reset from UM replacement, SM replacement, or Others.

   NOTE: *In case the Main Unit automatically resets the count for [Current Value] to '0' after replacing the parts, set the reason for resetting in [Others] with the Main Unit.*
8. If you want to change the Spec Life, select the appropriate HFSI items.
9. Select [Change spec life].
10. The Change spec life screen is displayed.
    - The current Spec Life is displayed as default.
11. Set a new Spec Life (max. 8 digits) using the keyboard and select [OK] to confirm.
    - The Spec Life on the HFSI Counter Screen: Part that reached time for replacement is rewritten into the new Spec Life.
12. After the HFSI Counter check is completed, select [Close] to return to the History/Component Check screen.

B. All HFSI (checking the data for all items)

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC135.
3. The HFSI Counter Screen: Part that reached time for replacement is displayed.
4. Select [All HFSI]. (Figure 1)

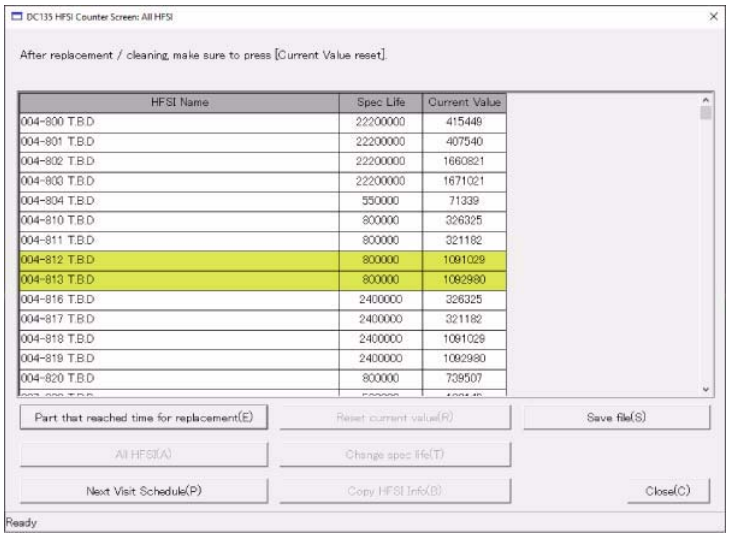


Figure 1 e0ko640007

5. The HFSI Counter Screen: All HFSI is displayed.
   - Displays the Spec Life and Current Value for all HFSI.

   NOTE: *If the Current Value for an item exceeds its Spec Life, the item is displayed yellow. The selected HFSI is displayed in blue and the first row is selected by default.*
6. The procedure for resetting the Current Value and changing the Spec Life are the same as in A. Part that reached time for replacement.

   NOTE: *Refer to Steps 4 to 11 of Procedure A.*
7. After checking the HFSI Counter display, select [Close] to return to the History/Component Check screen.

C. Next Visit Schedule (identifying the service items for the next service call)

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC135.
3. The [HFSI Counter Screen: Part that reached time for replacement] screen is displayed.
4. Select [Next Visit Schedule].
5. The [Time of Next Call] screen is displayed.
   - Displays the current Time of Call as default.
6. Set the Time of Next Call by the no. of months, and select [OK] to confirm.

   NOTE: *Enter the Time of Next Call by the month (2 digits), "To call how many months later".*
7. Close the [Time of Next Call] screen and display the [HFSI Counter Screen: Next Visit Schedule] screen. (Figure 2)

- Only displays the items meeting the following condition.

  Condition: Spec Life < = Current Value + Monthly average (*1) x No. of months, and displays the data of the Spec Life, Current Value and Outlook Value (*2) at the same time.

  NOTE:

  – **1 Monthly average for each HFSI is automatically calculated by the Main Unit. <How to calculate the Monthly average (E.g.)>*

  When selecting and executing [Exit when work completed] in the "Diag Exit screen", record the current value of each HFSI and the date.

  At the next call, derive the difference between the elapsed days and the current value by using the previously recorded data and the data on the day itself and calculate the Monthly average

  The Monthly average is regarded as 0 when you cannot calculate the elapsed days or the difference from the current value.

  – **2 Current Value + Monthly average x No. of months*

- If the Current Value for an item exceeds its Spec Life, the item is displayed yellow. The selected HFSI is displayed in blue and the first row is selected by default.

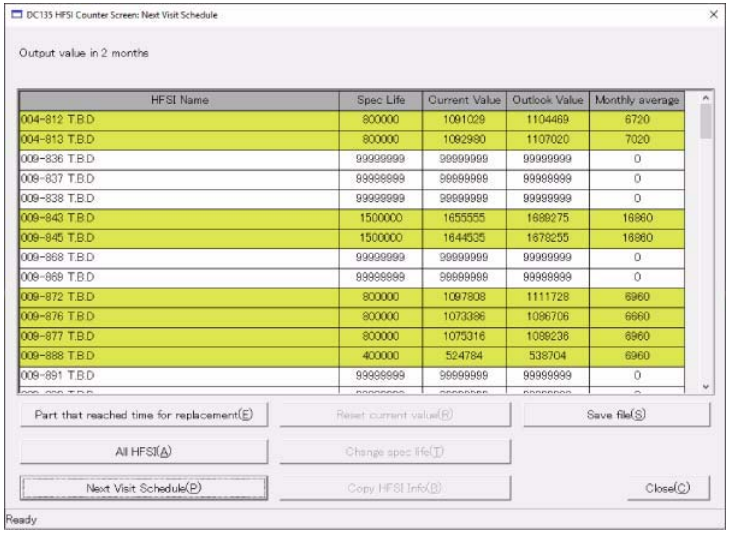


Figure 2 e0ko640008

8. The procedure for resetting the Current Value and changing the Spec Life are the same as in A. Part that reached time for replacement.

   NOTE: *Refer to Steps 4 to 11.*

9. After the Next Visit Schedule check is completed, select [Close] to return to the History/Component Check screen.

D. Copy HFSI Info (copies the HFSI info for #1, #6 Spot Color)

NOTE: *As this operates by using same Spot Color Developer Housing Assy at both #1 and #6, the NVM has [Use the Same Spot Color Developer Housing Assy at Both #1 and #6] for each color type (GLD/SLV/WHT/PINK). When it is set to [Use Both], the following pairs of HFSI Chain-Link No. will be automatically cleared to '0' and have their Spec Life changed at the same time.*

- *009-801 DEVELOPER WHT #1 <-> 009-803 DEVELOPER WHT #6*
- *009-802 DEVELOPER GLD #1 <-> 009-804 DEVELOPER GLD #6*
- *009-807 DEVELOPER SLV #1 <-> 009-806 DEVELOPER SLV #6*
- *009-826 DEVELOPER PINK #1 <-> 009-828 DEVELOPER PINK #6*
- *009-813 DEVE Housing WHT #1 <-> 009-815 DEVE Housing WHT #6*
- *009-814 DEVE Housing GLD #1 <-> 009-816 DEVE Housing GLD #6*
- *009-819 DEVE Housing SLV #1 <-> 009-818 DEVE Housing SLV #6*
- *0009-827 DEVE Housing PINK #1 <-> 009-829 DEVE Housing PINK #6*

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC135.
3. The HFSI Counter Screen: Part that reached time for replacement is displayed.
4. Select [Copy HFSI Info]. (Figure 3)

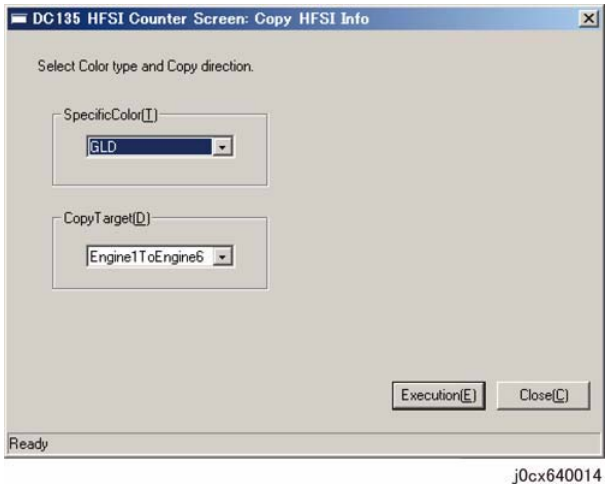


Figure 3 j0cx640014

5. Enter the color information and copy direction, then click [Execute]. After clicking [Execute], a Confirmation screen is displayed. Follow the message and select [OK] or [Cancel]. Selecting [OK] copies all the HFSI information. Selecting [Cancel] stops the operation.
   - If [Use the Same Spot Color Developer Housing Assy at Both #1 and #6] is enabled at the NVM, the copying of HFSI information for each color type (GLD/SLV/WHT/PINK) will also be enabled. Multiple color types cannot be copied at the same time.
   - The copy direction can be selected to be from #1 to #6 or from #6 to #1.

NOTE: *When [Use the Same Spot Color Developer Housing Assy at Both #1 and #6] was switched to enabled/disabled, turn the power OFF and ON before running this function. Using the HFSI for #1, #6 Spot Color before turning the power OFF and ON would cause the operation to be not guaranteed.*

6. After the copying of HFSI information has completed, select [Close] to return to the previous HFSI Counter Check screen before [Copy HFSI Info] was selected. Select [Close] again to return to the History/Component Check screen.

6.4.12 DC140 Analog Monitor

Purpose

Monitors the Analog value of the A/D converted sensor, by operating the various component (such as C.C).

You can temporarily change the output value. You can also check the Input Component and Output Component concurrently.

NOTE: *For details on the Analog Monitor Items, refer to* 6.3.4 *in Chapter 6.*

Procedure

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC140.
3. The Analog Monitor screen is displayed.
   - The Analog Output Component names and the Analog Input Component names are displayed in the table in the order of their Chain-Link No.
   - All the status displays of the input and output components show "Disable" (checking stopped). Display of the Input/Level columns are blank.
4. Perform the Input/Output Component Check items.

   <Output Component Check>

   (1) Select the target components.

   (2) Select [Execute] of the Output Component.

   (3) The applicable output component is turned ON at an output level that corresponded to the Output Level Value (test-specific instruction value).

   (4) The PSW changes the status display of output components to "Enable" (Checking in progress) and displays the Output Level Value received. (Level: 0 to 255)

   (5) When you want to check several components at the same time, repeat Step 4 <Output Component Check> from (1) to (4). The maximum no. of output components which can be checked at the same time is 12. When the 12th output component was instructed for checking, selection of [Execute] becomes unavailable.

   (6) If you want to stop checking of the target components being selected, select [Stop] or select [Stop All] to turn OFF all the output components.

   (7) Turns OFF the applicable output component. All the status displays of the applicable output components show "Disable". Display of the level is blank.

   (8) There are 2 methods to change and check the Output Level of the output component temporarily.

   "Procedure A" uses the Change Output Level screen by selecting [Change Output Level]. "Procedure B" uses [Level+] and [Level-] to add/subtract the Output Level Value by 1 at a time.

   Proceed to Step (9) when using [Change Output Level]. Proceed to the Step (1) when using [Level+] and [Level-].

   (9) Select the desired components for changing the Output Level in "Procedure A" and select [Change Output Level].

   NOTE: *Both components status showing either "Disable" or "Enable" can be selected.*

   (10) The Change Output Level screen is opened.

(11) Enter the new Output Level by using the keyboard, select [OK] to close the Change Output Level screen and display the Analog Monitor screen.

(12) The Output Component Level column displays a new output value on the Analog Monitor screen.

(13) For the subsequent procedures, repeat and check Step 4 <Output Component Check> from (1) to (4).

(14) Select the desired components for changing the Output Level in "Procedure B" and select [Level+] or [Level-].

(15) Adds/subtracts the value of Output Level 1 at a time. The new output level is added or subtracted for entry, and the new output level will be displayed in the Level column of output components on the Analog Monitor screen.

(16) For the subsequent procedures, repeat Step 4 <Output Component Check> from (1) to (4).

<Input Component Check>

(1) Select the target components.

(2) Select [Execute] of the Input Component.

(3) The status display of the input component changes to "Enable" (Check in progress) on the PSW when the applicable input component turns ON and displays the Input Value (Monitor value) in the Input column received. (Level: 0 to 255)

(4) When you want to check several components, repeat Step 1 to 3. The maximum no. of output components which can be checked at the same time is 12. When the 12th output component was instructed for checking, selection of [Execute] becomes unavailable.

(5) If you want to stop checking of the target components being selected, select [Stop] or select [Stop All] to turn OFF all the input components.

(6) Turns OFF the applicable input component. All the status displays of the applicable input components show "Disable".

5. After the Analog Monitor check is completed, select [Close] to return to the History/Component Check screen.

6.4.13 DC301 NVM Initialize

Purpose

To perform initialization on any NVM area.

NOTE: *For whether an NVM is an initialization target, refer to the NVM List.*

Procedure

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC301.
3. The NVM Initialization Screen is displayed. (Figure 1)

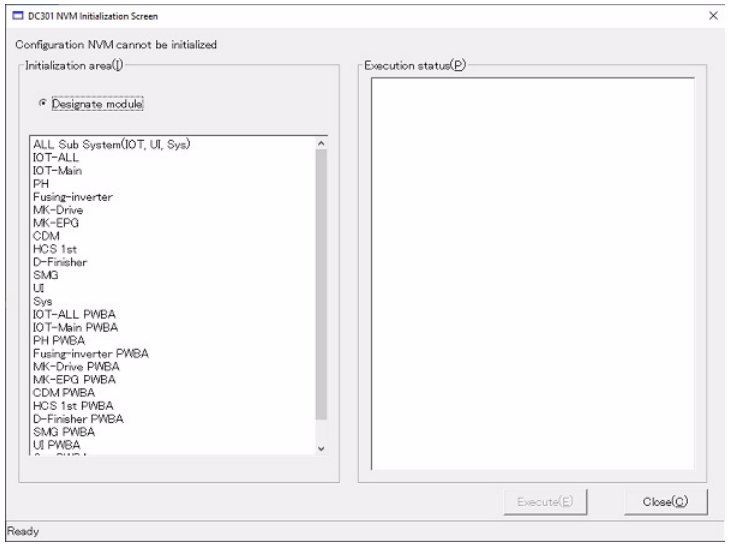


Figure 1 e0kol640067

4. Select the item to be initialized and click [Execute].
   In the above screen, grouped items that are initialization targets are as follows.

Table 1

NVM Area No.	NVM Area Selection Unit	Settings/Adjustment				Tools	Part of Tools	HFSI Counter	
		IOT	UI	SYS	Option	SYS	UI	IOT	Option
1	ALL Sub System (IOT, UI, Sys)	O	O	O		O			
2	IOT-ALL	O							
3	IOT-Main	O							
4	PH	O							
5	Fusing-inverter	O							

Table 1

NVM Area No.	NVM Area Selection Unit	Settings/Adjustment				Tools	Part of Tools	HFSI Counter	
		IOT	UI	SYS	Option	SYS	UI	IOT	Option
6	MK-Drive	O							
7	MK-EPG	O							
8	CDM				O				
9	HCS 1st				O				
10	HCS 2nd				O				
11	EDI Board				O				
12	Finisher				O				
13	UI		O						
14	Sys			O		O			
15	IOT-ALL PWBA	O						O	
16	IOT-Main PWBA	O						O	
17	PH PWBA	O						O	
18	Fusing-inverter PWBA	O						O	
19	MK-Drive PWBA	O						O	
20	MK-EPG PWBA	O						O	
21	CDM PWBA				O				O
22	HCS 1st PWBA				O				O
23	HCS 2nd PWBA				O				O
24	Finisher PWBA				O				O
25	UI PWBA		O				O		
26	Sys PWBA			O		O			
27	ALL PWBA (IOT, UI, Sys)	O	O	O		O	O	O	

6.4.14 DC330 Component Control

Purpose

Displays the instruction and the result for the Input Component Check and the Output Component Check.

- You can monitor the individual Input Component or check operation of the individual Output Component.
- You can check both multiple Input and multiple Output Components at the same time.
- You can perform a simple check for all the Input Component in the applicable module collectively.

NOTE: *For details on the Inputs, Outputs, and Components, refer to 6.3.1.1 and 6.3.1.2 in Chapter 6.*

Procedure

1. On the PC-Diag screen, select [History/Component Check].
2. On the History/Component Check screen, select DC330.
3. Displays the Component Control screen. (Figure 1)
4. Select the desired module from Designate module box or select [Designate direct code].
   - The selections for Designate module are as follows:

Table 1

Designate Module Items	Chain No.	
	INPUT	OUTPUT
DRIVE*	None	004
ELEC	004	None
EXIT	004, 008	008
FUSING	004, 010	010
NOHAD	None	004
REGI	004, 008	008
ROS	006	006
Tray	007	007
ALIGNER	008	008
DUPLEX	008	008
PREREGI	008	008
TRANSPORT	008	008
V-TRA	008	008
DEVE	009	009
DRUM/CLN	009	009
PROCON	None	009
XFER	009	009
BARI	010	010
COOLING	010	010
DECURLER	010	010
ILS	None	017
AttentionLight	None	003

Table 1

Designate Module Items	Chain No.	
	INPUT	OUTPUT
Finisher	012, 013, 015	012, 013, 014, 015
CDM	048	048
HCS1	049	049
HCS2	149	149
HCF3.5-1	078	078
HCF3.5-2	178	178
HCF3.6-1	078	078
HCF3.6-2	178	178

*: Default

- To select [Designate direct code], proceed to Step 6 onwards.

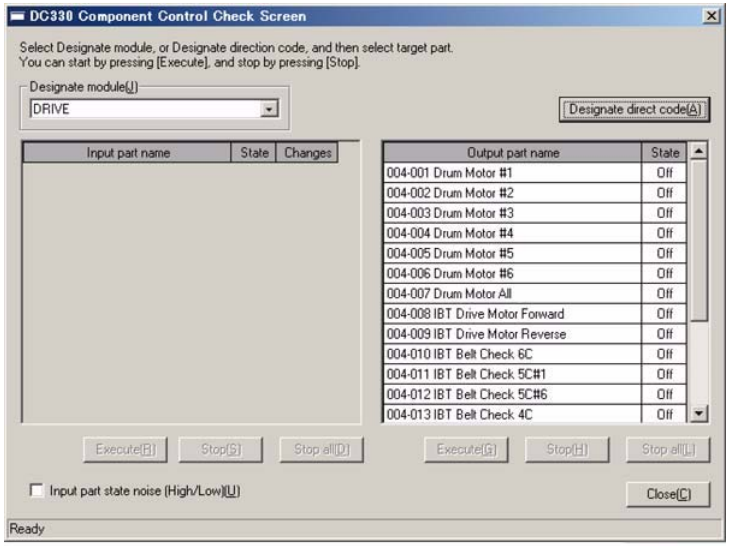


Figure 1 j0cx640016

5. Perform Item Check on Output Component and Input Component.

<Output Component Check>

(1) Select the applicable module from Designate module. (Figure 1)

(2) The output component names in the selected module are displayed in sequence of Chain-Link No. The status of the output components is all displayed as Off.

(3) Select the target component and select [Execute] of the Output Component.

NOTE:

- *Cycle operation: Repeats 1 s ON and 1 s OFF cyclically.*
- *The PSW holds information on whether the component is applicable to cycle operation.*

(4) The status display shows "On" if the target components of the Main Unit are being started normally. (Figure 1)

(5) When you want to check several components at the same time, repeat Step 5 <Output Component Check> from (3) to (4).

***NOTE:** The maximum no. of output components which can be checked at the same time is 12. When the 12th output component was instructed for checking, selection of [Execute] becomes unavailable.*

(6) If you want to stop checking of the target components being selected, select [Stop] or select [Stop All] to turn OFF all the output components.

(7) Turn OFF the applicable output component at the Main Unit.

(8) After the Output Component check is completed, select [Close] to return to the History/ Component Check screen.

<Input Component Check>

(1) Select the applicable module from Designate module. (Figure 1)

(2) The input component names in the selected module are displayed in sequence of Chain-Link No.

The State and No. of Changes of input components are all displayed blank.

(3) Select the target component and select [Execute] of the Input Component.

(4) The status of the target components in the Main Unit "High" or "Low" is accepted and displayed as "High" or "Low" in the Input Component Status column.

"0" is displayed in the No. of Changes column. Emits Beep sounds which can distinguish the Low from High status.

NOTE:

- *The input components High/Low sounds are beep sounds which can distinguish the Low, High status of the last components instructed to operate.*

  High sound: Repeats 125 ms ON, 125 ms OFF, 125 ms ON and 625 ms OFF 3 times. Low sound: Repeats 500 ms ON and 500 ms OFF 3 times.
- *The default of the input components High/Low sounds is set to "ON" (checked). (Figure 1)*

(5) Change the OFF/ON status of the target components to check at the Main Unit.

(6) The PSW updates "High" or "Low" in the Input Component Status column based on the status of the input component, and emits a beep sound to tell the difference between High and Low.

+1 is added into the No. of Changes column every time the "High" or "Low" level changes. (No. of Changes: 0 to 99)

(7) When you want to check several components at the same time, repeat Step 5 <Input Component Check> from (3) to (4).

NOTE: *The maximum no. of input components which can be checked at the same time is 12. When the 12th output component was instructed for checking, selection of [Execute] becomes unavailable.*

(8) If you want to stop checking of the target components being selected, select [Stop] or select [Stop All] to turn OFF all the input components.

NOTE: *During multiple selection of components, the Beep sound goes out when execution of the last component to be executed stopped.*

(9) Stops the status check of the applicable input components.

The display of the selected applicable Input Component Status is blank and the No. of Changes column maintains the no. of changes at the time when checking stopped.

(10) After the Input Component check is completed, select [Close] to return to the History/ Component Check screen.

6. Perform Designate direct code. Select [Designate direct code] to display the Component Control: Direct Code Designation Confirmation Screen. (Figure 2)

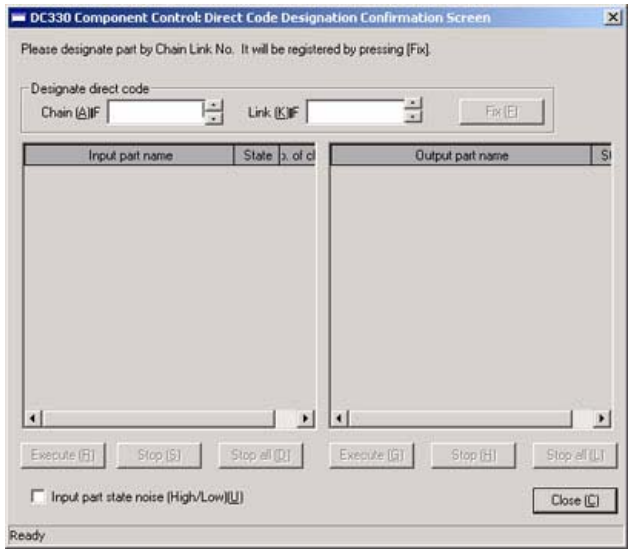


Figure 2 j0cm64017

(1) The [Execute], [Stop], and [Stop All] buttons for both the output and input component checks show dimmed displays.

(2) Enter the Chain-Link No. into the input fields of Designate direct code.

(3) Select [Fix].

(4) The input and output components are classified by recognizing the entered Chain-Link No.

NOTE: *When there is no applicable Chain-Link No. or when the input/output components cannot be classified, the message screen informing that the machine or the function is abnormal is displayed.*

- *For the input components (Link No. 100 to 309), the Chain-Link No. and the Input Component Name are indicated in the Input part name column.*

  Both State and No. of Changes have blank displays. [Execute] for the Input Component Check becomes available.
- *For the output components (Link No. 001 to 099), the Chain-Link No. and the Output Component Name are indicated in the Output part name column.*

  The display of State shows Off. [Execute] for the Output Component Check becomes available.

(5) When you want to register multiple no. of components, repeat Step 6 from (2) to (4).

The maximum no. of the input/output components which can be registered is 12 each. If registration of the 13th component was instructed, [?] [Up to 12 components for each input and output components can be registered.

Are you sure you want to delete the components registered previously before new registration?] will be displayed.

At this point, the components registered previously will be cleared and the 13th component will be registered if [OK] is selected.

NOTE: *Repeat entry of the Chain-Link No. cannot be accepted.*

(6) The subsequent steps are the same as those of Output Component Check and Input Component Check.

NOTE: *When the Input/Output Components checking is "In Progress", [Save] will not respond in the direct input of Chain-Link No.*

(7) After the Direct Code Designation Confirmation is completed, select [Close] to return to the Component Control screen.

7. After the Component Control check is completed, select [Close] to return to the Component Control Check Screen.

6.4.15 DC361 NVM Save / Restore

Purpose

To save the Main Unit NVM data in the Sys NVM Area as well as to perform a reload by using the Main Unit NVM data that was saved in Sys NVM Area.

Procedure

A. Saving NVM Data

1. On the PC-Diag screen, select [NVM/EP Accessory].
2. On the NVM/EP Accessory screen, select DC361.
3. The NVM Save / Reset Screen is displayed. (Figure 1)

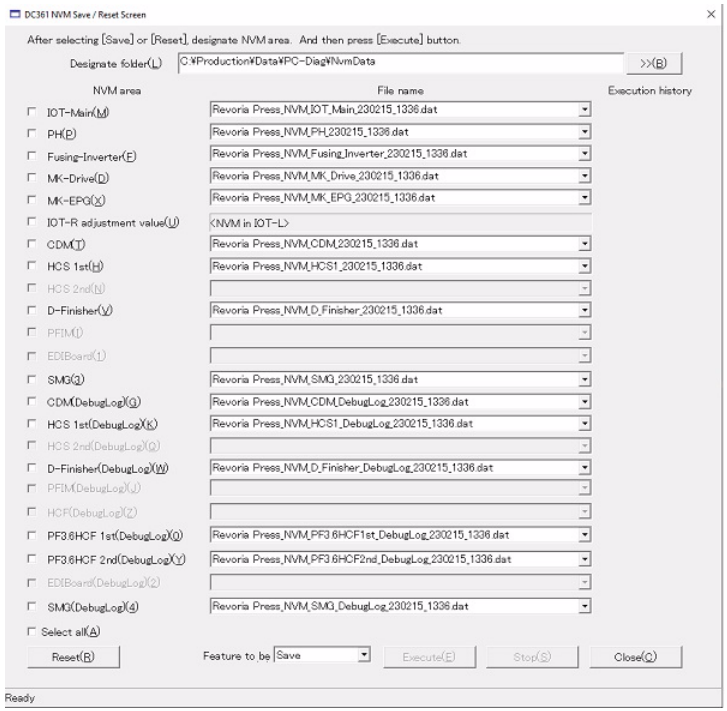


Figure 1 e0kol640068

4. Select the desired target module from [Select All] or [Specify an Item], and the Storage Medium from the NVM Area.
5. At [Feature to be], select [Save] and then click [Execute].
6. At the Confirmation screen, the message: "The specified folder does not exist. Do you want to create this folder?" is displayed along with [OK] and [Cancel].
7. If [OK] is selected, the message: "It may take a few minutes to save / restore the NVM data. Select [OK] to start." is displayed on the Caution screen.
8. Select [OK].
   - If the NVM data is already saved, the message: "The following save file already exists. Do you want to overwrite? xxxx_NVM_xxxx_yymmdd_xxxx.dat" is displayed along with [OK] and [Cancel].
9. Select [OK].
   - When [Cancel] is selected, saving will be stopped.
10. When saving is completed successfully, "Completed successfully" is displayed in the Execution Process column.

B. Reloading NVM Data

1. Perform this after PWB Replacement or NVM Initialization.

   NOTE: *For the NVM initialization, refer to DC301 NVM Initialize (6.4.13).*

2. On the PC-Diag screen, select [NVM/EP Accessory].
3. On the NVM/EP Accessory screen, select DC361.
4. The NVM Save / Reset Screen is displayed.
5. On [Feature to be] at the bottom of the screen, select [Reload].
6. At [Specify Folder], specify the folder containing the saved file.
7. Select the NVM Area to be reloaded and select the file name.
8. Click [Execute].
9. The message confirming to start the reloading is displayed.
10. Select [OK].
    - When completed successfully, the message: "Completed successfully" is displayed on the screen.
    - When not completed successfully, the message: "The operation requested was not completed successfully." is displayed on the screen.

6.4.16 DC612 Color Test Pattern Print

Purpose

To print the Test Pattern that is stored in the machine for the checking of image quality and isolating problems.

NOTE: *For details on the Test Patterns, refer to 6.3.5.1 DC612 Color Test Pattern List in Chapter 6.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment] or [Subsystem check].
2. On the IQ adjustment / Subsystem check screen, select DC612.
3. The Color Test Pattern Print Screen is displayed. (Figure 1)

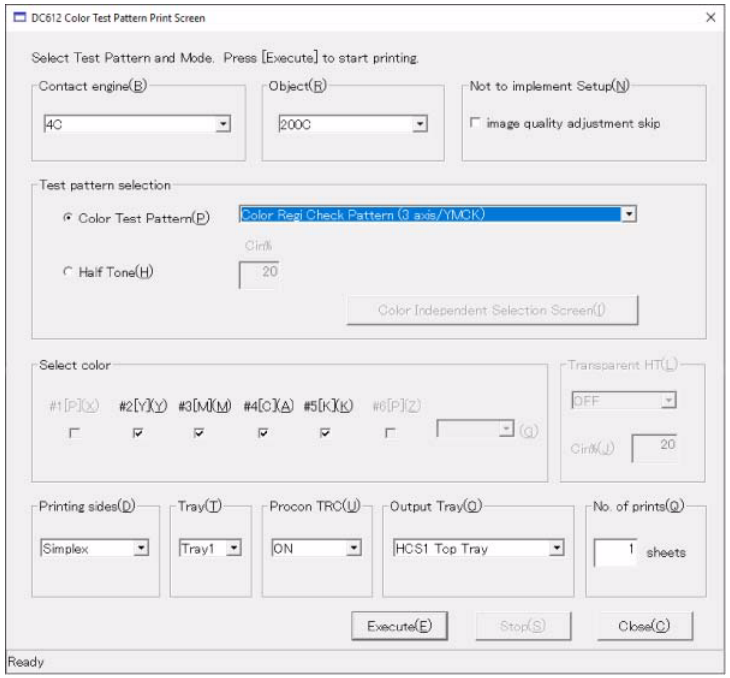


Figure 1 e0ko640010

4. Select the Test Pattern from the Test pattern selection box.
   (1) Color Test Pattern
   - Select Output Pattern from the pull down menu.

     NOTE: *Refer to the Color Test Patterns from 6.3.5.2 onwards.*

   (2) Half Tone
   - The default Cin% is [20].
   - The Cin for Y, M, C, K can be set from the common selection screen for each color.
5. Change the following items for setup of mode selection as required.
   - The mode detailed settings can be selected for Contact engine, Select color, Printing sides, Tray, Procon TRC, Object (screen type), etc. However, if batch print output pattern involving pattern numbers 230 to 250 (6.3.5.1) was selected at the Test Pattern, options other than Color Test Pattern, Tray, Procon TRC, Object (screen type), and Not to implement Setup cannot be selected.

     NOTE: *Transparent HT will be OFF if Clear Toner is not loaded.*
6. Enter the desired number of sheets into the No. of prints input box.
   - The default No. of prints is '1'.

     The number of sheets that can be entered is 1 to 9999.
7. Select [Execute].

   NOTE: *If there is a check mark at [Skip Image Quality Adjustment], image quality adjustment does not get performed when the test pattern is being printed.*
8. Select [Close] to return to the IQ Adjustment screen.

About the Page No. (symbol) when printing multiple sheets of paper

When printing multiple sheets of Test Patterns, settings can be made at the NVM to enable the printing of page numbers that had been converted into symbols on the printouts so that which printout is which page can be known. (The default for each of these NVM is Disabled)

Although the same thing can also be done by the other DC Code below, the method is listed in the explanation for DC612 which has a higher usage frequency.

Applies to:

- DC612
- DC129
- DC894
- DC895
- DC900
- DC922
- DC938
- Xfer Voltage
- Alignment

[NVM Items]

Table 1

	Item	Default Value	NVM Range	Meaning
1	Page Number Display Switch	0	0: Disabled, 1: Enabled	The switch for selecting whether to display.
2	Display Location Selection	1	0 to 9: Fixed, 10: Custom	Specifies the location at which to display the symbol.
3	Display Location X Coordinate	13	Range: 1 to 1023	Specifies the X coordinate when Custom (10) is selected for display location.
4	Display Location Y Coordinate	13	Range: 1 to 1023	Specifies the Y coordinate when Custom (10) is selected for display location.
5	Cin	255	Range: 1 to 255	Sets the Cin for display color.

[NVM for Each Function]

Table 2

DC Code Name/ Function	Display Switch	Location Selection	X Coordinate	Y Coordinate	Cin (Common)
DC612	757-905	757-906	757-907	757-908	757-904
DC129	757-913	757-914	757-915	757-916	757-904
DC894	757-925	757-926	757-927	757-928	757-904
DC895	757-929	757-930	757-931	757-932	757-904
DC900	757-933	757-934	757-935	757-936	757-904
DC922	757-937	757-938	757-939	757-940	757-904
DC938	757-941	757-942	757-943	757-944	757-904
Xfer Voltage	757-949	757-950	757-951	757-952	757-904
Alignment	757-953	757-954	757-955	757-956	757-904

[Meaning of Page No. Display]

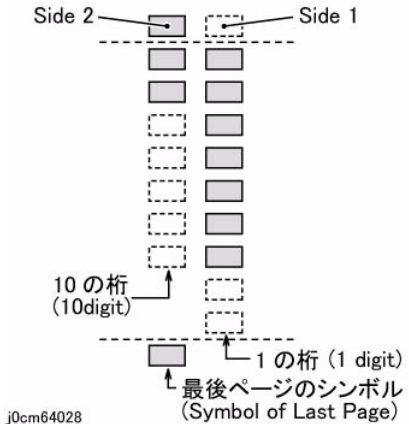


Figure 2 j0cm64028

Table 3

Figure 2 Display No.	Meaning	Sample in Figure
1	A mark at the display upper right means Side 1.	None
2	A mark at the display upper left means Side 2.	Exists. Means that this is a Side 2 sample.
3	One mark at the display center left means 10 sheets.	2 marks means 20 sheets.
4	One mark at the display center right means 1 sheet.	7 marks means 7 sheets.
5	A mark at the display bottom means the last sheet of the sample.	A mark exists, which means that this is the last page of the printouts.

NOTE: *The sample means: Side 2/27th sheet/last page.*

[Location of Page No. Display]

The display location can be specified by NVM as follows.

- Fixed: Print at one of the locations (1 to 9) indicated in the figure.
- Custom: print at the location indicated by X and Y coordinates with the top left of the page as the origin.

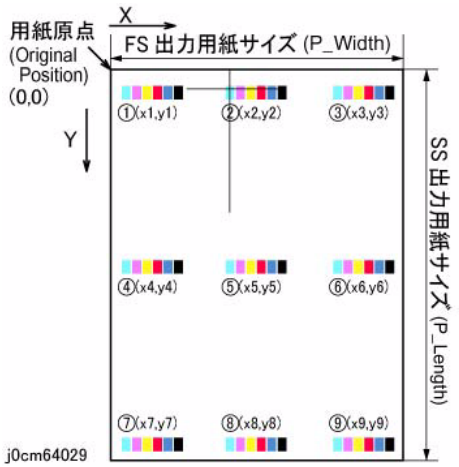


Figure 3 j0cm64029

6.4.17 DC681 Registration Measuring Cycle

Purpose

This cycle performs the color registration measurement that includes the detection of AC component to grasp the condition of AC Control (Drum Drive, Belt Drive, Belt Steering, etc), which is one of the color Regi components and detects the color misalignment amount using A1 Patch. Calculates the average value (DC component) and the difference between maximum/minimum values (AC component) of the corresponding color misalignment amount relative to Black in the Fast Scan/Slow Scan directions, which are detected by the respective sensors, and displays the measurement result. In addition, this measurement result is compared with the target value to perform OK/NG determination. As this regi measurement result and comparison determination result are meant for display on the UI screen, no actual correction is performed.

Procedure

1. Enter the PC-Diag screen and select [Subsystem Check].
2. On the Subsystem Check screen, select DC681.
3. The Regi Measurement Cycle Screen is displayed. (Figure 1)
   - In the screen, Lateral means Fast Scan direction and Process means Slow Scan direction.
   - In the screen, DC component is the average value of the corresponding color misalignment amount relative to Black and AC component is the difference between the maximum/minimum values of the misalignment amount.
   - In the screen, the Comparison will display OK if the value is at or lower than the Target (Absolute Val) and NG otherwise.
   - In the screen, the Total judgment will display OK when all the applicable items are OK.

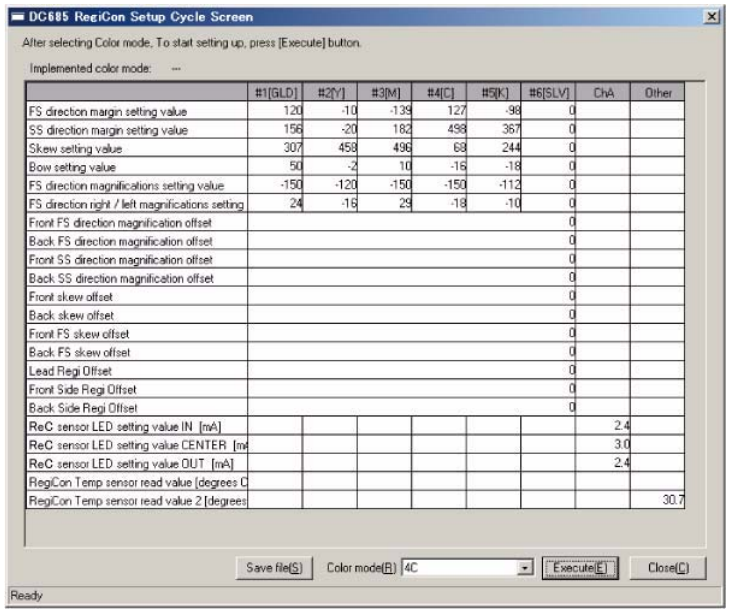

DC685 RegiCon Setup Cycle Screen
After selecting Color mode, To start setting up, press [Execute] button.
Implemented color mode: ---
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[SLV] ChA Other
FS direction margin setting value 120 -10 -139 127 -98 0
SS direction margin setting value 156 -20 182 498 367 0
Skew setting value 307 459 496 68 244 0
Bow setting value 50 -2 10 -16 -18 0
FS direction magnifications setting value -150 -120 -150 -150 -112 0
FS direction right / left magnifications setting 24 -18 29 -18 -10 0
Front FS direction magnification offset 0
Back FS direction magnification offset 0
Front SS direction magnification offset 0
Back SS direction magnification offset 0
Front skew offset 0
Back skew offset 0
Front FS skew offset 0
Back FS skew offset 0
Lead Regi Offset 0
Front Side Regi Offset 0
Back Side Regi Offset 0
ReC sensor LED setting value IN [mA] 2.4
ReC sensor LED setting value CENTER [mA] 3.0
ReC sensor LED setting value OUT [mA] 2.4
RegiCon Temp sensor read value [degrees C]
RegiCon Temp sensor read value 2 [degrees C] 30.7
Save file(S)
Color mode(R) 4C
Execute(E)
Close(C)
Ready

Figure 1 e0ko640064

4. Click [Execute].
   The Lateral (Fast Scan) and Process (Slow Scan) average value and comparison result for the corresponding color misalignment amount relative to Black that were calculated at the ReC Sensor (In, Center, Out) of each color are displayed. Unit: micro-m
5. To save the file, select [Save file].
   Data that is displayed in the Registration Measuring Cycle Screen can be saved using any file name and at any location.
6. After the Registration Measuring Cycle check is completed, select [Close] to return to the Subsystem Check screen.

6.4.18 DC683 Registration Control Sensor Check Cycle

Purpose

To check the function of the RegiCon (ReC) Sensor. This is a self-diagnosis cycle to check that the detection system can operate properly. To verify that the detection result is [Misalignment Amount = 0], the color misalignment amount is detected using C Patch (Cyan Single Color) and the misalignment amount result detected at each sensor is compared with the detected misalignment amount result and target value to perform OK/NG determination and display the result on the UI screen, no actual correction is performed.

Procedure

1. Enter the PC-Diag screen and select [Subsystem Check].
2. On the Subsystem Check screen, select DC683.
3. The RegiCon Sensor Check Cycle Screen is displayed. (Figure 1)
   - In the screen, Lateral means Fast Scan direction and Process means Slow Scan direction.
   - In the screen, the Comparison will display OK if the target value is at or lower than the absolute value and NG otherwise.
   - In the screen, the Total judgment will display OK when all the applicable items are OK.

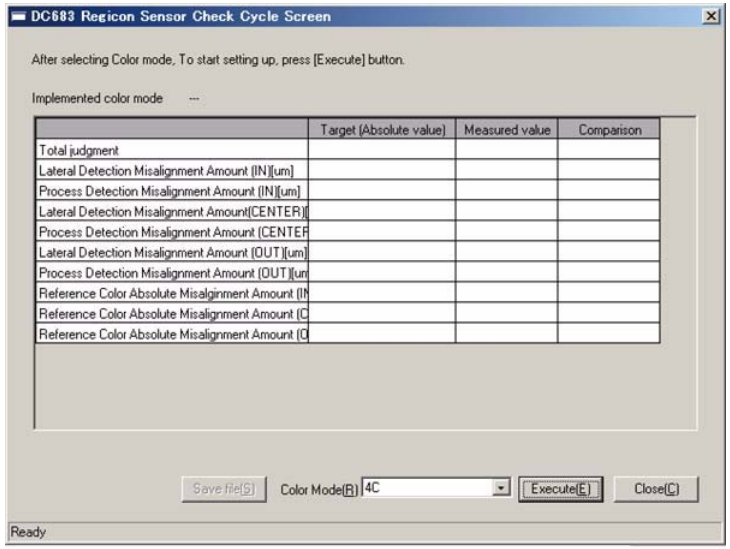

DC683 Regicon Sensor Check Cycle Screen
After selecting Color mode, To start setting up, press [Execute] button.
Implemented color mode ---
Target (Absolute value)
Measured value
Comparison
Total judgment
Lateral Detection Misalignment Amount (IN)[um]
Process Detection Misalignment Amount (IN)[um]
Lateral Detection Misalignment Amount(CENTER)[
Process Detection Misalignment Amount (CENTER
Lateral Detection Misalignment Amount (OUT)[um]
Process Detection Misalignment Amount (OUT)[un
Reference Color Absolute Misalginment Amount (IN
Reference Color Absolute Misalignment Amount (C
Reference Color Absolute Misalignment Amount (O
Save file(S)
Color Mode(R) 4C
Execute(E)
Close(C)
Ready
j0cx640020

Figure 1 j0cx640020

4. Click [Execute].
   C Patch (Cyan Single Color) is created on the IBT Belt to be read by the ReC Sensor (In, Center, Out), then the Lateral (Fast Scan) and Process (Slow Scan) registration misalignment amount are calculated to display the detected misalignment amount and comparison result. Unit: micro-m
5. To save the file, select [Save file].

Data that is displayed in the RegiCon Sensor Check Cycle Screen can be saved using any file name and at any location.

6. After the RegiCon Sensor Check Cycle check is completed, select [Close] to return to the Subsystem Check screen.

6.4.19 DC685 Registration Control Setup Cycle

Purpose

To compute the Skew, Magnification Ratio, Fast Scan Margin, Slow Scan Margin, ReC Sensor LED Light Amount Correction Amount for each color and perform corrections, then saves those correction amounts in the NVM. If a correction had failed, the previous saved data will be used.

NOTE: *Perform this Diag during ReC Sensor replacement.*

Procedure

1. Enter the PC-Diag screen and select [Subsystem Check].
2. On the Subsystem Check screen, select DC685.
3. The RegiCon Setup Cycle Screen is displayed. (Figure 1)
   The current registration control setting values are displayed.

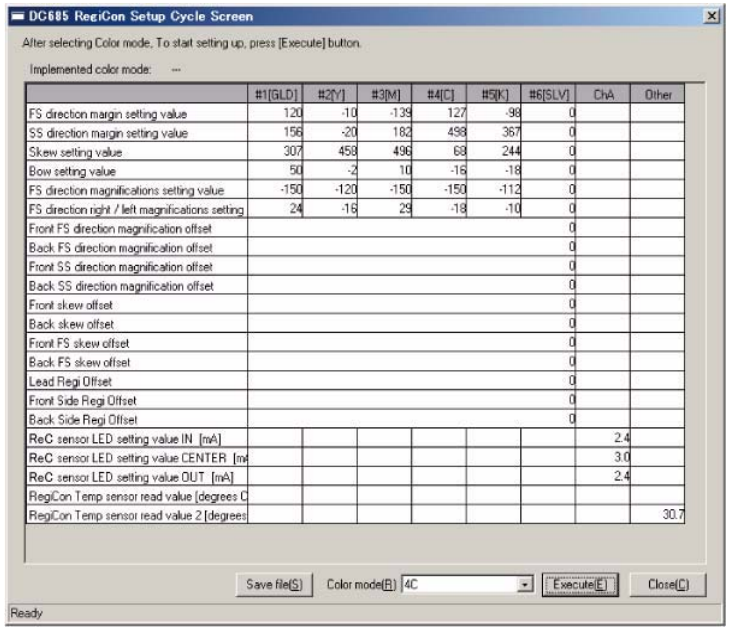

DC685 RegiCon Setup Cycle Screen
After selecting Color mode, To start setting up, press [Execute] button.
Implemented color mode: ---
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[SLV] ChA Other
FS direction margin setting value 120 -10 -139 127 -98 0
SS direction margin setting value 156 -20 182 498 367 0
Skew setting value 307 458 496 68 244 0
Bow setting value 50 -2 10 -16 -18 0
FS direction magnifications setting value -150 -120 -150 -150 -112 0
FS direction right / left magnifications setting 24 -16 29 -18 -10 0
Front FS direction magnification offset 0
Back FS direction magnification offset 0
Front SS direction magnification offset 0
Back SS direction magnification offset 0
Front skew offset 0
Back skew offset 0
Front FS skew offset 0
Back FS skew offset 0
Lead Regi Offset 0
Front Side Regi Offset 0
Back Side Regi Offset 0
ReC sensor LED setting value IN [mA] 2.4
ReC sensor LED setting value CENTER [m 3.0
ReC sensor LED setting value OUT [mA] 2.4
RegiCon Temp sensor read value [degrees C
RegiCon Temp sensor read value 2 [degrees 30.7
Save file(S)
Color mode(B) 4C
Execute(E)
Close(C)
Ready

Figure 1 e0ko640064

The items in the above screen display the NVM values in the following Table. (The NVM displays are all 753-xxx as shown in the following Table)

Table 1 Correction Type Setting Values

Item	Display Range (*1) [0.1@2400 dpi]					
	#1	#2 [Y]	#3 [M]	#4 [C]	#5 [K]	#6
Fast Scan Margin Setting Value	-4720 to +4720	-4720 to +4720	-4720 to +4720	-4720 to +4720	-4720 to +4720	-4720 to +4720
Slow Scan Margin Setting Value	-4720 to +4720	-4720 to +4720	-4720 to +4720	-4720 to +4720	-4720 to +4720	-4720 to +4720
Skew Setting Value	-4148 to +4148	-4148 to +4148	-4148 to +4148	-4148 to +4148	-4148 to +4148	-4148 to +4148
Bow Setting Value	-134 to +134	-134 to +134	-134 to +134	-134 to +134	-134 to +134	-134 to +134
Fast Scan All % Setting Value	-2974 to +2974	-2974 to +2974	-2974 to +2974	-2974 to +2974	-2974 to +2974	-2974 to +2974
Fast Scan Horizontal % Setting Value	-631 to +631	-631 to +631	-631 to +631	-631 to +631	-631 to +631	-631 to +631

*1: Data is displayed in whole numbers.

Table 2 Offset Type Setting Values

Item	Display range	Units	Description
	#1/#2 [Y]/#3 [M]/ #4 [C]/#5 [K]/#6		
Side 1 Fast Scan % Offset	-74 to +74	0.025% (*2)	Common for all colors and enabled only for Images +: Increases the Fast Scan length, -: Decreases the Fast Scan length
Side 2 Fast Scan % Offset	-74 to +74	0.025% (*2)	Common for all colors and enabled only for Images +: Increases the Fast Scan length, -: Decreases the Fast Scan length
Side 1 Slow Scan % Offset	-20 to +20	0.025% (*2)	Common for all colors and enabled only for Images +: Increases the Slow Scan length, -: Decreases the Slow Scan length
Side 2 Slow Scan % Offset	-20 to +20	0.025% (*2)	Common for all colors and enabled only for Images +: Increases the Slow Scan length, -: Decreases the Slow Scan length

Table 2 Offset Type Setting Values

Item	Display range	Units	Description
	#1/#2 [Y]/#3 [M]/ #4 [C]/#5 [K]/#6		
Side 1 Slow Scan Skew Offset	-212 to +212	1@600 dpi	Common for all colors and enabled only for Images +: In the direction that hasten the EOS, -: In the direction that hasten the SOS
Side 2 Slow Scan Skew Offset	-212 to +212	1@600 dpi	Common for all colors and enabled only for Images +: In the direction that hasten the EOS, -: In the direction that hasten the SOS
Side 1 Fast Scan Skew Offset	-30 to +30	0.1 mm	Common for all colors and enabled only for Images +: In the direction that gets away from SOS, -: In the direction that gets nearer to SOS
Side 2 Fast Scan Skew Offset	-30 to +30	0.1 mm	Common for all colors and enabled only for Images +: In the direction that gets away from SOS, -: In the direction that gets nearer to SOS
Lead Regi Offset	-50 to +50	0.1 mm	Common for Every Color +: In the direction that delay the LS, -: In the direction that hasten the LS
Side 1 Side Regi Offset	-20 to +20	0.1 mm	Common for Every Color +: Shift in EOS direction, -: Shift in SOS direction
Side 2 Side Regi Offset	-20 to +20	0.1 mm	Common for Every Color +: Shift in EOS direction, -: Shift in SOS direction

*2: The correction for Fast Scan % and Slow Scan % is usually performed using 0.025% of the Regi misalignment amount.

Table 3 ReC Sensor LED Setting Values

Item	Display Range (*3)	Units	Description
ReC Sensor LED Setting Value In [mA]	0.0 to 3.8	mA	The current value display before starting the operation displays the previous value. If the ReC light intensity correction cycle has completed successfully, its current result will be displayed. If it was unable to complete successfully (when ReC LED Fail has occurred), the previous value will be displayed.
ReC Sensor LED Setting Value Center [mA]	0.0 to 3.8	mA	The current value display before starting the operation displays the previous value. If the ReC light intensity correction cycle has completed successfully, its current result will be displayed. If it was unable to complete successfully (when ReC LED Fail has occurred), the previous value will be displayed.
ReC Sensor LED Setting Value Out [mA]	0.0 to 3.8	mA	The current value display before starting the operation displays the previous value. If the ReC light intensity correction cycle has completed successfully, its current result will be displayed. If it was unable to complete successfully (when ReC LED Fail has occurred), the previous value will be displayed.

*3: Data is displayed rounded to the first decimal point.

Table 4 Temperature Sensor Setting Values

Item	Display Range (*3)	Units	Description
RegiCon Temperature Sensor Read Value [Degree Celsius]	0.0 to 50.0	Degree Celsius	The absolute temperature at the previous completion of RegiCon operation (between ROS #1 - #2) (753-010)
RegiCon Temperature Sensor Read Value 2 [Degree Celsius]	0.0 to 50.0	Degree Celsius	The absolute temperature at the previous completion of RegiCon operation (between ROS #4 - #5) (753-011)

*3: Data is displayed rounded to the first decimal point.

4. Click [Execute].
   RegiCon Setup Cycle is performed and the data that has been updated to the optimal value is displayed.
5. To save the file, select [Save file].
   Data that is displayed in the RegiCon Setup Cycle Screen can be saved using any file name and at any location.
6. After the RegiCon Setup Cycle is completed, select [Close] to return to the Subsystem Check screen.

6.4.20 DC701 Fusing Nip Measurement

Purpose

To create a copy for the Contact Arc Adjustment to measure the Fusing Nip Width.

NOTE: *For details on the adjustment, refer to* ADJ 7.1.1 *DC701 Fusing Nip Measurement in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC701.
3. The Fusing Nip Measurement Screen is displayed. (Figure 1)

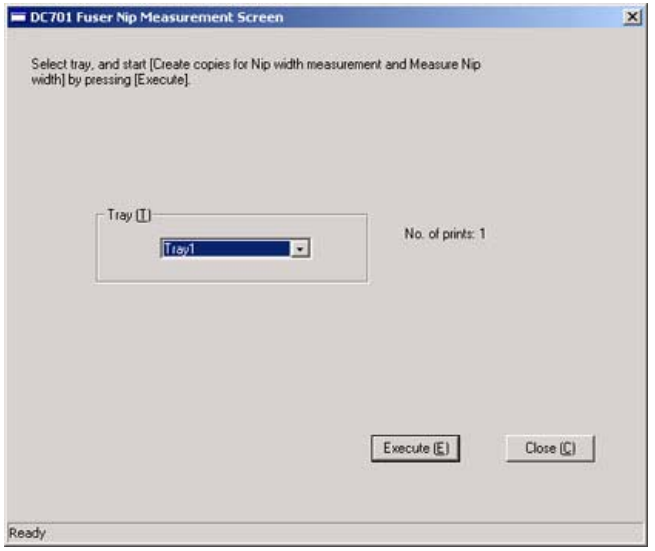

DC701 Fuser Nip Measurement Screen
Select tray, and start [Create copies for Nip width measurement and Measure Nip width] by pressing [Execute].
Tray (T)
Tray1
No. of prints: 1
Execute (E)
Close (C)
Ready

Figure 1 j0cm64020

4. Select a Tray that is loaded with A4 LEF or Letter LEF paper.
5. Select [Execute].
6. The message: "In progress..." is displayed.
   - Make a copy for measuring the nip width by using A4 LEF or Letter LEF. (Figure 2)
   - A confirmation message screen will be displayed if there is no paper tray loaded with A4 LEF or Letter LEF.
   - The paper is transported to the Fusing to be nipped for 10 seconds and then output automatically.

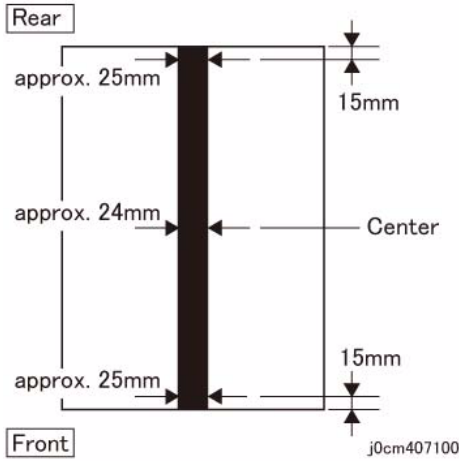


Figure 2 j0cm407100

7. When the creation of Copy for Nip Width Measurement is completed successfully, the message: "Completed successfully" will be displayed.
8. Measures the nip width of the output paper for Measure Nip Width.
9. After the Fusing Nip Measurement is completed, select [Close] to return to the Subsystem Check screen.

Table 1 DC701 Fusing Nip Measurement List

Name	Description	Remarks
Creating Copy for Nip Width Measurement	Printing of image patterns is carried out on A4 LEF or letter LEF.	Refer to the Copy for Nip Width Measurement (Figure 2)
Measuring Nip Width	Load the created Copy for Nip Width Measurement with the copy side face down in the Tray. The copy is automatically transported to the Fusing nip position, where it stops for a while before being output.	Measure the Fusing nip amount with the change of width of the all-black toner image.

6.4.21 DC727 Paper Path Timing Measurement

Purpose

Displays measurement results of the Sensor Pass By Timings when paper is fed.

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC727.
3. The Paper Path Timing Measurement Screen is displayed. (Figure 1)

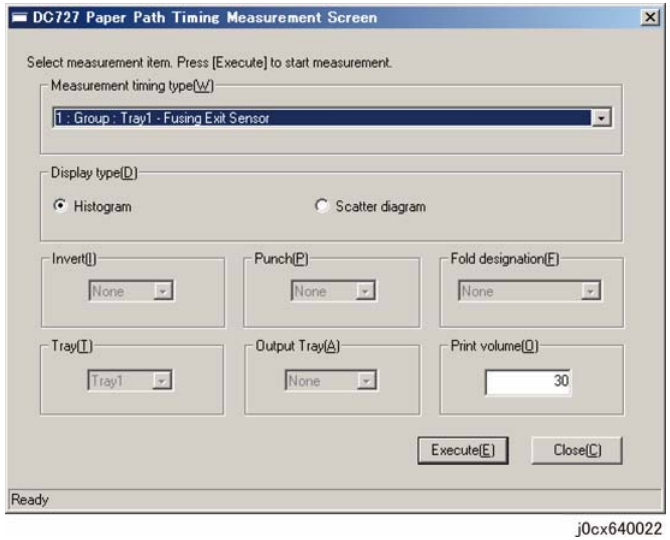


Figure 1 j0cx640022

4. Select a Measurement timing type. The timing types to be displayed and their displaying sequence are as follows.

NOTE: *The following combinations cannot be specified and executed on Finisher, but they are possible on the Paper Path Timing Measurement screen. However, in these cases, 045-397 PH Time Out Fail occurs and the operation will be stopped.*

- *[Punch] is specified when the output destination is [Booklet].*
- *[Punch] is specified when the output destination is [EnvTray].*

NOTE:

- **1: IOT Group ID gathers Sensor ID from maximum of 12 locations and can be used for simultaneous measurement. After the Paper Feed is finished, the Measurement Data of each Sensor ID (Histogram or Scatter Diagram) can be checked on the UI Screen.*
- **2: The IOT Sensor ID 1 to 35 are for IOT, 36 to 62 are for HCF A3 and 2nd HCF A3, and you can refer to the following Table (Table 2) for the contents of the IOT Sensor ID.*

- **3: "Any Tray" can be Tray 1 and Tray 2, as well as Tray 3 to Tray 6 and MBT from options. Tray 3, Tray 4, and MBT are selectable when the HCF A3 option is installed, while Tray 5 and Tray 6 are selectable when the 2nd HCF A3 option is installed.*

Table 1 IOT Paper Path Timing Measurement List (Group ID and Sensor ID)

Group ID *1	Measurement Interval	Tray	Sensor ID *2											
			1	2	3	4	5	6	7	8	9	10	11	12
1	Group: Tray 1 to Fusing Exit Sensor	Fixed to Tray 1	1	3	5	7	12	14	16	23	24	-	-	-
2	Group: Tray 2 to Fusing Exit Sensor	Fixed to Tray 2	2	4	6	7	12	14	16	23	24	-	-	-
3	Group: Pre Regi In SNR to Fusing Exit Sensor Simplex/Duplex Side 1	Any Tray*3	14	16	23	24	35	-	-	-	-	-	-	-
4	Group: Aligner Path Snr.1 R to Decurler Exit Sensor Simplex/Duplex Side 1	Any Tray*3	16	23	24	25	-	-	-	-	-	-	-	-
5	Group: Decurler Exit Sensor to IOT Exit Straight/Duplex Side 2	Any Tray*3	26	27	-	-	-	-	-	-	-	-	-	-
6	6 Group: Decurler Exit Sensor to IOT Exit Invert	Any Tray*3	28	29	-	-	-	-	-	-	-	-	-	-
7	Group: Cooling Exit Sensor to Duplex Out Sensor Duplex	Any Tray*3	11	28	-	-	-	-	-	-	-	-	-	-
8	Group: Duplex P/H Reference to Decurler Exit Sensor	Any Tray*3	21	22	23	24	25	32	33	34	-	-	-	-
9	Group: Tray 3 (HCF Upper Level) Feed Start to J-Tra Exit Sensor	Fixed to Tray 3	36	37	38	-	-	-	-	-	-	-	-	-
10	Group: Tray 4 (HCF Lower Level) Feed Start to J-Tra Exit Sensor	Fixed to Tray 4	39	40	41	-	-	-	-	-	-	-	-	-
11	Group: CHCF MBT Feed Start to J-Tra Exit Sensor	Fixed to HCF 1st MBT	42	43	44	-	-	-	-	-	-	-	-	-
12	Group: Tray 5 (CHCF Upper Level) Feed Start to J-Tra Exit Sensor	Fixed to Tray 5	45	46	47	48	49	50	63	-	-	-	-	-
13	Group: Tray 6 (CHCF Lower Level) Feed Start to J-Tra Exit Sensor	Fixed to Tray 6	51	52	53	54	55	56	64	-	-	-	-	-
14	Group: HCF MBT Feed Start to J-Tra Exit Sensor	Fixed to HCF 2nd MBT (CHCF)	57	58	59	60	61	62	65	-	-	-	-	-
137	Any Tray: Paper Pitch to Pre Regi IN Snr On (Side 2) Any Tray (Dup Feed)	Any Tray (Dup Feed) *3	9	-	-	-	-	-	-	-	-	-	-	-
138	Any Tray: Dec EXIT Snr Off to IOT Exit Snr On (Inv)	Any Tray*3	10	-	-	-	-	-	-	-	-	-	-	-
144	Any Tray: Aligner Path Snr.1R On to Regi Out Snr On	Any Tray*3	16	-	-	-	-	-	-	-	-	-	-	-
150	Any Tray: Aligner Path Snr.1R On (Side 2) to Regi Out Snr On	Any Tray (Dup Feed) *3	22	-	-	-	-	-	-	-	-	-	-	-

Table 2 ASF Paper Path Timing Measurement List (Group ID and Sensor ID)

Group ID	Measurement Interval	Tray	Sensor ID											
			1	2	3	4	5	6	7	8	9	10	11	12
431	HCF3.6 Tray3 Feed Start to J-Tra Exit Sensor	Fixed to Tray3	67	68	-	-	-	-	-	-	-	-	-	-
432	HCF3.6 Tray4 Feed Start to J-Tra Exit Sensor	Fixed to Tray4	69	70	-	-	-	-	-	-	-	-	-	-
433	HCF3.6 1st MBT Feed Start to J-Tra Exit Sensor	Fixed to 1st MBT	71	72	73	-	-	-	-	-	-	-	-	-
434	HCF3.6 Tray5 Feed Start to J-Tra Exit Sensor	Fixed to Tray5	74	75	76	77	78	79	-	-	-	-	-	-
435	HCF3.6 Tray6 Feed Start to J-Tra Exit Sensor	Fixed to Tray6	80	81	82	83	84	85	-	-	-	-	-	-
436	HCF3.6 2nd MBT Feed Start to J-Tra Exit Sensor	Fixed to 2nd MBT	86	87	88	89	90	91	92	-	-	-	-	-

Table 3 IOT Paper Path Timing Measurement Interval

Sensor ID	Measurement Interval	Tray	Remarks	Timing Adjustment at NVM
1	Tray 1: Feed Mot #1 On to Pre Feed Snr #1 On	Fixed to Tray 1	N/A	NG
2	Tray 2: Feed Mot #2 On to Pre Feed Snr #2 On	Fixed to Tray 2	N/A	NG
3	Tray 1: Feed Mot #1 On to Feed Out Snr #1 On	Fixed to Tray 1	N/A	NG
4	Tray 2: Feed Mot #2 On to Feed Out Snr #2 On	Fixed to Tray 2	N/A	NG
5	Tray 1: Feed Mot #1 On to (J-Tra) Feed Out Snr #1 On	Fixed to Tray 1	N/A	NG
6	Tray 2: Feed Mot #2 On to (J-Tra) Feed Out Snr #2 On	Fixed to Tray 2	N/A	NG
7	Any Tray: Paper Pitch to Regi Out Snr On (Side 1)	Any Tray*2	N/A	NG
9	Any Tray: Paper Pitch to Pre Regi IN Snr On (Side 2)	Any Tray (Dup Feed) *2	Adjusts the NVM by the sensor before start of deceleration control	OK (common for all paper types)
10	Any Tray: Dec EXIT Snr Off to IOT Exit Snr On (Inv)	Any Tray*2	N/A	NG
11	Any Tray: Dup Inv Motor On (invert output) to Dup In Snr On (Dup)	Any Tray*2	N/A	NG
12	Any Tray: Paper Pitch to Aligner Path Snr.1 On (Side 1)	Any Tray*2	N/A	NG
14	Any Tray: Paper Pitch to Pre Regi IN Snr On (Side 1)	Any Tray*2	Adjusts the NVM by the sensor before start of deceleration control	OK (common for all paper types)
16	Any Tray: Aligner Path Snr.1R On to Regi Out Snr On	Any Tray*2	N/A	NG
21	Any Tray: Paper Pitch to Aligner Path Snr.1 On (Side 2)	Any Tray (Dup Feed) *2	N/A	NG
22	Any Tray: Aligner Path Snr.1R On (Side 2) to Regi Out Snr On	Any Tray (Dup Feed) *2	N/A	NG
23	Any Tray: Regi Out SNR On to V-Tra Snr.7 On	Any Tray*2	N/A	NG
24	Any Tray: V-Tra Snr.7 On to Fusing Exit Snr On	Any Tray*2	N/A	NG
25	Any Tray: Fusing Exit Snr On to Decurler Exit Snr On	Any Tray*2	N/A	NG
26	Any Tray: DCR Exit Snr On to IOT Exit Snr On	Any Tray*2	N/A	NG

Table 3 IOT Paper Path Timing Measurement Interval

Sensor ID	Measurement Interval	Tray	Remarks	Timing Adjustment at NVM
27	Any Tray: IOT Exit Snr On to IOT Exit Snr Off	Any Tray*2	N/A	NG
28	Any Tray: DCR Exit Snr On to Invert Snr On	Any Tray*2	N/A	NG
29	Any Tray: Invert Snr On to IOT Exit Snr On	Any Tray*2	N/A	NG
32	Dup Feed: Paper Pitch (Dup Feed) to H-Tra Path Snr.5 On (Side 2)	Any Tray (Dup Feed) *2	N/A	NG
33	Dup Feed: H-Tra Path Snr.5 On to Burr_Press Path Snr On (Side 2)	Any Tray (Dup Feed) *2	N/A	NG
34	Dup Feed: Burr_Press Path Snr On to Aligner Path Snr.1R On (Side 2)	Any Tray (Dup Feed) *2	N/A	NG
35	Any Tray: Pre Regi In Snr On to Aligner Path Snr.1R On	Any Tray*2	N/A	NG
36	HCF 3.5 ADV 1st T1 PF SNR: Paper Pitch to HCF 3.5 ADV Tray 1 Pre Feed Out Snr On	Fixed to Tray 3 (HCF Tray 1)	N/A	NG
37	HCF 3.5 ADV 1st T1 FO SNR: Paper Pitch to HCF 3.5 ADV Tray 1 Feed Out Snr On	Fixed to Tray 3 (HCF Tray 1)	N/A	NG
38	HCF 3.5 ADV 1st T1 Exit SNR: HCF 3.5 ADV T1 Feed Out Snr On to HCF 3.5 ADV J-Tra Exit Snr On	Fixed to Tray 3 (HCF Tray 1)	N/A	NG
39	HCF 3.5 ADV 1st T2 PF SNR: Paper Pitch to HCF 3.5 ADV Tray 2 Pre Feed Out Snr On	Fixed to Tray 4 (HCF Tray 2)	N/A	NG
40	HCF 3.5 ADV 1st T2 FO SNR: Paper Pitch to HCF 3.5 ADV Tray 2 Feed Out Snr On	Fixed to Tray 4 (HCF Tray 2)	N/A	NG
41	HCF 3.5 ADV 1st T2 Exit SNR: HCF 3.5 ADV T2 Feed Out Snr On to HCF 3.5 ADV J-Tra Exit Snr On	Fixed to Tray 4 (HCF Tray 2)	N/A	NG
42	HCF 3.5 ADV 1st MBT PF SNR: Paper Pitch to HCF 3.5 ADV MBT Pre Feed Out Snr On	Fixed to HCF 1st MBT	N/A	NG
43	HCF 3.5 ADV 1st MBT FO SNR: Paper Pitch to HCF 3.5 ADV MBT Feed Out Snr On	Fixed to HCF 1st MBT	N/A	NG
44	HCF 3.5 ADV 1st MBT Exit SNR: HCF 3.5 ADV MBT 1st Feed Out Snr On to HCF 3.5 ADV J-Tra Exit Snr On	Fixed to HCF 1st MBT	N/A	NG
45	HCF 3.5 ADV 2nd T3 PF SNR: Paper Pitch to HCF 3.5 ADV Tray 3 Pre Feed Out Snr On	Fixed to Tray 5 (HCF Tray 3)	N/A	NG
46	HCF 3.5 ADV 2nd T3 FO SNR: Paper Pitch to HCF 3.5 ADV Tray 3 Feed Out Snr On	Fixed to Tray 5 (HCF Tray 3)	N/A	NG
47	HCF 3.5 ADV 2nd T3 T-Tra Exit Snr: Paper Pitch to T-Tra Exit Snr On (Tray 3)	Fixed to Tray 5 (HCF Tray 3)	N/A	NG
48	HCF 3.5 ADV 2nd T3 F-Tra Pre Regi Snr: Paper Pitch to F-Tra Pre Regi Snr On (Tray 3)	Fixed to Tray 5 (HCF Tray 3)	N/A	NG
49	HCF 3.5 ADV 2nd T3 F-Tra Regi Snr: Paper Pitch to F-Tra Regi Snr On (Tray 3)	Fixed to Tray 5 (HCF Tray 3)	N/A	NG
50	HCF 3.5 ADV 2nd T3 Exit Snr: HCF 3.5 ADV Tray 3 Feed Out Snr On to J-Tra Exit Snr On (Tray 3)	Fixed to Tray 5 (HCF Tray 3)	N/A	NG
51	HCF 3.5 ADV 2nd T4 PF SNR: Paper Pitch to HCF 3.5 ADV Tray 4 Pre Feed Out Snr On	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
52	HCF 3.5 ADV 2nd T4 FO SNR: Paper Pitch to HCF 3.5 ADV Tray 4 Feed Out Snr On	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
53	HCF 3.5 ADV 2nd T4 T-Tra Exit Snr: Paper Pitch to T-Tra Exit Snr On (Tray 4)	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
54	HCF 3.5 ADV 2nd T4 F-Tra Pre Regi Snr: Paper Pitch to F-Tra Pre Regi Snr On (Tray 4)	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
55	HCF 3.5 ADV 2nd T4 F-Tra Regi Snr: Paper Pitch to F-Tra Regi Snr On (Tray 4)	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
56	HCF 3.5 ADV 2nd T4 Exit Snr: HCF 3.5 ADV Tray 4 Feed Out Snr On to J-Tra Exit Snr On (Tray 4)	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
57	HCF 3.5 ADV 2nd MBT PF SNR: Paper Pitch to HCF 3.5 ADV 2nd MBT Pre Feed Out Snr On	Fixed to HCF 2nd MBT (CHCF)	N/A	NG
58	HCF 3.5 ADV 2nd MBT FO SNR: Paper Pitch to HCF 3.5 ADV 2nd MBT Feed Out Snr On	Fixed to HCF 2nd MBT (CHCF)	N/A	NG
59	HCF 3.5 ADV 2nd MBT T-Tra Exit Snr: Paper Pitch to T-Tra Exit Snr On (MBT)	Fixed to HCF 2nd MBT (CHCF)	N/A	NG
60	HCF 3.5 ADV 2nd MBT F-Tra Pre Regi Snr: Paper Pitch to F-Tra Pre Regi Snr On (MBT)	Fixed to HCF 2nd MBT (CHCF)	N/A	NG
61	HCF 3.5 ADV 2nd MBT F-Tra Regi Snr: Paper Pitch to F-Tra Regi Snr On (MBT)	Fixed to HCF 2nd MBT (CHCF)	N/A	NG
62	HCF 3.5 ADV 2nd MBT Exit Snr: HCF 3.5 ADV 2nd MBT Feed Out Snr On to HCF 3.5 ADV 2nd J-Tra Exit Snr On (MBT)	Fixed to HCF 2nd MBT (CHCF)	N/A	NG
63	HCF 3.5 ADV MBT Feed Out Snr: Paper Pitch to HCF 3.5 ADV MBT Feed Out Snr On (HCF Tray 3)	Fixed to Tray 5 (HCF Tray 3)	N/A	NG

Table 3 IOT Paper Path Timing Measurement Interval

Sensor ID	Measurement Interval	Tray	Remarks	Timing Adjustment at NVM
64	HCF 3.5 ADV MBT Feed Out Snr: Paper Pitch to HCF 3.5 ADV MBT Feed Out Snr On (HCF Tray 4)	Fixed to Tray 6 (HCF Tray 4)	N/A	NG
65	HCF 3.5 ADV MBT Feed Out Snr: Paper Pitch to HCF 3.5 ADV MBT Feed Out Snr On (MBT)	Fixed to HCF 2nd MBT (CHCF)	N/A	NG

Table 4 ASF Paper Path Timing Measurement Interval

Sensor ID	Measurement Interval	Tray	Remarks	Timing Adjustment at NVM
67	Tray3 Feed Out Sensor	Fixed to Tray3(HCF3.6Tray1)	N/A	NG
68	J-Tra Exit Sensor	Fixed to Tray3(HCF3.6Tray1)	N/A	NG
69	Tray4 Feed Out Sensor	Fixed to Tray4(HCF3.6Tray2)	N/A	NG
70	J-Tra Exit Sensor	Fixed to Tray4(HCF3.6Tray2)	N/A	NG
71	MBT Pre Feed Out Sensor	Fixed to HCF3.6 MBT 1st	N/A	NG
72	HCF1 MBT Feed Out Sensor	Fixed to HCF3.6 MBT 1st	N/A	NG
73	J-Tra Exit Sensor	Fixed to HCF3.6 MBT 1st	N/A	NG
74	Tray5 Feed Out Sensor	Fixed to Tray5(HCF3.6Tray3)	N/A	NG
75	T-Tra Exit Sensor	Fixed to Tray5(HCF3.6Tray3)	N/A	NG
76	F-Tra Pre Regi Sensor	Fixed to Tray5(HCF3.6Tray3)	N/A	NG
77	F-Tra Regi Sensor	Fixed to Tray5(HCF3.6Tray3)	N/A	NG
78	HCF1 MBT Feed Out Sensor	Fixed to Tray5(HCF3.6Tray3)	N/A	NG
79	J-Tra Exit Sensor	Fixed to Tray5(HCF3.6Tray3)	N/A	NG
80	Tray6 Feed Out Sensor	Fixed to Tray6(HCF3.6Tray4)	N/A	NG
81	T-Tra Exit Sensor	Fixed to Tray6(HCF3.6Tray4)	N/A	NG
82	F-Tra Pre Regi Sensor	Fixed to Tray6(HCF3.6Tray4)	N/A	NG
83	F-Tra Regi Sensor	Fixed to Tray6(HCF3.6Tray4)	N/A	NG
84	HCF1 MBT Feed Out Sensor	Fixed to Tray6(HCF3.6Tray4)	N/A	NG
85	J-Tra Exit Sensor	Fixed to Tray6(HCF3.6Tray4)	N/A	NG
86	MBT Pre Feed Out Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG
87	HCF2 MBT Feed Out Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG
88	T-Tra Exit Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG
89	F-Tra Pre Regi Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG
90	F-Tra Regi Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG
91	HCF1 MBT Feed Out Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG
92	J-Tra Exit Sensor	Fixed to HCF3.6 MBT 2nd	N/A	NG

About the Finisher Group Paper Path Timing Measurement List (Group ID and Sensor ID)

NOTE:

- **4: Finisher Group ID gathers Sensor ID from maximum of 10 locations and can be used for simultaneous measurement. After the Paper Feed is finished, the Measurement Data of each Sensor ID (Data by Layer, Measurement Data by Printing Sides) can be checked on the UI Screen.*
- **5: The Finisher Group Sensor ID 1701 to 1710 are for the Finisher internals, 1711 to 1717 are for the Folder internals, and you can refer to the following Table (Table 4) for the contents of the Finisher Group Sensor ID.*
- **6: There is no reference measurement time in the following Table (Table 4) for Measurement Time [ms] as the paper insertion speed differs depending on the combination of the Finisher Group function modules. However, performing the Measure Paper Path Timing screen will sort and display the actual measured Measurement Data by layer. The threshold value and total (measurement count) by layer [ms] correspond to (from the top) Min: Early Lower Limit Value, Low: Early Warning Value, Standard: Desired Value, High: Warning Value, and Max: Jam Timer Value.*

Table 5 Finisher Group Paper Path Timing Measurement List (Group ID and Sensor ID)

			Sensor ID*5									
			Folder						Finisher (Booklet)			
Group ID*4	Measurement Interval	Tray	1	2	3	4	5	6	7	8	9	10
801	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	-	-	-	-	-	-	1701	1702	1708	1705
802	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	-	-	-	-	-	-	1701	1702	1707	1705
803	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	-	-	-	-	-	-	1701	1702	1709	1706
804	Exit Sensor On of preceding module to Compile Exit Sensor On -> Fixed to Stacker Tray	Stacker Tray	-	-	-	-	-	-	1701	1702	1708	-
805	Exit Sensor On of preceding module to Compile Exit Sensor On -> Fixed to Stacker Tray	Stacker Tray	-	-	-	-	-	-	1701	1702	1707	-
806	Exit Sensor On of preceding module to Booklet In Sensor Off -> Fixed to Booklet Tray	Booklet Tray	-	-	-	-	-	-	1701	1702	1709	1710
807	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	1711	1717	-	-	-	-	1701	1702	1704	1705
808	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	1011	1717	-	-	-	-	1701	1702	1703	1705
809	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	1711	1717	-	-	-	-	1701	1702	1703	1706
810	Exit Sensor On of preceding module to Compile Exit Sensor On -> Fixed to Stacker Tray	Stacker Tray	1711	1717	-	-	-	-	1701	1702	1708	-
811	Exit Sensor On of preceding module to Compile Exit Sensor On -> Fixed to Stacker Tray	Stacker Tray	1711	1717	-	-	-	-	1701	1702	1707	-
812	Exit Sensor On of preceding module to Booklet In Sensor Off -> Fixed to Booklet Tray	Booklet Tray	1711	1717	-	-	-	-	1701	1702	1709	1710
813	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	1711	1712	1713	1714	1715	1716	1701	1702	1704	1705
814	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	1711	1712	1713	1714	1715	1716	1701	1702	1703	1705
815	Exit Sensor On of preceding module to Top Tray Exit Sensor On -> Fixed to Top Tray	Top Tray	1711	1712	1713	1714	1715	1716	1701	1702	1703	1706
816	Exit Sensor On of preceding module to Compile Exit Sensor On -> Fixed to Stacker Tray	Stacker Tray	1711	1712	1713	1714	1715	1716	1701	1702	1708	-

Table 5 Finisher Group Paper Path Timing Measurement List (Group ID and Sensor ID)

Group ID*4	Measurement Interval	Tray	Sensor ID*5									
			Folder						Finisher (Booklet)			
			1	2	3	4	5	6	7	8	9	10
817	Exit Sensor On of preceding module to Compile Exit Sensor On -> Fixed to Stacker Tray	Stacker Tray	1711	1712	1713	1714	1715	1716	1701	1702	1707	-
818	Exit Sensor On of preceding module to Folder Path Sensor 3 On -> Fixed to Env Tray	Envelop Tray	1711	1712	1713	1714	-	-	-	-	-	-

Table 6 Finisher Group Paper Path Timing Measurement Interval and Measurement Time

Sensor ID	UI Display Name	Measurement Interval		Output Tray	Measurement Conditions	Measurement Time [ms] *6
		Start	End			
1701	Finisher In	Exit Sensor ON of preceding module	Finisher In Sensor ON	• Top Tray • Stacker Tray • Booklet Tray	All paper/Invert output	-
1702	DP Path	Finisher In Sensor ON	DP Path Snr ON (Punch Out Snr ON)	• Top Tray • Stacker Tray • Booklet Tray	All paper/Invert output	-
1703	Top Path	DP Path Snr ON (Punch Out Snr ON)	Top Path Snr ON	Top Tray	Other than (With Punch control and L < = 190 mm)	-
1704	Top Path	DP Path Snr ON (Punch Out Snr ON)	Top Path Snr ON	Top Tray	With Punch control and L < = 190 mm	-
1705	Top Tray Exit	Top Path Snr ON	Top Tray Exit Snr ON	Top Tray	Other than (With Punch control and 190 < = L < = 329)	-
1706	Top Tray Exit	Top Path Snr ON	Top Tray Exit Snr ON	Top Tray	With Punch control and 190 < = L < = 329	-
1707	Compile Exit	DP Path Snr ON (Punch Out Snr ON)	Compile Exit Snr ON	Stacker Tray	Other than (With Punch control and 357 < = L) • When buffer is 1 sheet, at the 3rd sheet of the set or later • When buffer is 2 sheets, at the 4th sheet of the set or later	-
1708	Compile Exit	DP Path Snr ON (Punch Out Snr ON)	Compile Exit Snr ON	Stacker Tray	With Punch control and 357 < = L • When buffer is 1 sheet, at the 3rd sheet of the set or later • When buffer is 2 sheets, at the 4th sheet of the set or later	-
1709	Booklet In	DP Path Snr ON (Punch Out Snr ON)	Booklet In Snr ON	• Booklet Tray	Straight output • Although usually based on Invert output (Simplex), this is calculated using Straight output as Booklet Jobs are mainly Duplex	-
1710	Booklet In	Booklet In Snr ON	Booklet In Snr OFF	Booklet Tray	When buffer is 1 sheet, at the 3rd sheet of the set or later	-
1711	Folder Exit	Exit Sensor ON of preceding module	Folder Entrance Sensor ON	• Env Tray • Stacker Tray	Invert output	-

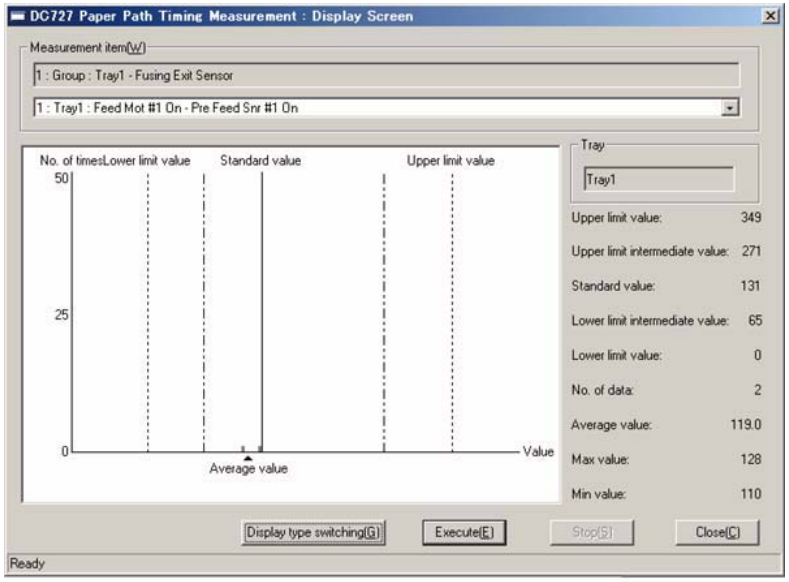
Table 6 Finisher Group Paper Path Timing Measurement Interval and Measurement Time

Sensor ID	UI Display Name	Measurement Interval		Output Tray	Measurement Conditions	Measurement Time [ms] *6
		Start	End			
1712	Folder Path 1	Folder Entrance Sensor ON	Folder Path Sensor 1 ON	• Env Tray • Top Tray • Stacker Tray	Invert output	-
1713	Folder Path 2	Folder Path Sensor 1 ON	Folder Path Sensor 2 ON	• Env Tray • Top Tray • Stacker Tray	All	-
1714	Folder Path 3	Folder Path Sensor 2 ON	Folder Path Sensor 3 ON	• Env Tray • Top Tray • Stacker Tray	All	-
1715	Folder Path 4	Folder Path Sensor 3 ON	Folder Path Sensor 4 ON	• Top Tray • Stacker Tray	All	-
1716	Folder Exit	Folder Path Sensor 4 ON	Folder Exit Sensor ON	• Top Tray • Stacker Tray	All	-
1717	Folder Exit	Folder Entrance Sensor ON	Folder Exit Sensor ON	• Top Tray • Stacker Tray • Booklet Tray	Invert output and no folding	-

NOTE: *When performing timing measurement, clean the Crossed Roll of the Aliger.*

NOTE: *Upon performing timing measurement, the NVM optimal value will be calculated. Selecting [Update to the Optimal Adjustment Value] writes the optimal feed timing into the NVM.*

5. Set the number of copies. (Default: 30 sheet, Settable Range: 1 to 99)
6. When Any Tray is selected for Measurement timing type, select the Tray to specify.
7. Specify the Display Type (Histogram or Scatter Diagram) as required. (Default: Histogram)
8. Select [Execute].
9. The machine begins measurement, the message: "In progress..." is displayed on the bottom left screen, and the screen is switched to the Paper Path Timing Measurement: Display Screen. (Histogram: Figure 2, Scatter Diagram: Figure 3)
10. After the copy operation for the specified no. of copies is completed, the bottom left of the screen will display
    - Completed successfully: The message: "Execution Completed".
    - Not completed successfully: The message: "Execution Completed" before switching to the message screen as described below.
    - <Histogram>



j0cx640023

Figure 2 j0cx640023

- <Scatter Diagram>

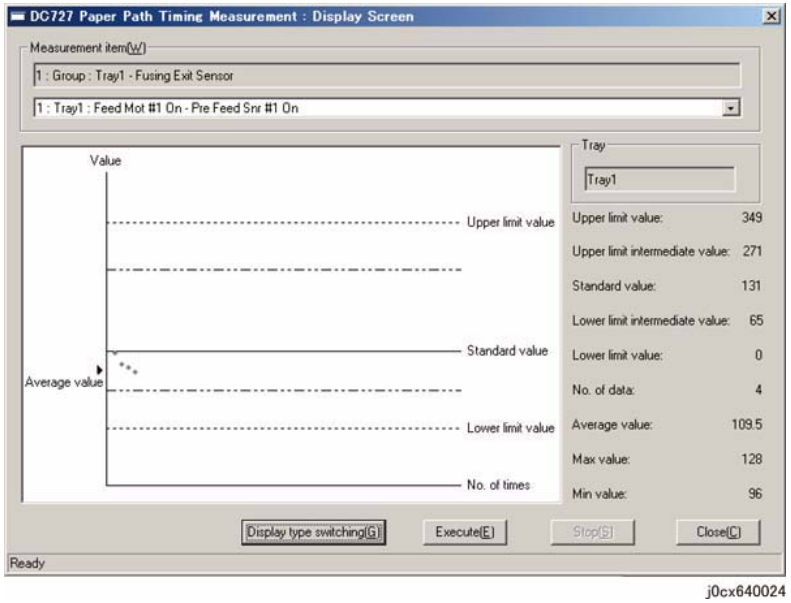


Figure 3 j0cx640024

NOTE:

- *Display the Measurement Item and Tray. Does not display the paper type.*
- *The graph display, No. of Data, Average Value, Maximum Value, Minimum Value, and the position of triangle mark that indicates the Average Value are updated every time data is obtained/processed.*
- *The [Display type switching] is always available for selection.*
- *When [Stop] is selected, the data obtained before the selection will be used and displayed.*
- *When jam occurs during measurement, only the data measured before the jam will be displayed. Clear the jam and execute again.*

  Data is not displayed when jam has occurred. The graph is displayed after the job of the specified no. of copies is completed.
- *Unit: ms*

11. Select [Close].
12. The Paper Path Timing Measurement: Display Screen will be closed and the Paper Path Timing Measurement Screen is displayed.
13. After the Paper Path Timing Measurement check is completed, select [Close] to return to the Subsystem Check screen.

6.4.22 DC740 MBT Guide Adjustment

Purpose

This is a CE oriented function for adjusting the Size Detection Sensor in the MBT width direction.

Overview

- To set and confirm the size detection correction value in the MBT width direction.
  - To set the sensor output values for the maximum and minimum positions for the MBT Guide using NVM.
  - To display the detected size in the width direction of the MBT Guide.

NOTE: *This adjustment is performed during MBT Size Sensor replacement and when a size detection error occurs.*

NOTE: *For detailed procedures, refer to* ADJ 18.1.16 *in Chapter 4.*

Procedure

1. Start up the PC-Diag, select [Subsystem Check], and click [DC740] MBT Guide Adjustment.
2. The MBT Guide Adjustment Screen is displayed.
3. On the screen, select [Minimum Value Setting], [Maximum Value Setting], or [Guide Test].
4. When [Minimum Value Setting] is selected.
   (1) Align the MBT Paper Guides to the minimum position.
   (2) Click [Execute].
   - If the sensor output value is within the specified range, [OK] will be displayed.

     At the same time, the NVM [518-192] MBT Side Guide Minimum Position data is changed.
   - If the sensor output value is out of the specified range, [NG] will be displayed.

     If [NG], check the guide position and try again.
5. When [Maximum Value Setting] is selected.
   (1) Align the MBT Paper Guides to the maximum position.
   (2) Click [Execute].
   - If the sensor output value is within the specified range, [OK] will be displayed.

     At the same time, the NVM [518-193] MBT Side Guide Maximum Position data is changed.
   - If the sensor output value is out of the specified range, [NG] will be displayed.

     If [NG], check the guide position and try again.
6. When [Guide Test] is selected.
   (1) Align the MBT Paper Guides to the size that you want to check.
   (2) Click [Execute].
   (3) The paper width size is displayed.
7. Select [Close] to return to the Subsystem Check screen.

6.4.23 DC750 CIS Setup Cycle

Purpose

Performs the optimization of the parameter value for the CIS Edge Detection.

NOTE: *This Setup optimizes the LED Light Amount and saves parameter values in the NVM during CIS Sensor and Regi Unit replacement.*

NOTE: *For details on the adjustment procedure of DC750, refer to ADJ 15.15.1 in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC750. (Figure 1)

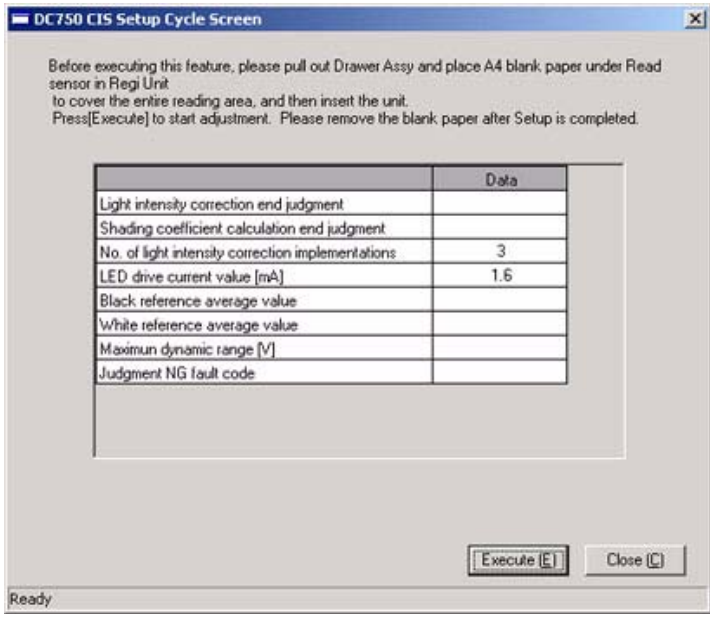

DC750 CIS Setup Cycle Screen
Before executing this feature, please pull out Drawer Assy and place A4 blank paper under Read sensor in Regi Unit
to cover the entire reading area, and then insert the unit.
Press[Execute] to start adjustment. Please remove the blank paper after Setup is completed.
Data
Light intensity correction end judgment
Shading coefficient calculation end judgment
No. of light intensity correction implementations
3
LED drive current value [mA]
1.6
Black reference average value
White reference average value
Maximun dynamic range [V]
Judgment NG fault code
Execute (E)
Close (C)
Ready

Figure 1 j0cm64030

3. Open the Front Door, pull out the Drawer Assy and manually insert paper into the CIS Sensor section. With the paper inserted, push in the Drawer Assy and close the Front Door.
4. On the Diag screen, click [Execute]. This starts the adjustment.
5. The adjustment results are displayed on the screen.
   - When NG: A Fault Code is displayed and you can refer to the FIP in Chapter 2 to make repairs.

6.4.24 DC751 CIS Check Cycle

Purpose

Performs checking for the edge detection function. It is a cycle to check whether the detection system is operating normally.

NOTE: *Perform this Setup when the Fail Code, etc. is displayed.*

NOTE: *For details on the adjustment procedure of DC751, refer to ADJ 15.15.2 in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC751. (Figure 1)

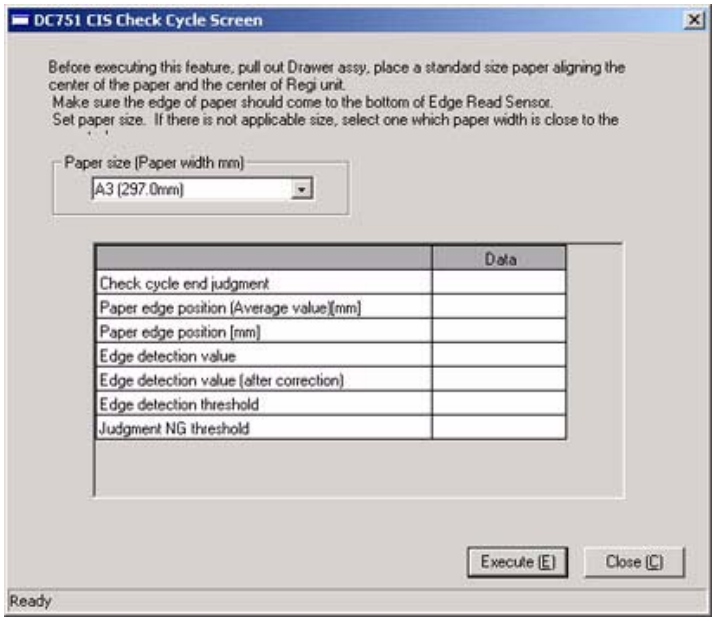

DC751 CIS Check Cycle Screen
Before executing this feature, pull out Drawer assy, place a standard size paper aligning the center of the paper and the center of Regi unit.
Make sure the edge of paper should come to the bottom of Edge Read Sensor.
Set paper size. If there is not applicable size, select one which paper width is close to the
Paper size [Paper width mm)
A3 (297.0mm)
Data
Check cycle end judgment
Paper edge position (Average value)[mm]
Paper edge position [mm]
Edge detection value
Edge detection value (after correction)
Edge detection threshold
Judgment NG threshold
Execute (E)
Close (C)
Ready

Figure 1 j0cm64031

3. Open the Front Door and pull out the Drawer Assy.
4. Fold the paper to measure in half, then align the crease to the mark at the Guide of the machine and manually insert it.
5. With the paper inserted, push in the Drawer Assy and close the Front Door.
6. On the Diag screen, click [Execute]. This starts the adjustment.
7. The adjustment results are displayed on the screen.
   - When NG: A Fault Code is displayed and you can refer to the FIP in Chapter 2 to make repairs.

6.4.25 DC800 ADC Sensor Setup

Purpose

To set the ADC Tone Target Correction Amount that corresponded to the ADC Sensor individual difference from the designated Tone Chart density color measurement value and ADC Tone measurement value.

Overview

- To correct the individual difference of ADC Sensor.
- To manually enter the density measurement value of color measurement chart and set it into the NVM.
- Colorimetric chart: Calculates the ADC sensor Cin 100% gradation target value (ADC sensor white detection correction amount in White mode) from the density value (L* value in White mode), and displays it on the screen.
- Perform during replacement of ADC Sensor.

NOTE: *DC800 White ADC Setup can be substituted by running DC807.*

NOTE: *After adjusting the ADC sensor sensitivity used for white toner control using DC807 White ADC Sensitivity Correction Cycle, do not perform adjustment with Adjustment Mode [White] of DC800 ADC Sensor Setup as the adjusted value set by the DC807 White ADC Sensitivity Correction Cycle will be overwritten.*

NOTE: *In the absence of the following standard paper, do not perform DC800.*

- *Standard paper : J paper (82 gsm)*
- *Standard paper for white: Black paper standard paper (use Kishu color bond black extra heavyweight paper)*

NOTE: *For details on the adjustment procedure of DC800, refer to* ADJ 18.1.13 *in Chapter 4.*

Procedure

1. Start up the PC-Diag, select [IQ adjustment], and click [DC800] ADC Sensor Setup.
2. The ADC Sensor Setup Screen is displayed. (Figure 1)
   - When [Adjustment mode] is pulled down, [YMCK] mode and [White] mode can be selected.

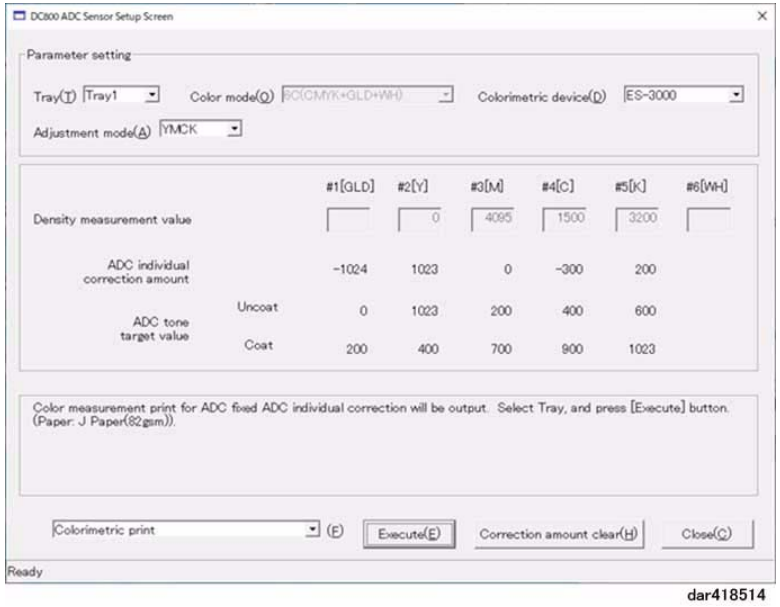

DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O)
Colorimetric device(D) ES-3000
Adjustment mode(A) YMCK
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
Density measurement value
0 4095 1500 3200
ADC individual correction amount
-1024 1023 0 -300 200
ADC tone target value
Uncoat 0 1023 200 400 600
Coat 200 400 700 900 1023
Color measurement print for ADC fixed ADC individual correction will be output. Select Tray, and press [Execute] button.
(Paper: J Paper(82gsm)).
Colorimetric print
(E) Execute(E) Correction amount clear(H) Close(C)
Ready
dar418514

Figure 1 dar418514

3. In the case of [YMCK] adjustment mode, proceed to Step 4. In the case of [White] adjustment mode, proceed to Step 8.
4. Select [Colorimetric print], set the Tray and Colorimetric device in the Parameter setting column, then click [Execute]. (Figure 1)
   - Tray: Select a Tray loaded with A3 SEF (J paper).
   - Colorimetric device: Select the Spectrophotometer to use.
5. Select [ADC individual correction amount setting], use a Spectrophotometer to measure the YMCK Color Patch density at the center of the PG that was output by [Colorimetric print], select the Spectrophotometer that was used from the pull-down menu, round the measured density value to the 3rd decimal place and multiply it by 1000 for entry in the range of 0 to 4095, and click [Execute]. (Figure 2)
   - For example, if the density value is 1.643, enter [1643] in the density measurement value column.

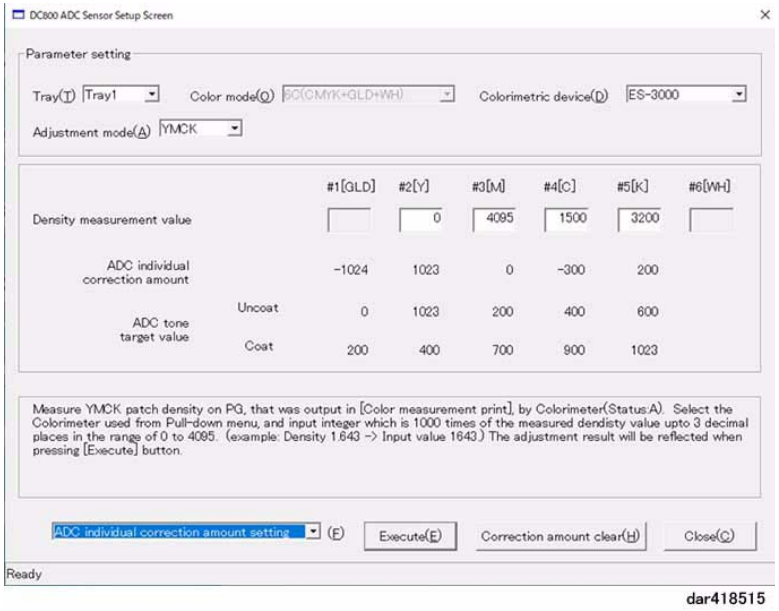

DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+WH)
Colorimetric device(D) ES-3000
Adjustment mode(A) YMCK
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
Density measurement value 0 4095 1500 3200
ADC individual correction amount -1024 1023 0 -300 200
ADC tone target value Uncoat 0 1023 200 400 600
Coat 200 400 700 900 1023
Measure YMCK patch density on PG, that was output in [Color measurement print], by Colorimeter(Status:A). Select the Colorimeter used from Pull-down menu, and input integer which is 1000 times of the measured dendisty value upto 3 decimal places in the range of 0 to 4095. (example: Density 1.643 -> Input value 1643.) The adjustment result will be reflected when pressing [Execute] button.
ADC individual correction amount setting
(E)
Execute(E)
Correction amount clear(H)
Close(C)
Ready
dar418515

Figure 2 dar418515

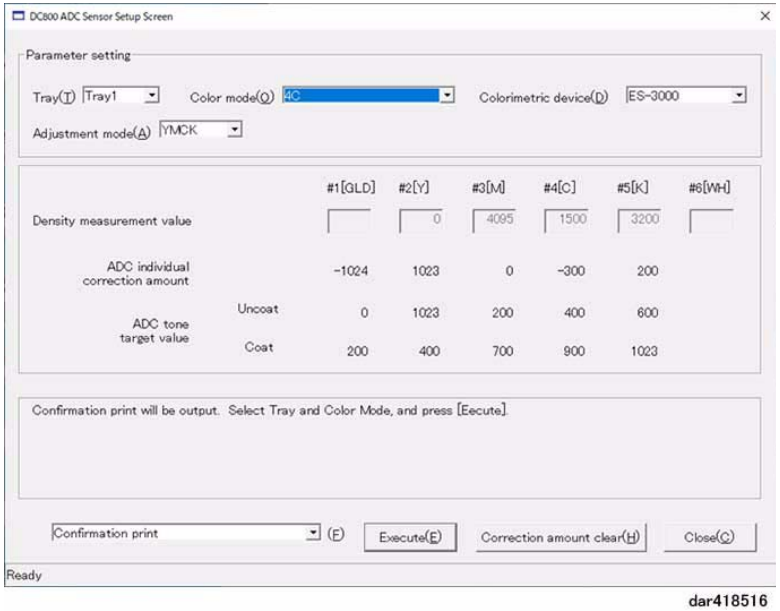

DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 4C
Colorimetric device(D) ES-3000
Adjustment mode(A) YMCK
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
Density measurement value 0 4095 1500 3200
ADC individual correction amount -1024 1023 0 -300 200
ADC tone target value Uncoat 0 1023 200 400 600
Coat 200 400 700 900 1023
Confirmation print will be output. Select Tray and Color Mode, and press [Execute].
Confirmation print
(E)
Execute(E)
Correction amount clear(H)
Close(C)
Ready
dar418516

Figure 3 dar418516

6. Select [Confirmation print], set the Tray, Color Mode in the Parameter setting column, then click [Execute]. (Figure 3)
   - Tray: Select a Tray loaded with A3 SEF (J paper).
   - Color Mode: 4C.

   When selecting a Color Mode that includes only the #2, #3, #4, and #5 Engines, output Procon PG #2 to 5; when selecting a Color Mode that includes #1 and #6 Engines, output both Procon PG #2 to 5 and Procon PG #1 and 6 as 1 set.
7. Use a Spectrophotometer to measure the K Color Patch density at the center of the printout and, if it is at the desired density, end the adjustment. If there is a problem, adjust by using DC900 TRC Manual Adjustment (ADJ 18.1.8).
8. The following are the procedures for the [White] adjustment mode.
9. Select [Colorimetric print], set the Tray, Color Mode, and Colorimetric device in the Parameter setting column, then click [Execute]. (Figure 4)
   - Tray: Select a Tray loaded with black standard paper.
   - Color Mode: When white is installed in Toner #1 engine, 6C, 5C#1 is selectable, and when it is installed in #6 engine, 6C, 5C#6 can be selected.
   - Colorimetric device: Select the Spectrophotometer to use.

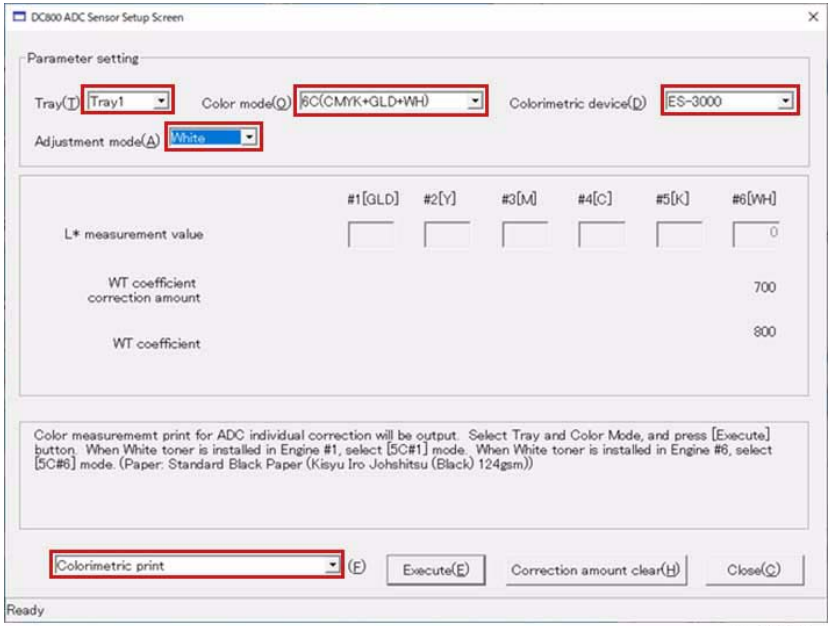
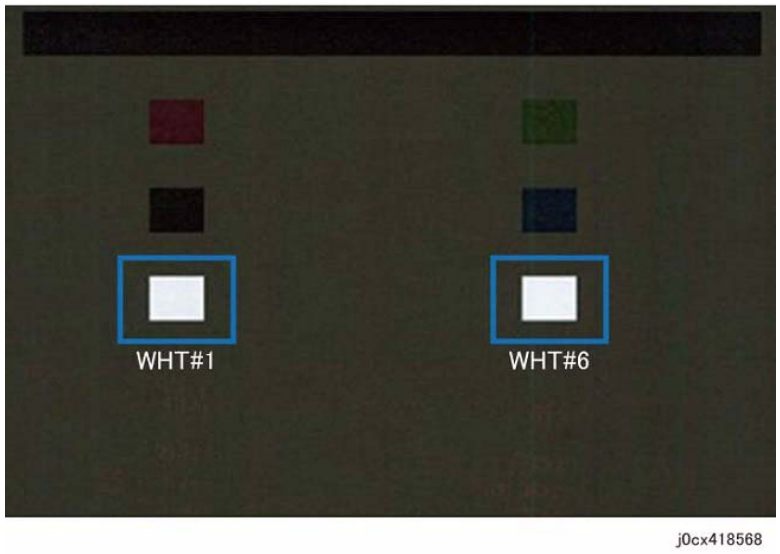

DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+WH)
Colorimetric device(D) ES-3000
Adjustment mode(A) White
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[WH]
L* measurement value
0
WT coefficient correction amount
700
WT coefficient
800
Color measurememt print for ADC individual correction will be output. Select Tray and Color Mode, and press [Execute] button. When White toner is installed in Engine #1, select [5C#1] mode. When White toner is installed in Engine #6, select [5C#6] mode. (Paper: Standard Black Paper (Kisyu Iro Johshitsu (Black) 124gsm))
Colorimetric print
(E)
Execute(E)
Correction amount clear(H)
Close(C)
Ready
dar418517

Figure 4 dar418517

10. Measure patch L* of center portion WHT#1, WHT#6 of PG output by [Colorimetric print] with colorimeter. (Figure 5)



j0cx418568

Figure 5 j0cx418568

11. Select [ADC individual correction amount setting], and select the colorimeter used by pull-down. In the L* colorimetric value column, enter the measured lightness L* value (standard range: 70 to 74) up to the first decimal place as an integer value, in the range of 0 to 1023 with a 10-fold value and press the [Execute] button. (Figure 6)
    - For example, if the measured L* value in ES-3000 of the patch of WHT#6 is 72.3, enter [723] in the field of #6 [Wh] of [L* measured value].

NOTE: *Enter respectively for WHT#1: IN patch colorimetric value, WHT#6: OUT color patch colorimetric value. In addition, if only WHT#1 is within the target L*, and when only the adjustment value of WHT#6 is entered and executed subsequently, take note that deviation from the original adjustment will occur because the correction amount is calculated at the same time for WHT#1 with the update setting.*

NOTE: *Do not press the [Enter] key on the keyboard after entering the L* measurement value. Also, click on the [Execute] button only once. Should you press the [Enter] key or press the [Execute] button twice, execute DC800 ADC Sensor Setup from the beginning without pressing the [Correction Amount Clear] button.*

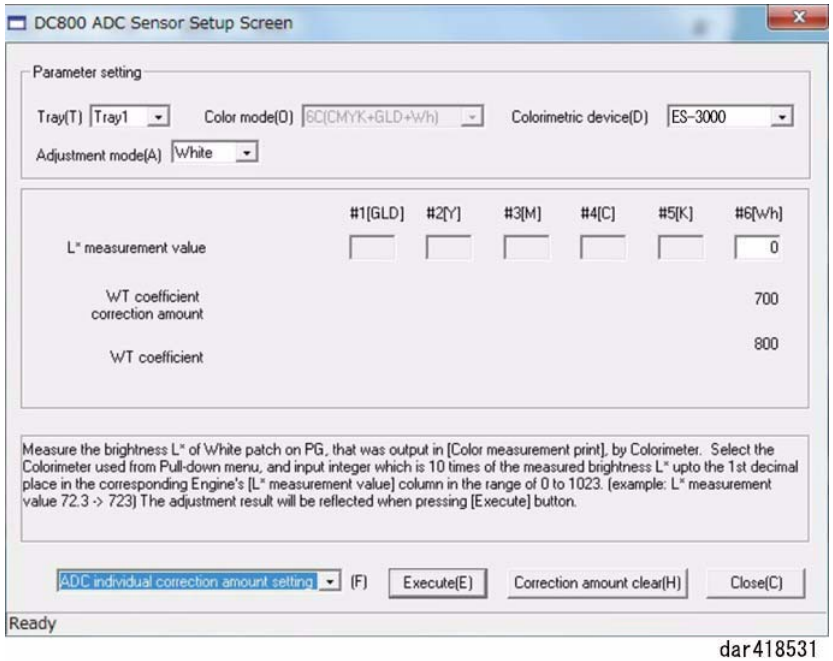

DC800 ADC Sensor Setup Screen
Parameter setting
Tray(T) Tray1
Color mode(O) 6C(CMYK+GLD+Wh)
Colorimetric device(D) ES-3000
Adjustment mode(A) White
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[Wh]
L* measurement value
0
WT coefficient correction amount
700
WT coefficient
800
Measure the brightness L* of White patch on PG, that was output in [Color measurement print], by Colorimeter. Select the Colorimeter used from Pull-down menu, and input integer which is 10 times of the measured brightness L* upto the 1st decimal place in the corresponding Engine's [L* measurement value] column in the range of 0 to 1023. (example: L* measurement value 72.3 -> 723) The adjustment result will be reflected when pressing [Execute] button.
ADC individual correction amount setting
(F)
Execute(E)
Correction amount clear(H)
Close(C)
Ready
dar418531

Figure 6 dar418531

12. Select [Confirmation print], set the Tray, Color Mode in the Parameter setting column, then click [Execute]. (Figure 7)
    - Tray: Select a Tray loaded with Black paper standard paper
    - Color Mode: Any

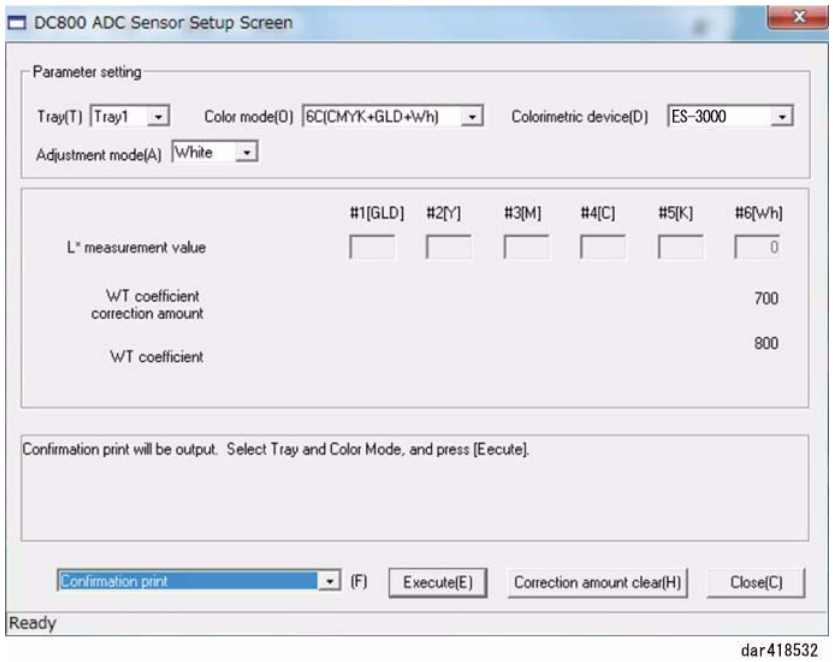


Figure 7 dar418532

NOTE: *Both ProconPG#2-5, ProconPG#1, 6 is output as 1 set by executing [Test print].*

13. Among the prints which are output, use a Spectrophotometer to measure the patches L* of WHT#1 and WHT#6 of ProconPG# 1, 6 shown in Figure 8, and if it is the desired colorimetric value, end the adjustment. If there is a problem, adjust by using DC900 TRC Manual Adjustment (ADJ 18.1.8).

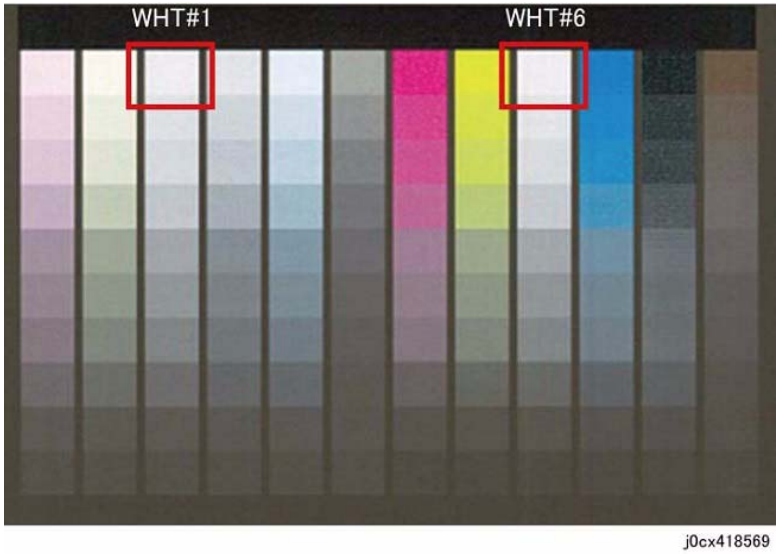


Figure 8 j0cx418569

6.4.26 DC801 User Dmax Adjustment

Purpose

This is a User oriented function for adjusting the density at Beta section when an image quality defect, such as Dmax density error/dropping FI, has occurred. It adjusts the ADC Potential Target and ADC Tone Target for Potential Control according to the adjustment value.

Overview

- To calculate the correction amount of ADC Potential Target and Tone Target from the adjustment value of the Engine that performs the specified density adjustment and write it into the NVM.

NOTE: *For details on the adjustment procedure of DC801, refer to* ADJ 18.1.14 *in Chapter 4.*

Procedure

1. Start up the PC-Diag, select [IQ adjustment], and click [DC801] User Dmax Adjustment.
2. The User Dmax Ajustment Screen is displayed. (Figure 1)
   - When [Paper type] is pulled down, Uncoated/Coated can be selected.

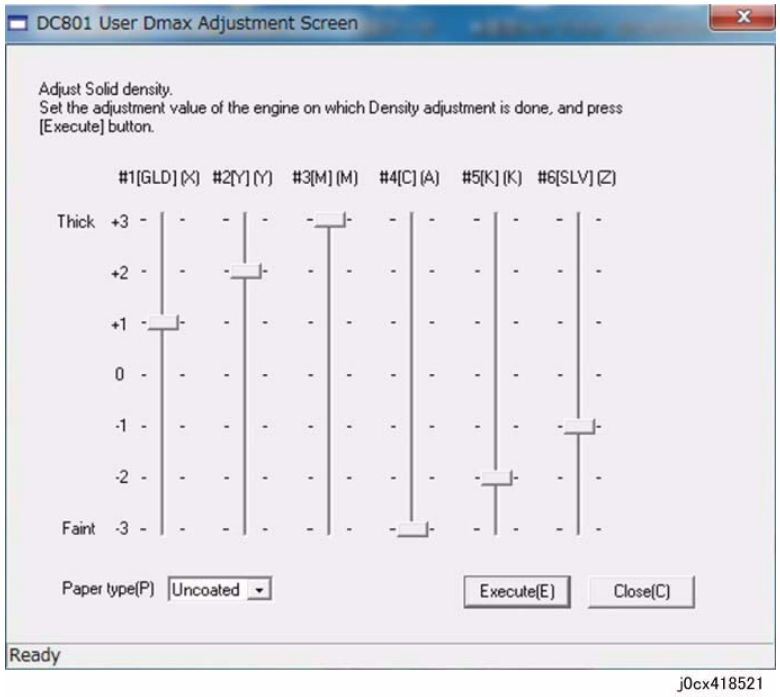


Figure 1 j0cx418521

3. Select the paper type to perform density adjustment, set the adjustment value of the Engine that performs the density adjustment and click [Execute].
4. Use DC612 Test Pattern Print or DC900 TRC Manual Adjustment (ADJ 18.1.8) to output the TRC Check PG and check the density.

6.4.27 DC802 Deve Mixing

Purpose

This is a function that is executed during CE installation or at the occurrence of Deve Motor Fail to eliminate an increase in developer mixing load due to developing powder compaction caused by vibrations of the transporting device. Performing this Diag mixes the developing powder in the Developer Housing Assy to avoid the occurrence of Deve Motor Fail.

Overview

- Along with the start of Diag execution, the Transfer Component is retracted and then the Developer Housing Assy is driven to repeat forward rotation/reverse rotation operations for the designated number of times.

NOTE: *For details on the adjustment procedure of DC802, refer to* ADJ 5.1.1 *in Chapter 4.*

Procedure

1. Start up the PC-Diag, select [Subsystem Check], and click [DC802] Deve Mixing.
2. When the DC802 screen is open, the selection screen for Toner Color (Engine) that is the target for execution is displayed. (Figure 1)

   NOTE: *The Toner Color (Engine) that is not installed will not be selectable.*

j0cx640025

Figure 1 j0cx640025

3. Select the Toner Color (Engine) that is the target for execution and click [Execute].

   NOTE: *Multiple Toner Colors (Engines) can be selected.*

   NOTE: *The Interlock state is detected and this operation will be prohibited if any of the following conditions are met. Furthermore, if this is detected in the middle of an operation, it will be stopped immediately.*

   - *When the Service Interlock is not cheated,*
     (1) The Front Interlock is Open
     (2) The Big Module Interlock is Open
     (3) The IBT Drawer Interlock is Open
4. After the operation is completed and the message indicating that it has is displayed, click [Close].

6.4.28 DC803 Xfer 2nd BTB In/Out Nip Adjustment

Purpose

- To correct the In/Out difference of 2nd BTB Nip.
- Perform during M/C manufacturing, or Backup Roll Assembly, IBT Drawer Assembly replacement.

Overview

- Starting this Diag performs printing up to the designated number of sheets while reducing the 2nd BTB bite amount (Nip). Check the printed samples and enter the number of prints directly before the appearance of uneven density at In and Out respectively to have the appropriate In/Out correction amount calculated and set to the adjustment NVM.

NOTE: *For details on the adjustment procedure of DC803, refer to* ADJ 6.1.1 *in Chapter 4.*

Procedure

1. Load J paper (A3 or 11x17) into Tray 1.
2. Perform DC957 Xfer Monitor (Vmoni Change-point Detection). (6.4.40)
   (Color Mode: 4C)
3. Close DC957 and start up DC803 Xfer 2nd BTB In/Out Nip Adjustment.
4. The Xfer 2nd BTB In/Out Nip Adjustment screen is displayed. (Figure 1)

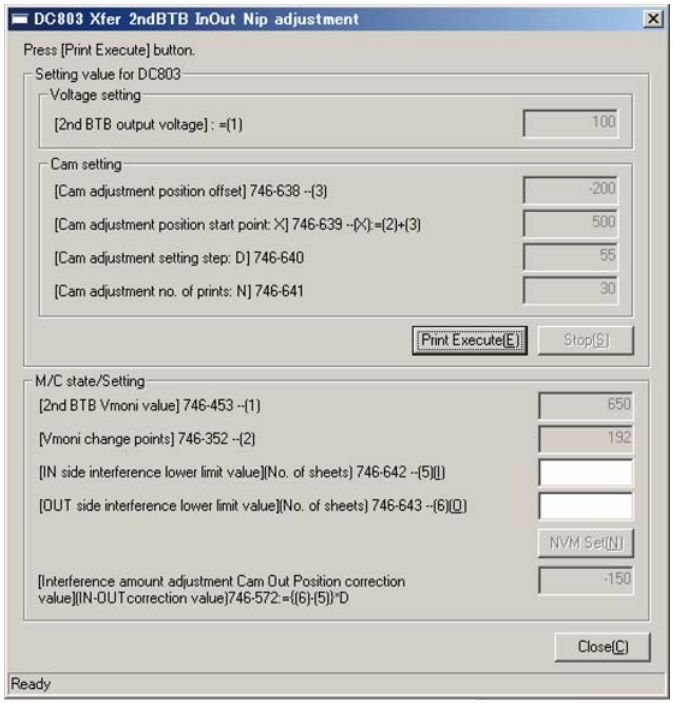


Figure 1 j0cx640026

5. Click [Print Execute].
   "In progress" is displayed and 8 sheets of samples are printed while reducing the bite amount (Nip).
6. Visually check the print condition at the In/Out sides of the 8 sheets of samples that were output. (Figure 2)

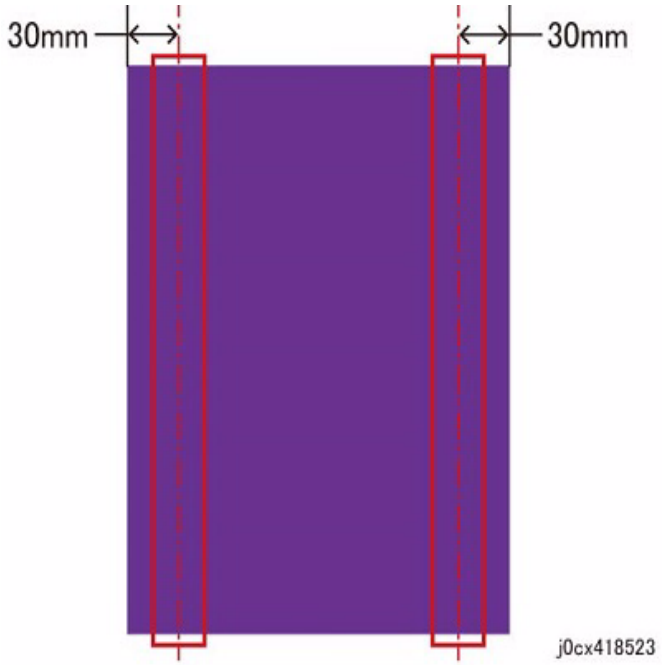


Figure 2 j0cx418523

7. Decide at which page (Xth sheet) the density starts lightening at the following evaluation positions. (Figure 3)

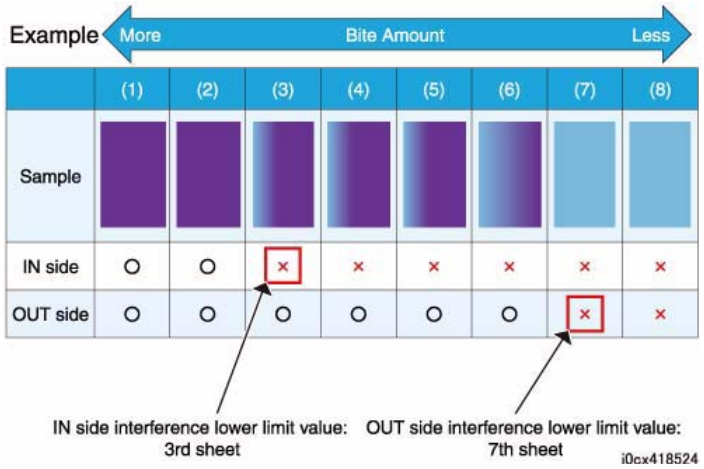
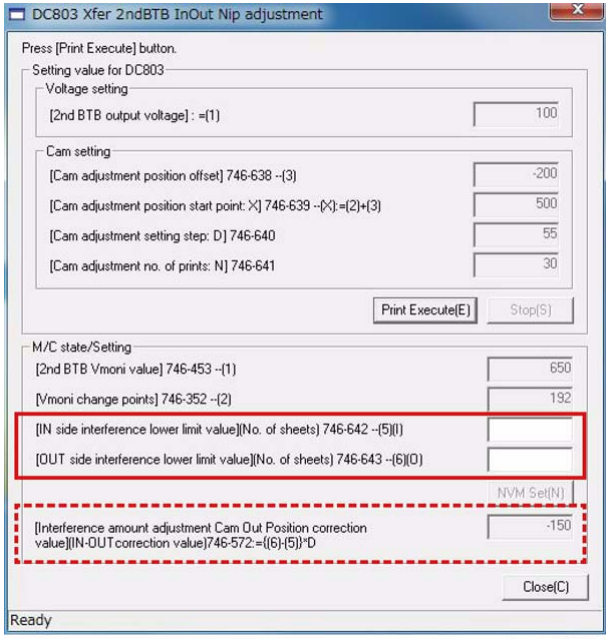


Figure 3 j0cx418524

8. Enter the following values that were decided by looking at the samples into the DC803 screen. (Figure 4)
   - [IN side interference lower limit value] (No. of sheets) Chain-Link (746-642)--(5)
   - [OUT side interference lower limit value] (No. of sheets) Chain-Link (746-643)--(6)
9. Clicking [NVM Set] calculates the appropriate value and automatically sets it to [Bite Amount Adjustment Cam Out Position Correction Value] (In/Out Correction Amount) 746-572: = [(6) - (5)] * D. (Figure 4)

   NOTE: *About the corrective action when IN-OUT correction amount: (746-572) = |110| or |132|*
   - *If there is no problem in image quality when IN-OUT correction amount: (746-572) = |110|, adjust [OUT side interference lower limit value] (Sheet No.) Chain - Link (746-643)--(6) so that it becomes |88|. At this time, in order to for the positive/negative sign not to change, if the IN-OUT correction amount: (746-572) = |-110|, carefully adjust so that it becomes |-88| and if |110|, so that it becomes |88|.*
   - *When the IN-OUT correction amount: (746-572) = |132|, it becomes NG. In this case, Contact the Support Department for instructions.*



j0cx640027

Figure 4 j0cx640027

10. Close DC803 and perform DC957 Xfer Monitor (Vmoni Change-point Detection). (Color Mode: 4C)
11. Close DC957, perform DC612 Color Test Pattern Print with the following settings, and check the sample.

Table 1

	Setting Value	Remarks
Contact Engine	4C	
Test pattern selection	Half Tone	Cin Settings: #2/#3/#4/#5 = 0%/60%/60%/0%
Printing sides	1 Sided	
Tray	Tray 1	Loaded with A3, J paper
Procon TRC	ON	
Object	200C	
No. of prints	1 sheet	

6.4.29 DC804 Xfer Belt Run

Purpose

To set the 2nd BTB drive mode for BTB Walk Adjustment at shipment and during 2nd BTB replacement.

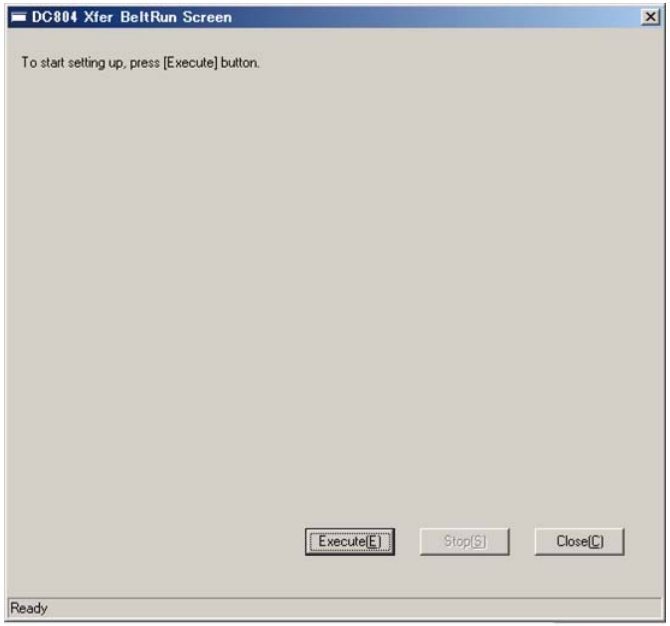
Overview

- To drive the 2nd BTB/IBT for BTB Walk Adjustment.

NOTE: *For details on the adjustment procedure of DC804, refer to* ADJ 6.1.2 *in Chapter 4.*

Procedure

1. Start up the PC-Diag, select [Subsystem Check], and click [DC804] Xfer Belt Run.
2. The Xfer Belt Run Screen is displayed. (Figure 1)
3. Click [Execute].



j0cx640028

Figure 1 j0cx640028

4. After the operation is completed and the message indicating that it has is displayed, click [Close].

6.4.30 DC894 ADC TRC Target Set

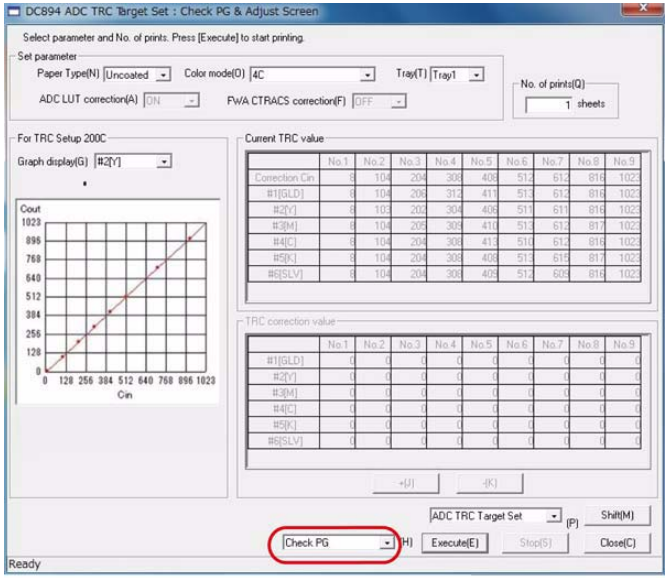
Purpose

To create a Patch on the IBT Belt with highlight reproduction and Tone in adjusted state and set it as the Target for ADC TRC Control that is read by ADC Sensor.

NOTE: *For details on the adjustment procedure of DC894, refer to* ADJ 18.1.9 *in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC894.
3. The ADC TRC Target Set: Check PG & Adjust Screen is displayed. (Figure 1)



j0cx418510

Figure 1 j0cx418510

4. Select the following mode in the screen and click [Execute]. (Figure 1)
   - Paper Type: Uncoated
   - Color Mode: 4C
   - Tray: Select a Tray loaded with A3 SEF (J paper)
   - No. of prints: 1
   - Test Pattern: Check PG
5. Visually compare the density of each Y.M.C.K color with the factory shipment sample on the following items.
   - Cin (0.4%): Patch is not reproduced.
   - Cin (5.1%): Patch is reproduced and it is the same as the factory shipment sample.

6. Check and perform adjustments as required. For details on the adjustment procedure, refer to ADJ 18.1.9.

6.4.31 DC895 Dmax Setup

Purpose

To perform the Dmax Setup function when unable to obtain the desired TRC (Tone Curve) despite having performed Calibrations because the Dmax (Cin 100% density) is light.

Overview

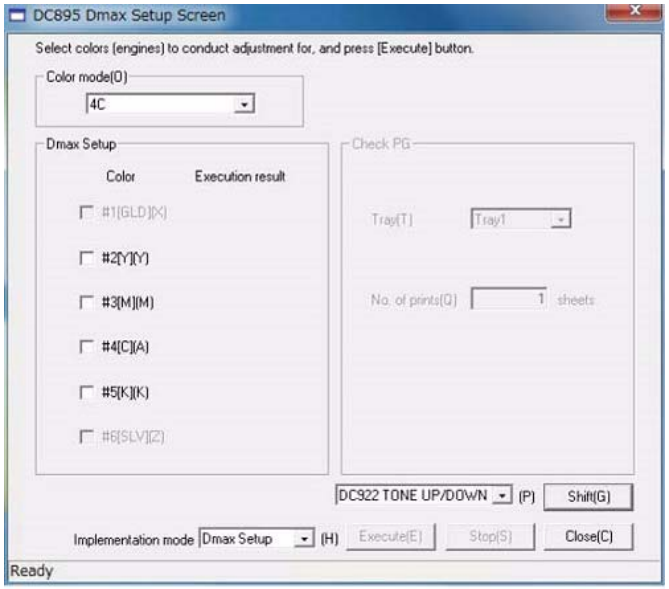
- To display the result after performing Dmax Setup. Specify the Tray and No. of prints to print the image quality check pattern and check the correction result.

NOTE: *As this Setup uses the following DC Codes in common, refer to the following for the Adjustment Items to reference.*

- *DC900 TRC Manual Adjustment:* ADJ 18.1.8
- *DC922 Tone Up/Down* ADJ 18.1.10

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. Select [DC895] Dmax Setup.
3. The Dmax Setup Screen is displayed. (Figure 1)
   Select the color with density lighter than the target in Cin 99.6%, select the [Dmax Setup] for the Implementation mode, and click [Execute].



j0cx418529

Figure 1 j0cx418529

4. Stop the machine and, if the results are all OK, proceed to Step 5.
   If it is NG, use DC938 PCON Check to repair the NG item. (Refer to ADJ 18.1.7)

5. Open the DC900 TRC Manual Adjustment Screen, select the following items, and click [Execute]. (Refer to ADJ 18.1.8)
   - Object (screen): 200C
   - Paper Type: Uncoated
   - ADC LUT Correction: OFF
   - Tray: Select a Tray loaded with A3 SEF (J paper)
   - No. of prints: 10
   - Test Pattern (H): TRC Check PG
6. Compare the output sample with the factory shipment sample. If the Cin 99.6% (topmost Patch) density of each color (Y/M/C/K) from the output sample (10th sheet) is the same as or darker than the factory shipment sample, it is OK.

6.4.32 DC900 TRC Manual Adjustment

Purpose

To manually perform fine adjustment on the 9 levels density area of each screen and fix the Procon LUT data.

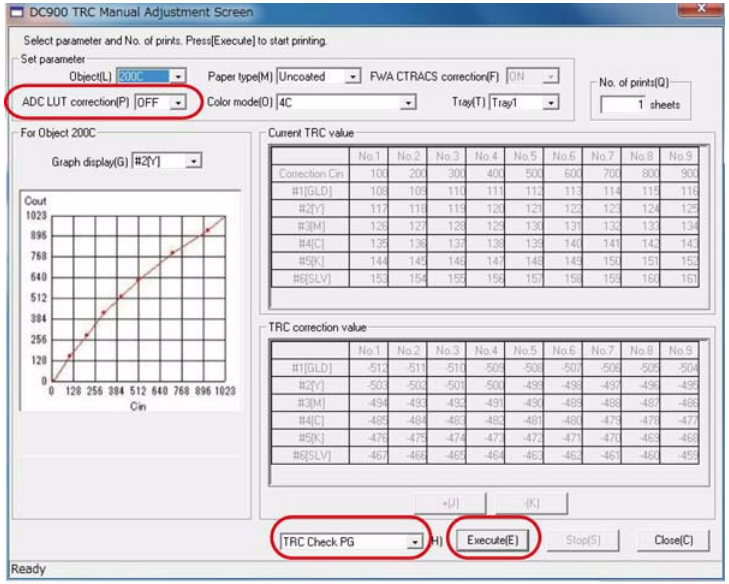
Print and check the Tone Characteristics Settings result which data had been updated manually and by TRC Control.

NOTE:

- *If the ATC Average Value was found to have diverged from the target value at DC938 PROCON Check, perform DC922 Tone Up/Down before performing this procedure. (Refer to ADJ 18.1.10)*
- *For details on the adjustment procedure of DC900, refer to ADJ 18.1.8 in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC900.
3. The TRC Manual Adjustment Screen is displayed. (Figure 1)



j0cx418504

Figure 1 j0cx418504

4. At the Set parameter column, select the Object, Paper type, ADC LUT correction, Color mode, Tray, No. of prints, and Test Pattern (H): TRC Check PG. (Figure 1)
   - Object (screen): 200C (default)
   - Paper Type: Uncoated

- ADC LUT correction: OFF (the output is initially set with ADC LUT correction as OFF for checking the Dmax in Step 5)
- Color Mode: 4C
- Tray: Select a Tray loaded with A3 SEF (J paper)
- No. of prints: 10 (perform density check using the 10th or later printout)
- Test Pattern (H): TRC Check PG

NOTE: *ADC LUT correction determines whether to use (ON) or not use (OFF) the Procon Image Data Conversion Table.*

NOTE: *Side 1/Side 2 and the page number can be identified from the symbol information at the top left on the Lead side.*

- *Sample 1. <1-01>: Side 1 (Front) - 1st page*
- *Sample 2. <2-02>: Side 2 (Rear) - 2nd page*

5. Select [Execute]. Compare the density of each color (Y, M, C, K) with the factory shipment sample by using the 10th output test print (1st one from the top) and check the Dmax. (Figure 2)

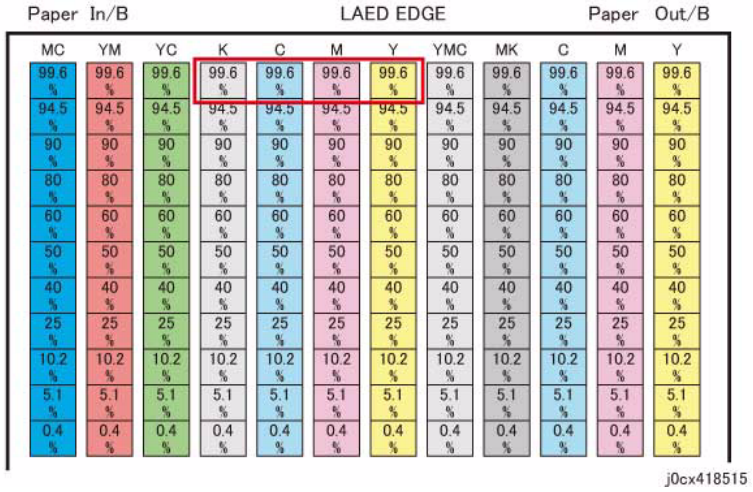


Figure 2 j0cx418515

6. Check and perform adjustments as required. (For details on the procedure, refer to ADJ 18.1.8)

6.4.33 DC922 Tone Up/Down

Purpose

To adjust the density of each color.

Overview

- Perform density adjustment by performing Tone Up/Down. The transition of ATC measurement value and target value and the transition of ADC measurement value are displayed at each measurement while Tone Up/Down is in progress.

  If the measurement result is not within the specified range, the Tone Up/Down judgment will be displayed.
- All scatter diagram data can be displayed together with ATC and ADC.

NOTE: *As this Setup uses the following DC Codes in common, refer to the following for the Adjustment Items to reference.*

- *DC900 TRC Manual Adjustment:* ADJ 18.1.8
- *DC895 Dmax Setup:* ADJ 18.1.15

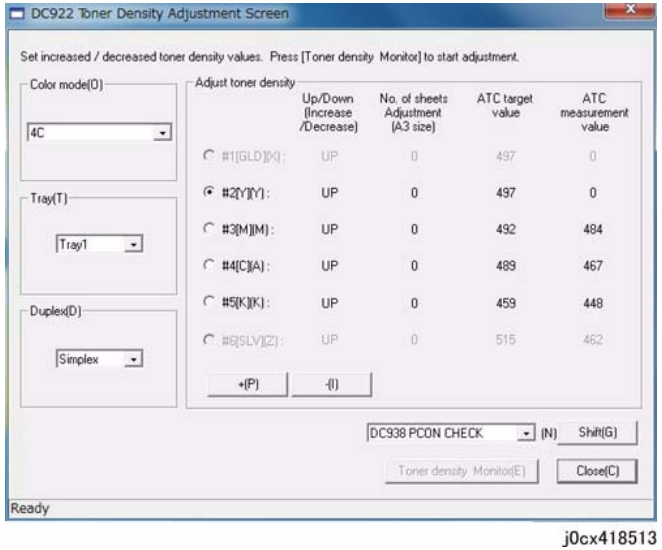
  When performed with the DC895 Dmax Setup Implementation mode set to [Reset], adjust by using Tone Up/Down until the ATC measurement value is at the ATC target value.

NOTE: *For details on the adjustment procedure of DC922, refer to* ADJ 18.1.10 *in Chapter 4.*

NOTE: *To print page numbers that had been converted into symbols on the PG, set the value of NVM 757-937 to '1'. (For explanations on printing the page numbers, refer to* 6.4.16 *DC612 Color Test Pattern Print)*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC922.
3. The Toner Density Adjustment Screen is displayed. (Figure 1)



j0cx418513

Figure 1 j0cx418513

4. When the [ATC measurement value] is [ATC target value - 20] or lower

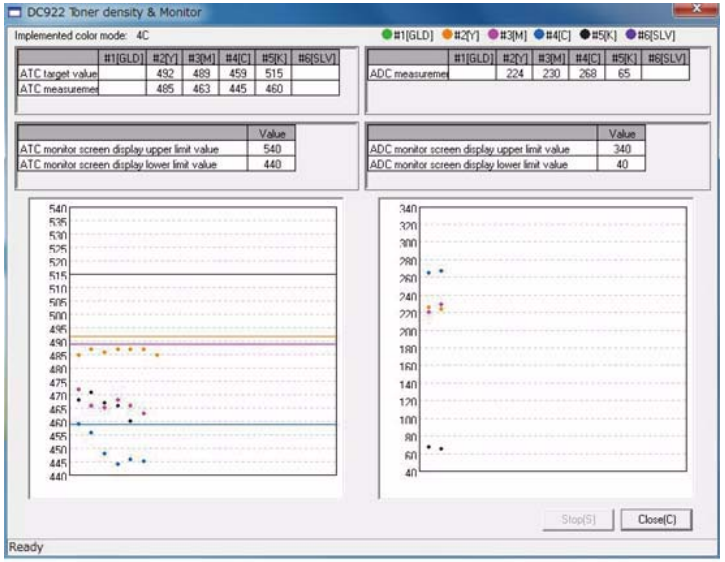
   After checking the No. of sheets adjustment for the color displayed with UP/DOWN, select the Tray and click [Toner density Monitor].

   NOTE: *For the number of sheets that is needed for Up/Down adjustment (+(P)/-(I) buttons), take factors such as environment (humidity) and Deve degradation due to the passage of time into consideration while setting the No. of sheets adjustment (approx. 10 sheets).*

   NOTE: *Side 1/Side 2 and the page number can be identified from the symbol information at the top left on the Lead side.*

   - *Sample 1. <1-01>: Side 1 (Front) - 1st page*
   - *Sample 2. <2-02>: Side 2 (Rear) - 2nd page*

5. On the [Toner density & Monitor] screen, check the [ATC measurement value] and [ATC target value] items. (Figure 2)
   - If the [ATC measurement value] is larger than the value of [ATC target value - 20], return to Step 4 and adjust again.
   - If the [ATC measurement value] is smaller than the value of [ATC target value - 20], end the procedure.


DC922 Toner density & Monitor
Implemented color mode: 4C
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[SLV]
ATC target value 492 489 459 515
ATC measurement 485 463 445 460
ADC measurement 224 230 268 65
ATC monitor screen display upper limit value 540
ATC monitor screen display lower limit value 440
ADC monitor screen display upper limit value 340
ADC monitor screen display lower limit value 40
Value
Stop(S)
Close(C)
Ready

j0cx418514

Figure 2 j0cx418514

6.4.34 DC934 ADC AGC Setup

Purpose

To perform adjustment for always maintaining a stable ADC Sensor output value by automatically updating the data to compensate for contamination at the ADC Sensor.

Overview

- Measure the IBT Belt background (Vcln) using the ADC Sensor and perform Gain adjustment on the ADC Sensor until the desired Vcln is obtained.

  If the measurement result is not within the specified range, the Tone Up/Down judgment will be displayed.
- The setting value data is displayed as the current latest data.

NOTE: *For details on the adjustment procedure of DC934, refer to* ADJ 18.1.11 *in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC934.
3. The ADC AGC Setup Screen is displayed. (Figure 1)

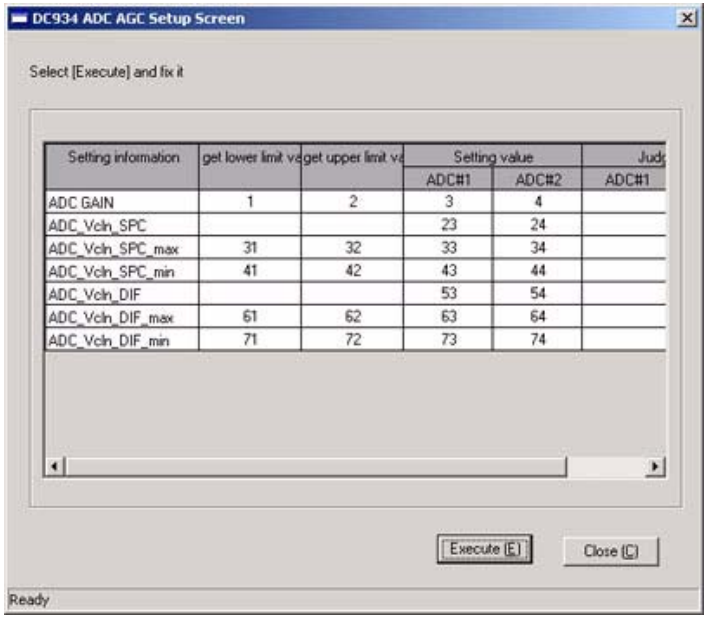


Figure 1 j0cm64041

4. Select [Execute].
5. On the ADC AGC Setup Screen, check under all the [Judgment] column of [ADC GAIN] and [ADC Vcln]. If the judgment results are all [OK], the procedure ends.

   If there is any [NG], perform the following.
   - If the ADC GAIN is NG: Replace the ADC Sensor (PL 18.6) or the IOT Main PWB (PL 18.14).
   - If the ADC_Vcln_SPC (or DIF) max/min is NG, replace the following in sequence.
     – IBT Belt (PL 6.3)
     – ADC Sensor (PL 18.6)
     – IOT Main PWB (PL 18.14)

Table 1 <ADC AGC Setup Items Supplement>

Item	Description
ADC GAIN	The current value of ADC Sensor Gain
ADC_Vcln_SPC	The reflection component value of ADC Sensor Vcln
ADC_Vcln_SPC_max	The reflection component maximum value of ADC Sensor Vcln
ADC_Vcln_SPC_min	The reflection component minimum value of ADC Sensor Vcln
ADC_Vcln_DIF	The diffusion component value of ADC Sensor Vcln for Y, C detection
ADC_Vcln_DIF_max	The diffusion component maximum value of ADC Sensor Vcln
ADC_Vcln_DIF_min	The diffusion component minimum value of ADC Sensor Vcln

6. After the ADC AGC Setup is completed, select [Close] to return to the IQ Adjustment screen

6.4.35 DC938 PCON Check

Purpose

To aggregate all functions for checking the Procon operation.

The setting value data is displayed as the current latest data.

Overview

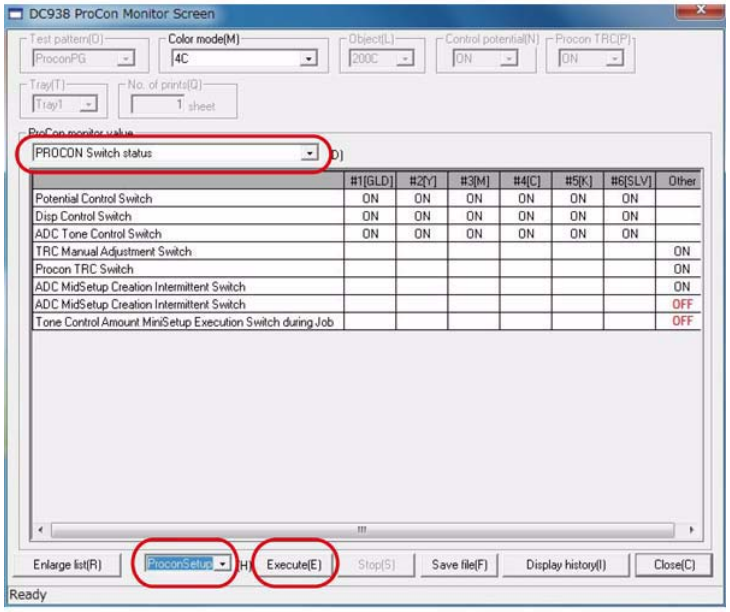
- Displays the current ON/OFF status and judgment (FAIL occurrence status) of the Procon Switch in a list.
- Displays the NVMs of Main Procon related current values in a list.
- Saves and displays the Procon Monitor value at the occurrence of Image Quality Fail.
- Able to change the Potential Control and Procon LUT and then perform confirmation print.

NOTE: *For details on the adjustment procedure of DC938, refer to* ADJ 18.1.7 *in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select [DC938] PCON Check.
3. The ProCon Monitor Screen is displayed. (Figure 1)

   In the ProCon Monitor Screen, select [PROCON Switch status] and check that [ADC MidSetup Creation Continuous Switch] and [Tone Control Amount MiniSetup Execution Switch during Job] are OFF while all the other Switches are ON.



j0cx418502

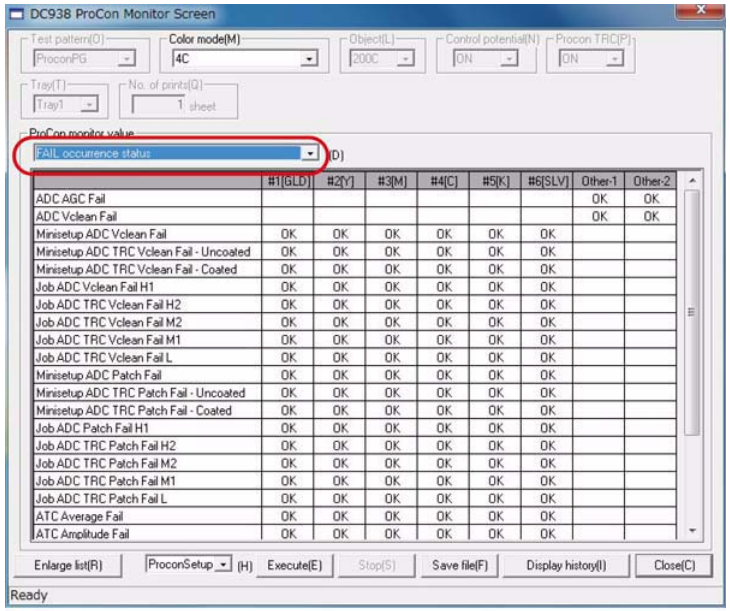
Figure 1 j0cx418502

4. For those that is OFF, set the value of the NVM in the following Table (Table 1) to '1' (ON).

Table 1

Switch Name	NVM	Description
Potential Control Switch	766-001 to 006	1: Procon Potential Mode
Disp Control Switch	765-001 to 006	1: Procon Toner Supply Mode
ADC Tone Control Switch	772-001 to 006	1: Mode that applies the LUT calculated from ADC Tone Patch as ADC_LUT
TRC Manual Adjustment Switch	772-007	1: TRC Manual Adjustment ON
Procon TRC Switch	772-008	1: Turn ON the ADC LUT in Video ASIC
ADC MidSetup Creation Intermittent Switch	766-021	1: Perform 2nd Mid Setup with Intermittent PV condition after the previous Mini/Mid Setup execution
ADC MidSetup Creation Continuous Switch	766-022	1: Perform 2nd Mini Setup during Continuous Print after the previous Mini/Mid Setup execution
Tone Control Amount MiniSetup Execution Switch during Job	772-010	1: perform 2nd Mid Setup when the change of Tone Control amount during a Job is large

5. At the bottom left of the screen, select [Procon Setup] and click [Execute]. (Figure 1)
6. When the [FAIL occurrence status] is displayed after performing the Setup, check that the judgment for all items are OK. (Figure 2)


DC938 ProCon Monitor Screen
Test pattern(O)
ProconPG
Color mode(M)
4C
Object(L)
200C
Control potential(N)
ON
Procon TRC(P)
ON
Tray(T)
Tray1
No. of prints(Q)
1 sheet
ProCon monitor value
FAIL occurrence status
(D)
#1[GLD] #2[Y] #3[M] #4[C] #5[K] #6[SLV] Other-1 Other-2
ADC AGC Fail OK OK
ADC Vclean Fail OK OK
Minisetup ADC Vclean Fail OK OK OK OK OK OK
Minisetup ADC TRC Vclean Fail - Uncoated OK OK OK OK OK OK
Minisetup ADC TRC Vclean Fail - Coated OK OK OK OK OK OK
Job ADC Vclean Fail H1 OK OK OK OK OK OK
Job ADC TRC Vclean Fail H2 OK OK OK OK OK OK
Job ADC TRC Vclean Fail M2 OK OK OK OK OK OK
Job ADC TRC Vclean Fail M1 OK OK OK OK OK OK
Job ADC TRC Vclean Fail L OK OK OK OK OK OK
Minisetup ADC Patch Fail OK OK OK OK OK OK
Minisetup ADC TRC Patch Fail - Uncoated OK OK OK OK OK OK
Minisetup ADC TRC Patch Fail - Coated OK OK OK OK OK OK
Job ADC Patch Fail H1 OK OK OK OK OK OK
Job ADC TRC Patch Fail H2 OK OK OK OK OK OK
Job ADC TRC Patch Fail M2 OK OK OK OK OK OK
Job ADC TRC Patch Fail M1 OK OK OK OK OK OK
Job ADC TRC Patch Fail L OK OK OK OK OK OK
ATC Average Fail OK OK OK OK OK OK
ATC Amplitude Fail OK OK OK OK OK OK
Enlarge list(R)
ProconSetup
(H)
Execute(E)
Stop(S)
Save file(F)
Display history(I)
Close(C)
Ready

j0cx418503

Figure 2 j0cx418503

If NG, proceed to the following Fault Code RAP (Chapter 2) to repair the problem.

- 092-642 to 643: ADC AGC Fail (#1/2)
- 092-644 to 645: ADC Vclean Fail (#1/2)
- 092-606 to 611: Mini Setup ADC Patch Fail (#1/2/3/4/5/6)
- 092-612 to 617: Mini Setup ADC TRC Patch Fail Uncoated (#1/2/3/4/5/6)
- 092-618 to 623: Mini Setup ADC TRC Patch Fail Coated (#1/2/3/4/5/6)
- 092-624 to 629: Job ADC Patch Fail (#1/2/3/4/5/6)
- 092-630 to 635: Job ADC TRC Patch Fail H (#1/2/3/4/5/6)
- 092-636 to 641: Job ADC TRC Patch Fail L (#1/2/3/4/5/6)
- 092-650 to 655: ATC Average Fail (#1/2/3/4/5/6)
- 092-656 to 661: ATC Amplitude Fail (#1/2/3/4/5/6)
- 092-646 to 647: Temperature Sensor Fail (#1/2)
- 092-648 to 649: Humidity Sensor Fail (#1/2)
- 092-310 to 315: VH Charge Check Fail (#1/2/3/4/5/6)
- 092-662 to 667: ESV VH Fail (#1/2/3/4/5/6)
- 092-668 to 673: ESV Vcont VH4 Fail (#1/2/3/4/5/6)
- 092-674 to 679: ESV Vcont VH5 Fail (#1/2/3/4/5/6)
- 092-680 to 685: ESV Vcont VH6 Fail (#1/2/3/4/5/6)
- 092-692 to 697: Job ADC TRC Patch Fail M2 (#1/2/3/4/5/6)
- 092-686 to 691: Job ADC TRC Patch Fail M1 (#1/2/3/4/5/6)

7. At the bottom left of the screen, select [Check PG], set the No. of prints to 10 sheets*, and click [Execute].

   NOTE: *10 sheets*: At least 9 sheets is required when creating all types of ADC Patch during a Job.*

   NOTE: *Side 1/Side 2 and the page number can be identified from the symbol information at the top left on the Lead side.*

   - *Sample 1. <1-01>: Side 1 (Front) - 1st page*
   - *Sample 2. <2-02>: Side 2 (Rear) - 2nd page*

8. Check that the [FAIL occurrence status] display are all showing OK.

   If there is any NG, proceed to the Fault Code RAP (Chapter 2) that was described in Step 6 to repair the problem until everything is OK.

9. This ends the check procedure by DC938 PCON Check.

6.4.36 DC950 ATC Sensor Setup

Purpose

To derive the sensitivity correction values for adjusting the ATC sensor output from the bar code numbers which display the sensitivity attribute in every ATC Sensor.

Overview

To derive the sensitivity correction values [Correction Coefficient] and [Correction Offset] for adjusting the ATC sensor output from the bar code numbers which display the sensitivity attribute in every ATC Sensor. The bar code numbers are set in NVM [Bar Code Number] manually from this adjustment screen.

When this adjustment is required:

- Developer Housing Assy replacement
- ATC Sensor replacement

NOTE: *For details on the adjustment procedure of DC950, refer to* ADJ 18.1.6 *in Chapter 4.*

Operation Overview

- Selecting [DC950 ATC Sensor Setup] displays the [Bar Code No.], [Correction coefficient], and [Correction offset] for each of the colors #1, #2 [Y], #3 [M], #4 [C], #5 [K], #6.
- The [Bar Code No.] value displayed on the 950 ATC Sensor Setup Screen can be rewritten with the Keypad.
- Clicking [Execute] updates the NVM [Bar Code Number], [Correction Coefficient], and [Correction Offset] for each of the colors #1, #2 [Y], #3 [M], #4 [C], #5 [K], #6 after the calculation based on the [Bar Code No.] value displayed on the screen at that time. The [Correction coefficient] and [Correction offset] screen displays will also be updated at the same time.

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC950.
3. The ATC Sensor Setup Screen is displayed. (Figure 1)

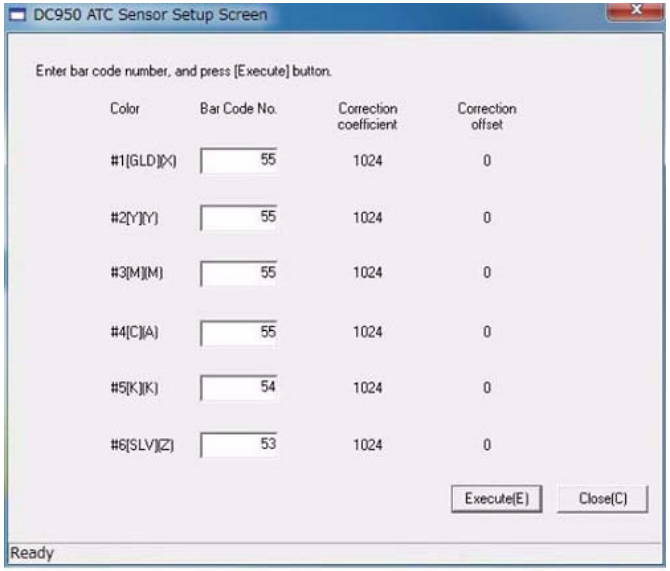


Figure 1 j0cx418501

4. The Code can be found on the Label in the ATC Sensor Kit. (Figure 2)
   The following figure shows the Code for #2 Engine, which is 55.

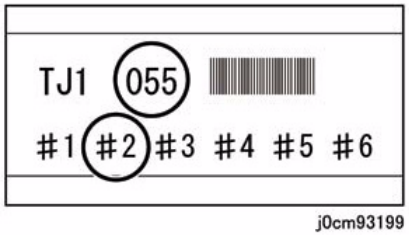


Figure 2 j0cm93199

5. Enter the number indicated on the replaced sensor into the [Bar Code No.] on the screen and click [Execute].
   Check that the [Correction Coefficient] and [Correction Offset] have changed.

6.4.37 DC951 ESV Sensitivity Setup

Purpose

This Setup function performs VG output to attain the desired VH by ESV Sensor and obtains the LD Power Data to attain the desired VL, then displays the results on the screen so that the Setup condition can be grasped.

Overview

Display the execution result of VH/VL Sensitivity Setup that was performed in the Mini Setup of Customer Mode. Also, there are 2 types of ESV Patch being used here as follows.

1. Performed in the VH Patch: Mini Setup. VG is allocated to 3 levels (VG1, VG2, VG3) and the 3 types of Patch VH1, VH2, VH3 for obtaining VG-VH sensitivity with the 3 types of Patch VH4, VH5, VH6 that is created from 3 levels of VG4, VG5, VG6 calculated from the previous VG-VH sensitivity totals up to 6 types.
2. Performed in the Mini Setup. LD is allocated to 3 levels (LD1, 2, 3, LD4, 5, 6, LD7, 8, 9) by using the various conditions for turning VG4, VG5, VG6 into the 3 levels of VH from the VG-VH sensitivity that was determined in (1) with the Patch VL1, VL2, VL3, VL4, VL5, VL6, VL7, VL8, VL9 for obtaining the Vcont (= VH-VL) - LD sensitivity totals up to 9 types.

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC951.
3. The ESV Sensitivity Setup Screen is displayed. (Figure 1)

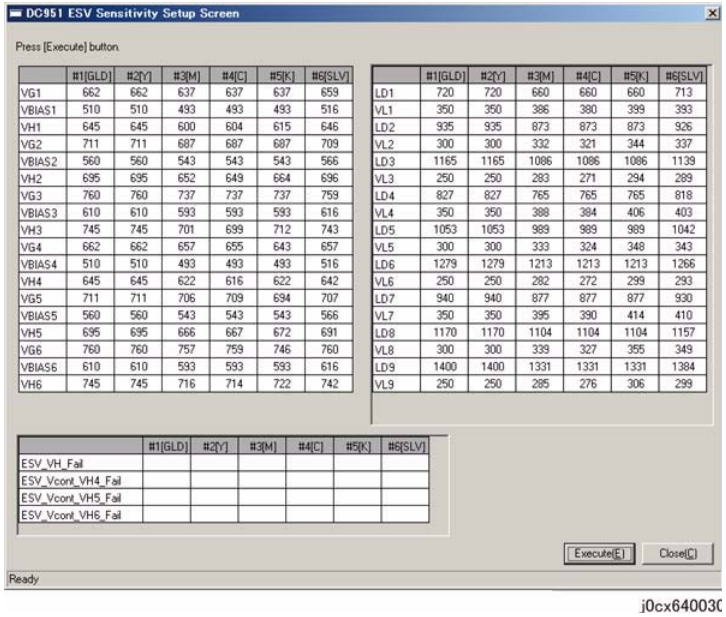


Figure 1 j0cx640030

4. Clicking [Execute] in the screen displays the current data. The ESV related Fails are also displayed with OK/NG.
5. If NG, proceed to the following Fault Code FIP to perform repairs.
   - ESV_VH_Fail:
     - 092-662 (#1)
     - 092-663 (#2)
     - 092-664 (#3)
     - 092-665 (#4)
     - 092-666 (#5)
     - 092-667 (#6)
   - ESV_Vcont_VH4_Fail:
     - 092-668 (#1)
     - 092-669 (#2)
     - 092-670 (#3)
     - 092-671 (#4)
     - 092-672 (#5)
     - 092-673 (#6)
   - ESV_Vcont_VH5_Fail:
     - 092-674 (#1)
     - 092-675 (#2)
     - 092-676 (#3)
     - 092-677 (#4)
     - 092-678 (#5)
     - 092-679 (#6)
   - ESV_Vcont_VH6_Fail:
     - 092-680 (#1)
     - 092-681 (#2)
     - 092-682 (#3)
     - 092-683 (#4)
     - 092-684 (#5)
     - 092-685 (#6)

6.4.38 DC955 Automatic Developer Replacement Mode

Purpose

When replacing the developing powder, using this mode allows the task to be completed in a shorter time. The replacement codes are in 2 modes: eject and supply.

Overview

- Developer ejection feature: ejects the developing powder (#1, #2 (Y), #3 (M), #4 (C), #5 (K), #6).
- Developer supply feature: supplies the developing powder (#1, #2 (Y), #3 (M), #4 (C), #5 (K), #6).

NOTE: *For details on this mode, refer to* REP 5.2.5 *Developer (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6) in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC955.
3. The Developer Auto Replacement Mode Screen is displayed. (Figure 1)

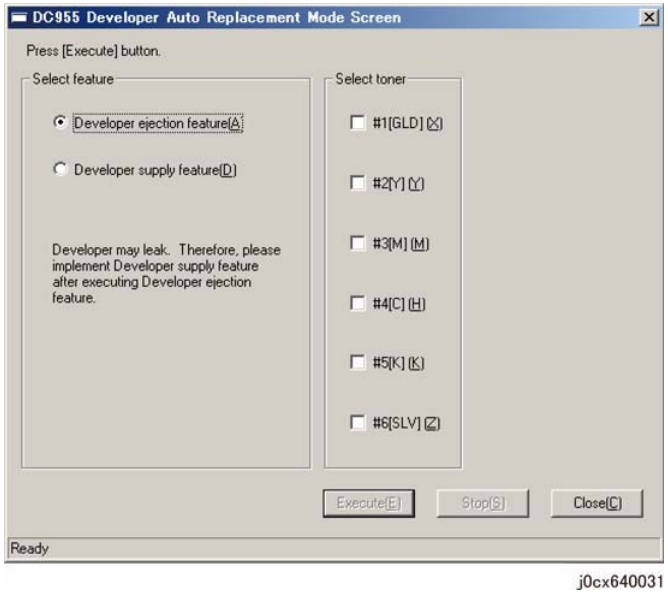


Figure 1 j0cx640031

[Collection Procedure]

1. When ejecting, cover with the collection bag and pull out the Shutter.
2. On the screen, select [Developer ejection feature] at the Select feature column, select the color to collect [#1, #2 (Y), #3 (M), #4 (C), #5 (K), #6] at the Select toner column, and click [Execute].

   NOTE: *Multiple Toners can be selected.*

3. The developing powder will be automatically collected into the collection bag.

4. After the collection is completed, click [Stop].
5. Restore the Shutter to its original state.

[Supply Procedure]

1. When supplying, incline the Guide of the supply inlet towards the front.
2. On the screen, select [Developer supply feature] at the Select feature column, select the color to supply [#1, #2 (Y), #3 (M), #4 (C), #5 (K), #6] at the Select toner column, and click [Execute].

   NOTE: *Multiple Toners can be selected.*

3. The Developer is supplied from the Consumables Developer bag.
4. After the supplying is completed, click [Stop].
5. Restore the Guide of the supply inlet to its original state.

6.4.39 DC956 Belt Edge Learn Mode

Purpose

To measure the shape of IBT Belt Edge for performing Belt Walk Control and re-create the Edge Profile Table (Steering operation).

NOTE: *Perform this during IBT Belt, IBT Drive Roll, MK DRV Core PWB, or Belt Edge Sensor 1/3 replacement.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC956.
3. The Belt Edge Learn Mode Screen is displayed.
4. Select [Execute].
5. After the Belt Edge Learn Mode is completed, select [Close] to return to the Subsystem Check screen.

6.4.40 DC957 XFER Monitor

Purpose

To check the XFER Device operation.

Overview

- Able to perform check when multiple components have to be operating at the same time.
- BTR Setup Execution Mode: For the 1st BTR Vmonitor #1 to #6 and the 2nd BTB Vmonitor, the values before the execution and after the execution are displayed on the same screen.

NOTE: *Perform this during IBT Belt replacement.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC957.
3. The XFER Monitor Screen is displayed.
4. At the parameter mode selection column and the color mode selection column, select the mode and the color mode.
   - BTR Setup Execution Mode: After performing the series of operations in normal copy mode, the output voltage of 1st/2nd BTR is displayed.
5. Select [Execute].
   - When in progress, the BTR Setup Execution Mode in the execution result column will switch from OFF to ON.
   - At completion, the BTR Setup Execution Mode will switch from ON to OFF and the new data for each color mode and execution items are displayed in the execution result column.
6. After the XFER Monitor is completed, select [Close] to return to the Subsystem Check screen.

6.4.41 DC960 Install Toner

Purpose

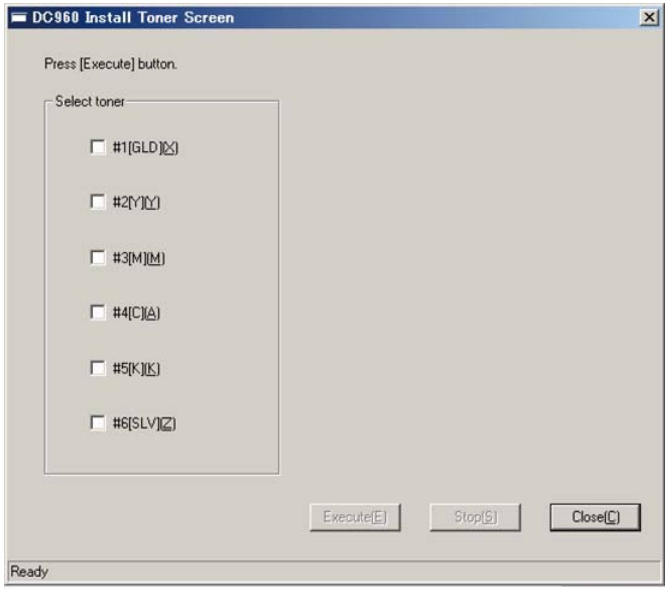
This function works to supply Toner into the Toner transportation path from the Toner Cartridge to the Developer Unit and it is a task that is mainly performed during an installation.

NOTE: *Perform this at installation, when installing the Spot Color Kit, and when replacing/cleaning a component of the Toner transportation path.*

NOTE: *The detailed explanations for this mode can be found in the respective installation procedure, Spot Color Kit installation procedure, and Toner transportation path replacement procedure.*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC960.
3. The Install Toner Screen is displayed. (Figure 1)



j0cx640032

Figure 1 j0cx640032

4. At the [Select toner] column, select the color to transport and click [Execute].

   NOTE: *Multiple Toners can be selected.*

   NOTE: *As performing this 2 or more times on the same color could result in a Toner overflow, once a Toner has completed its supply process, it cannot be performed again for the same Toner.*

5. Check the transportation status and when a sufficient amount had been transported, click [Stop].

6.4.42 DC961 ROS Correct

Purpose

When replacing/installing the ROS, this enters the ROS specific characteristics into the machine to put it into the optimal write state.

NOTE: *For details on this mode, refer to* REP 2.1.1 *ROS Assembly (#1/Y (#2)/M (#3)/C (#4)/K (#5)/#6) in Chapter 4.*

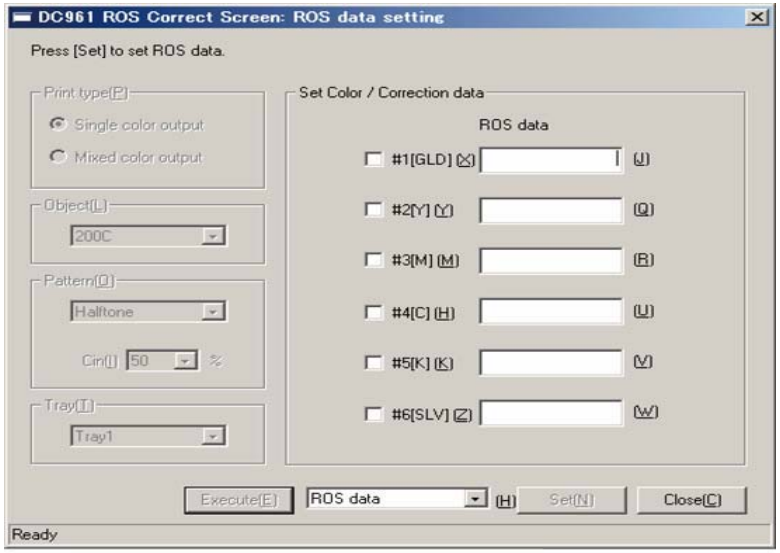
NOTE: *Make a note of the 16-digit number of the ROS bar code label affixed to the Service Log during replacement/new installation.*

- *The same barcode label is affixed at 2 locations, the upper part and side of ROS. The barcode at the top of the ROS Assembly Cover is affixed for ease of peeling. At the time of ROS replacement, remove the barcode at the top of the ROS, paste it on the Service Log, and input the ROS special data based on the barcode data.*
- *The following illustration is bar code label of the ROS,[1051514645733114]. (Figure 1)*

Figure 1 j0kol640069

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC961.
3. The ROS Correct Screen: ROS data setting screen is displayed. (Figure 2)



j0cx640033

Figure 2 j0cx640033

4. At the bottom of the screen, select [ROS data].
5. At the Set Color / Correction data column, put check marks on the Engine of replaced/installed ROS, enter the 16-digit number that was noted down in advance, and click [Set]. (Figure 3)

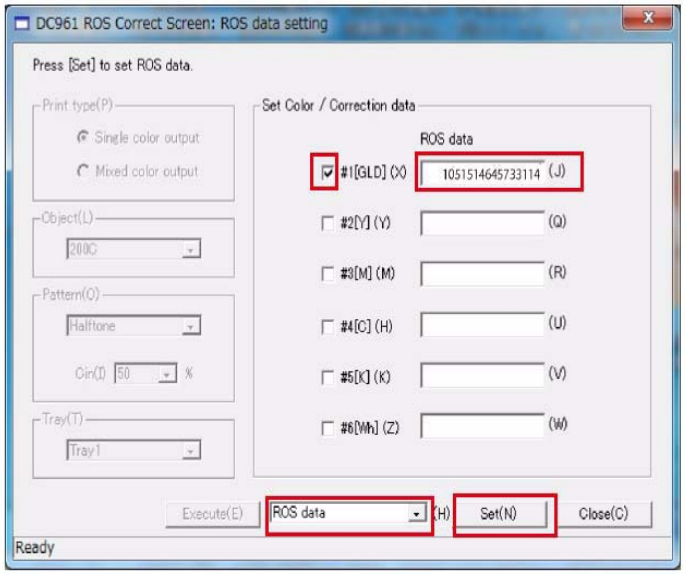


Figure 3 e0kol640070

6. After completing the setting, if the message: "Execution Completed" is displayed, the process had completed successfully.

   NOTE: *Values of ROS-S data and ROS-L data have been changed to calculated values based on the barcode label (ROS special data) which is set.*

7. After the ROS Correct Screen: ROS data setting is completed, select [Close] to return to the Sub-system Check screen.

6.4.43.1 DC970 ILS Standard Setup

Purpose

To perform various types of ILS calibrations and make settings for measurements and investigation results.

[Limitations]

- This function will not work if ILS is not connected.
- For reference on whether an adjustment is OK/NG, refer to the adjustment procedure.
- This has to be performed with the Front Interlock in Closed state. Adjustment is not possible when in Open state.

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC970.
3. The DC970 ILS Standard Setup Screen is displayed. (Figure 1)

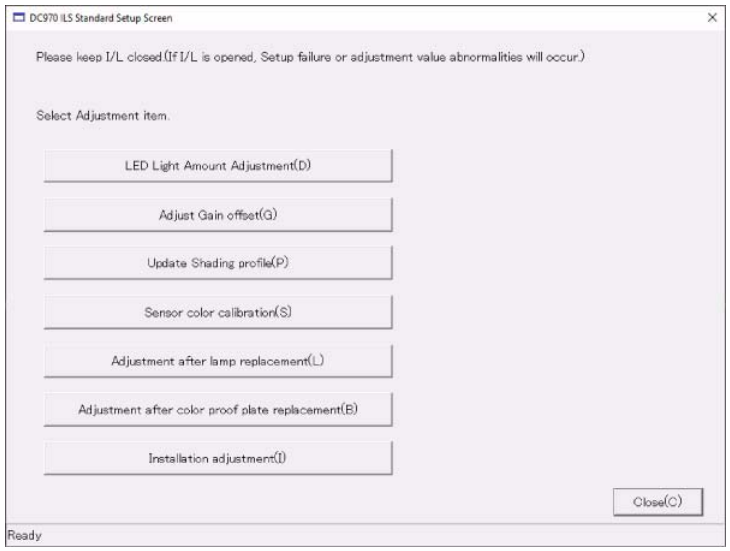

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640021

4. Click the applicable box from among the Adjustment items on the screen.
   - LED Light Amount Adjustment (6.4.43.2)
   - Adjust Gain offset (6.4.43.3)
   - Update Shading profile (6.4.43.4)
   - Sensor color calibration (6.4.43.5)
   - Adjustment after lamp replacement (6.4.43.6)
   - Adjustment after color proof plate replacement (6.4.43.7)
   - Installation adjustment (6.4.43.8)

6.4.43.2 LED Light Amount Adjustment: DC970

Purpose

To perform light intensity adjustment to balance the left and right LED light amount and check the adjustment value.

NOTE: *For details on the adjustment procedure of LED Light Amount Adjustment: DC970, refer to* ADJ 20.1.9 *in Chapter 4.*

Procedure

1. In the ILS Standard Setup screen, select [LED Light Amount Adjustment]. (Figure 1)

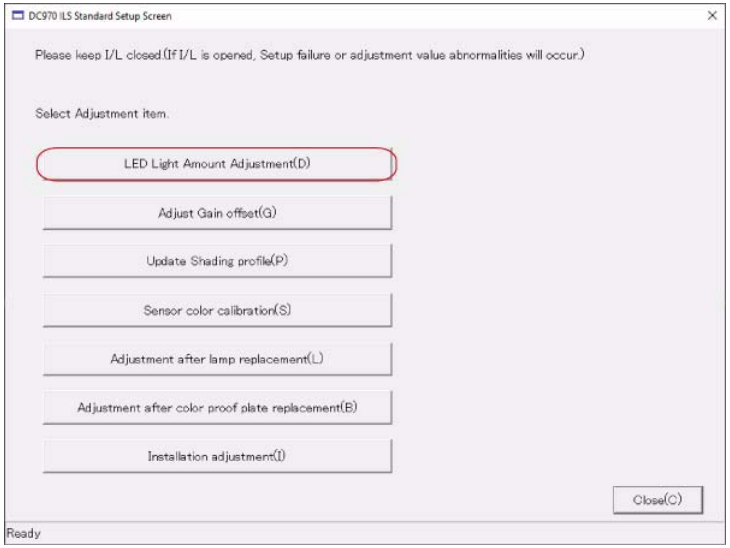

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640022

2. The ILS Standard Setup/LED Light Amount Adjustment screen is displayed. (Figure 2)
   - When the adjustment screen starts up, the latest NVM values for LED Light Amount Adjustment are acquired and displayed.

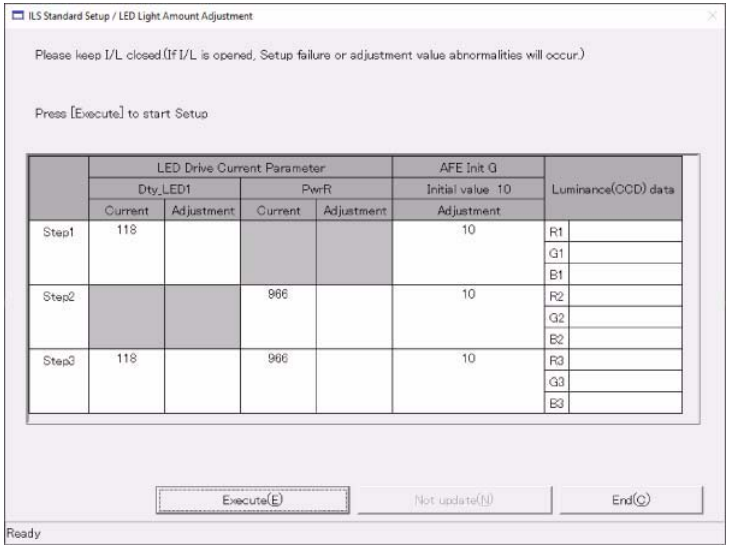


Figure 2 e0ko640023

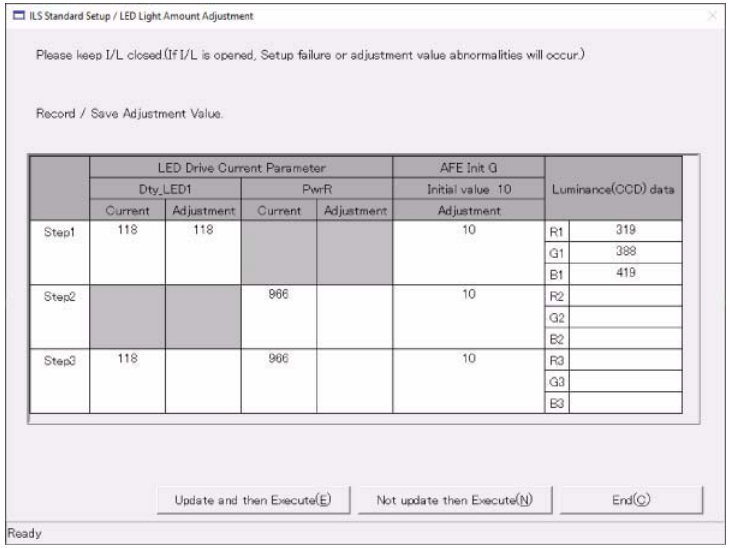


Figure 3 e0ko640024

3. Click [Execute] to perform the light intensity adjustment for LED. (Figure 2)
4. If it had completed successfully, the adjustment value of Dty_LED1 and the value of Luminance (CCD) data (R1, G1, B1) will be displayed in Step 1 on the screen. (Figure 3)

   Also at the same time, the message: "Record/Save Adjustment Value" is displayed and [Update and then Execute] becomes available.
5. Check whether the adjustment value of Dty_LED1 and the value of Luminance (CCD) data in Step 1 fall within the range. (Table 1)
   - Refer to the following LED Light Amount Adjustment Display Info Table to check whether the values fall within the range.

Table 1 LED Light Amount Adjustment Display Info

LED Light Amount Adjustment	LED Drive Current Parameter				AFE Init G	Luminance (CCD) data	Normal CCD output range (target is B channel)
	Dty_LED1		PwrR				
	Current Value	Adjustment Value	Current Value	Adjustment Value	Default value 10; Refer to NVM (782-865)		
Step 1	0 to 384	0 to 384	-	-	0 to 63	R1: 0 to 1023	LED_Lamp intensity lower limit: NVM (782-854) / 2 = 830 / 2 LED_Lamp intensity upper limit: NVM (782-853) / 2 = 870 / 2
						G1: 0 to 1023	
						B1: 0 to 1023	
Step 2	-	-	0 to 2047	0 to 2047	0 to 63	R2: 0 to 1023	Step 1 +/- 2%
						G2: 0 to 1023	
						B2: 0 to 1023	

Table 1 LED Light Amount Adjustment Display Info

LED Light Amount Adjustment	LED Drive Current Parameter				AFE Init G	Luminance (CCD) data	Normal CCD output range (target is B channel)
	Dty_LED1		PwrR				
	Current Value	Adjustment Value	Current Value	Adjustment Value	Default value 10; Refer to NVM (782-865)		
Step 3	0 to 255	0 to 255	0 to 2047	0 to 2047	0 to 63	R3: 0 to 1023 G3: 0 to 1023 B3: 0 to 1023	LED_Lamp intensity lower limit: NVM (782-854) / 2 = 830 / 2 LED_Lamp intensity upper limit: NVM (782-853) / 2 = 870 / 2
About the normal display range	50 < = normal range < = 250 (384 at first time only) Display: 3 digits		300 < = normal range < = 2500 Display: 4 digits		0 < = normal range < = 63 Display: 2 digits	Display: 4 digits	

- Step 1 Dty_LED 1 [adjustment value]
  If the adjustment value is between 50 and 255, it is OK
- Step 1 [Luminance (CCD) data]
  If this is between the LED_Lamp intensity lower limit value / 2 and upper limit value / 2, it is OK

NOTE: *The judgment on the adjustment values are performed at the IOT, and in cases of NG, the message: "LED Light Amount Adjustment has failed" is displayed and the adjustment value is displayed in red.*

6. If the adjustment values are all OK, click [Update and then Execute] and continue to perform Step 2 and Step 3.
7. If Step 2 had completed successfully, the adjustment value of PwrR and the value of Luminance (CCD) data (R2, G2, B2) will be displayed in Step 2 on the screen. If Step 3 had completed successfully, the adjustment value of Dty_LED1, the adjustment value of PwrR, and the value of Luminance (CCD) data (R3, G3, B3) will be displayed in Step 3 on the screen. (Figure 4)

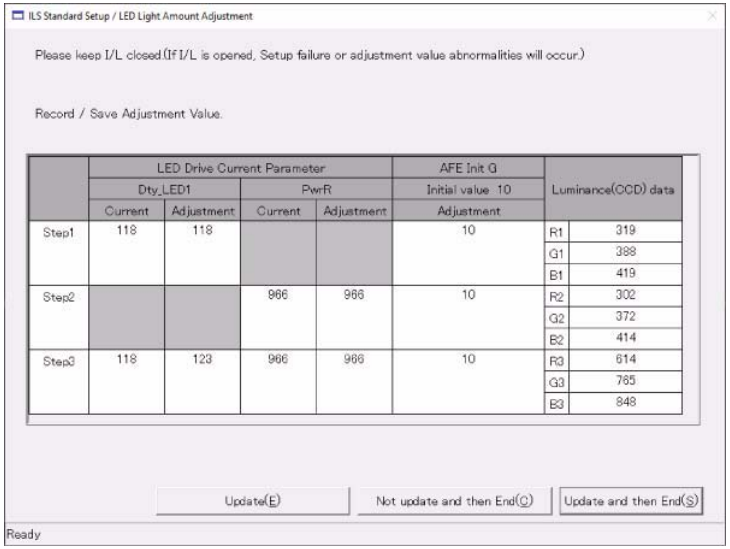


Figure 4 e0ko640025

8. After ILS Standard Setup/LED Light Amount Adjustment is completed, if there is no NG, click [Update and then End] and proceed to the next Step [6.4.43.4 Adjust Gain Offset: DC970].
9. If any of the adjustment value is NG, click [Not update and then End] and proceed to ADJ 20.1.9.2 Process when Abnormal - LED Light Amount Adjustment].

6.4.43.3 Adjust Gain Offset: DC970

Purpose

To adjust the Gain and Offset of CCD signal and check the adjustment value.

NOTE: *For details on the adjustment procedure of Adjust Gain Offset: DC970, refer to ADJ 20.1.10 in Chapter 4.*

6.4.43.3.1 How to Adjust Gain Offset

Procedure

1. On the ILS Standard Setup Screen, select [Adjust Gain offset]. (Figure 1)

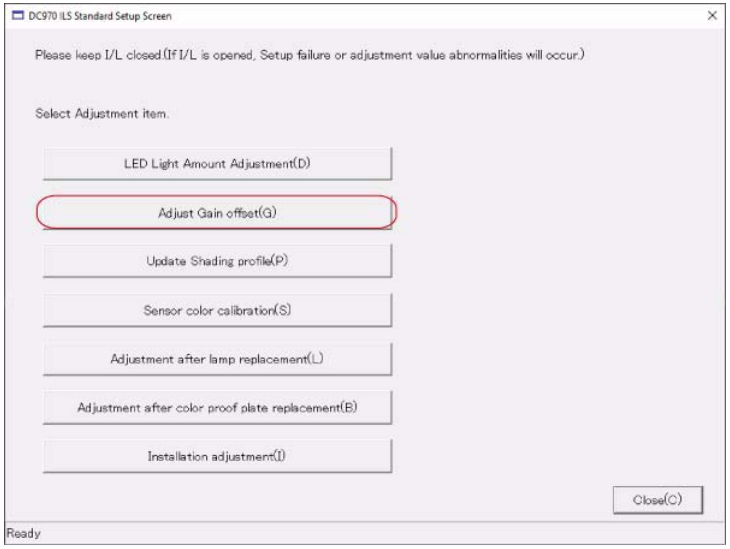

DC970 ILS Standard Setup Screen
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640026

2. The ILS Standard Setup/Gain Offset Adjustment screen is displayed.
   - When the adjustment screen starts up, the latest NVM values for Gain and Offset are acquired and displayed.
3. Click [Execute] to perform the gain offset adjustment. (Figure 2)
4. Check to see whether the adjusted value of [Gain] and [Offset] is within the range.
   - [Gain]
     If the adjustment value is between 10 and 55, it is OK
   - [Offset]
     If the adjustment value is between the lower limit value and the upper limit value, it is OK.

NOTE: *The IOT performs judgment on the adjustment value and it will display any NG values in red.*

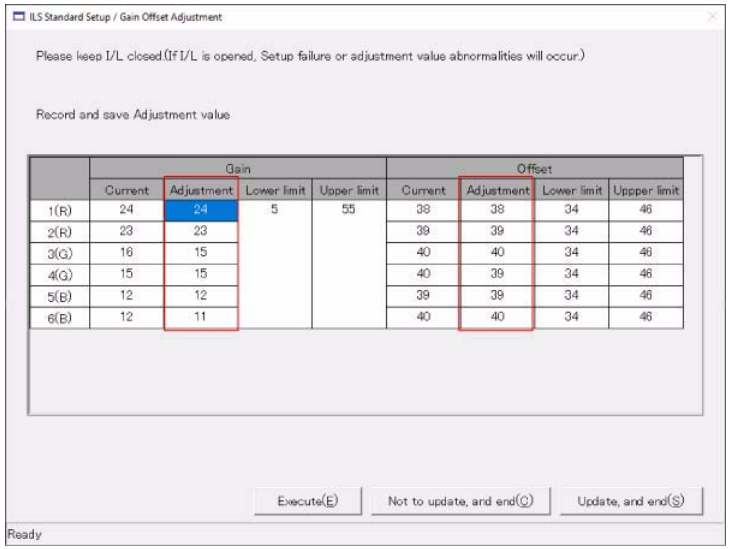

ILS Standard Setup / Gain Offset Adjustment
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Record and save Adjustment value
Gain
Offset
Current
Adjustment
Lower limit
Upper limit
1(R) 24 24 5 55 38 38 34 46
2(R) 23 23 39 39 34 46
3(G) 16 15 40 40 34 46
4(G) 15 15 40 39 34 46
5(B) 12 12 39 39 34 46
6(B) 12 11 40 40 34 46
Execute(E)
Not to update, and end(C)
Update, and end(S)
Ready

Figure 2 e0ko640027

5. After ILS Standard Setup/Gain Offset Adjustment is completed, if there is no NG, click [Update and then End] and proceed to the next Step [6.4.43.4 Update Shading Profile: DC970].
6. If any of the adjustment value is NG, click [Not to update, and end] and perform ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset].

6.4.43.3.2 Process when Abnormal - Adjust Gain Offset

Procedure

1. Turn OFF the Power and wipe both sides of the ILS Lamp Assy Window with a dry cloth. For heavy cleaning of the outer side, use a lens cleaner and wipe with a silicon cloth.
2. Wipe the WR Roll of WR Roll Assy with a dry cloth.
3. Open the IOT-R Front Right Cover and cheat the IOT-R F-Cover Interlock Switch R. Enter Component Check and turn the Lamp ON. Check to see if the ILS Front/Rear Lamp is turned ON.
   (1) If it turned ON -> Proceed to Step 7
   (2) If it did not turn ON -> Proceed to Step 4
4. If it did not turn ON, perform [Connector Check].
   (1) If there is a poor connection -> Proceed to Step 5
   (2) If there is no poor connection -> Proceed to Step 6
5. If there is poor connection of the Connector, perform process after [Connector Unplug/Plug Inspection].
6. If there is no poor connection of the Connector, perform [ILS Lamp Assy Replacement].
7. If the light turned ON, perform [ADJ 20.1.10.1 Adjust Gain Offset] again.

(1) If all adjustment values are OK -> Proceed to Step 8

(2) If any adjustment value is NG -> Proceed to Step 9

8. If all the adjustment values are OK, click [Update, and end] and proceed to the next Step ADJ 20.1.11.1 How to Update Shading Profile].
9. If the adjusted values still include NG's, perform escalation to the Support Dept.

6.4.43.4 Update Shading Profile: DC970

Purpose

To create a Shading Profile.

NOTE: *For details on the adjustment procedure of Update Shading Profile: DC970, refer to* ADJ 20.1.11 *in Chapter 4.*

6.4.43.4.1 How to Update Shading Profile

Procedure

1. On the ILS Standard Setup Screen, select [Update Shading profile]. (Figure 1)

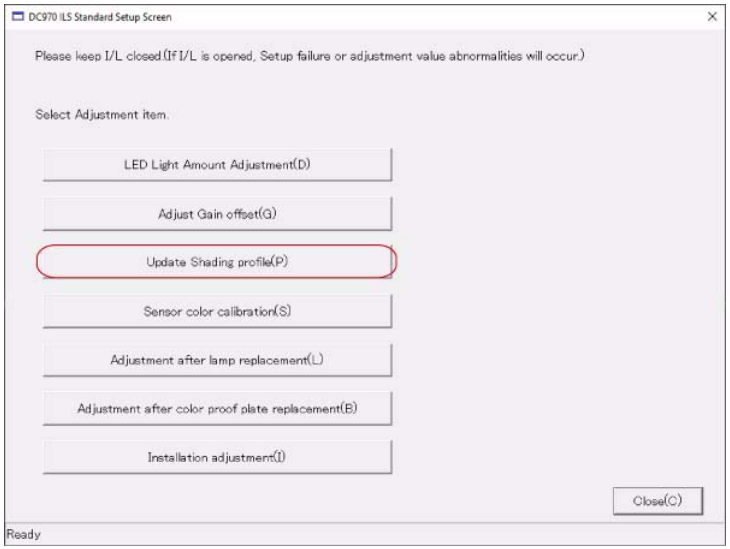

DC970 ILS Standard Setup Screen
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640028

2. The ILS Standard Setup Screen/Shading Profile Update screen is displayed. (Figure 2)

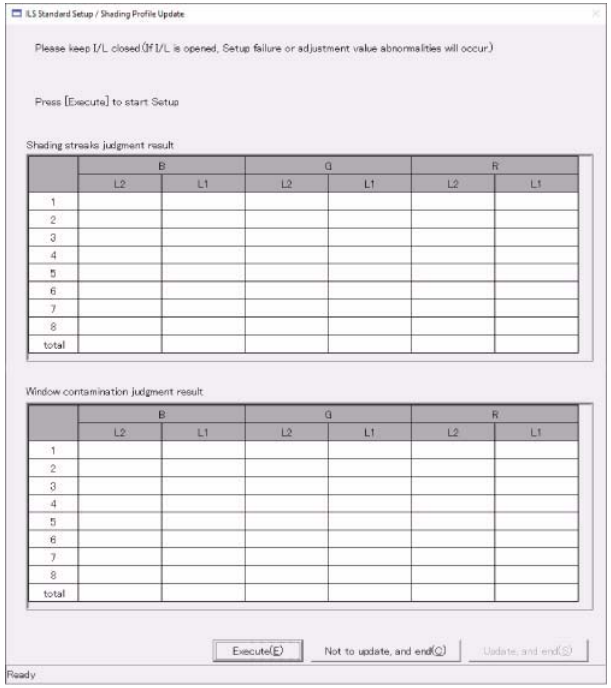


Figure 2 e0ko640029

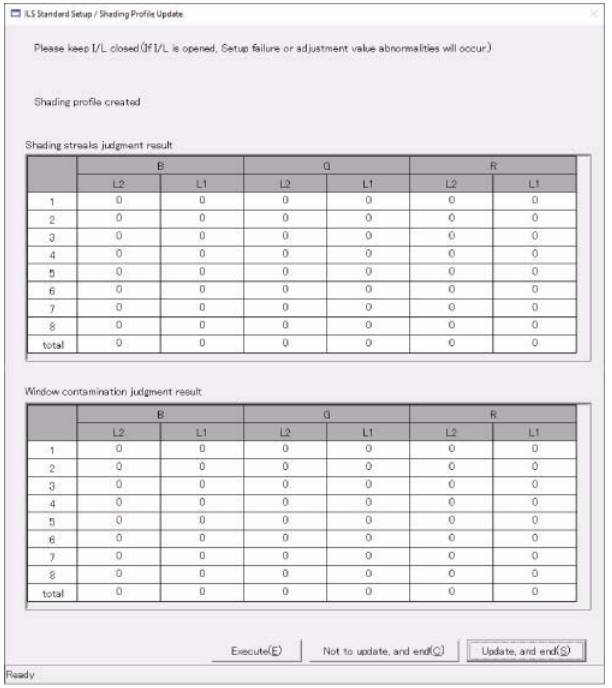


Figure 3 e0ko640030

3. Click [Execute] to update the Shading Profile. (Figure 2)
4. If the values of R (L2), G (L2), B (L2) in the [Window contamination judgment result] and [Shading streaks judgment result] results display are not all 0 (zero), perform Steps 1 and 2 of ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset]. (Figure 3)

   Perform Update Shading Profile again after that and check to see if the value is 0 (zero).

NOTE: *Hidden Fail (52-600) will occur if the value is other than 0 (zero), indicating that the ILS Lamp is dirty or scratched.*

5. If there is no abnormality, click [Update, and end] and proceed to the next Step [6.4.43.8 Installation Adjustment: DC970].
6. If there is an abnormality, perform ADJ 20.1.11.2 Update Shading Profile - When Result is Abnormal].

6.4.43.4.2 Update Shading Profile - When Result is Abnormal Procedure

1. Enter Shutdown History and check to see if ILS WR Motor Fail has occurred or not.
   (1) If it has -> proceed to Step 2.
   (2) If it has not -> proceed to Step 3.
2. If ILS WR Motor Fail has occurred, proceed to the applicable FIP.
3. If ILS WR Motor Fail has not occurred, perform ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset].
4. If the results display screen has L2 values that are 1 or higher, perform ADJ 20.1.10.2 Process when Abnormal - Adjust Gain Offset].

6.4.43.5 Sensor Color Calibration: DC970

Purpose

To scan the color proof plate and save the value as T0n value into the NVM.

Procedure

1. On the ILS Standard Setup Screen, select [Sensor color calibration]. (Figure 1)

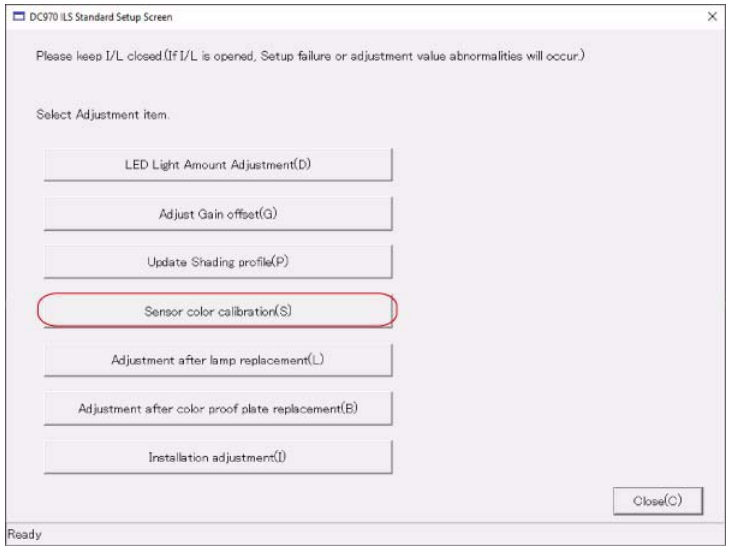

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640031

2. The ILS Standard Setup/Sensor Color Calibration: 20% evaluation value screen is displayed. (Figure 2)

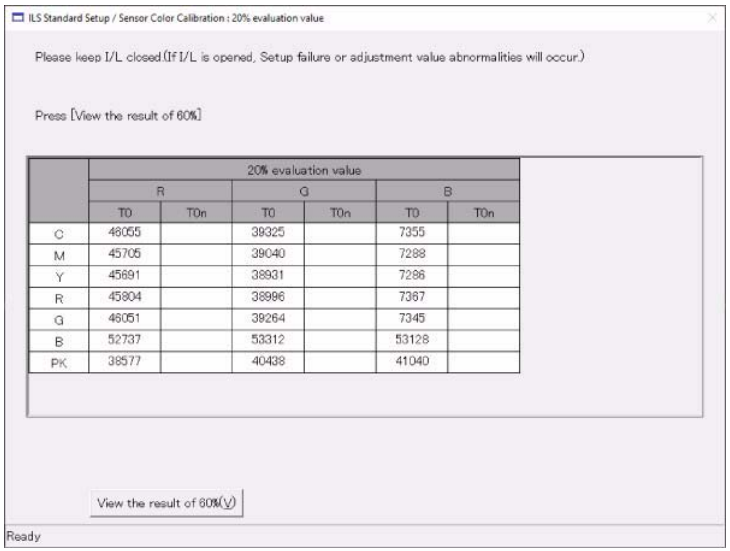

ILS Standard Setup / Sensor Color Calibration : 20% evaluation value
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [View the result of 60%]
20% evaluation value
R
G
B
T0
T0n
C 46055 39325 7355
M 45705 39040 7288
Y 45691 38931 7286
R 45804 38996 7367
G 46051 39264 7345
B 52737 53312 53128
PK 38577 40438 41040
View the result of 60%(V)
Ready

Figure 2 e0ko640032

3. On the ILS Standard Setup / Sensor Color Calibration: 20% evaluation value screen, the acquired T0 values (passage of time correction target value) and the message: "Press [View the result of 60%]" are displayed. (Figure 2)

   The T0n values (new passage of time correction target value) are blank. The display of evaluation values scanned at 20% and 60% can be switched by using the [View the result of 20%/60%] button. (Figure 3)

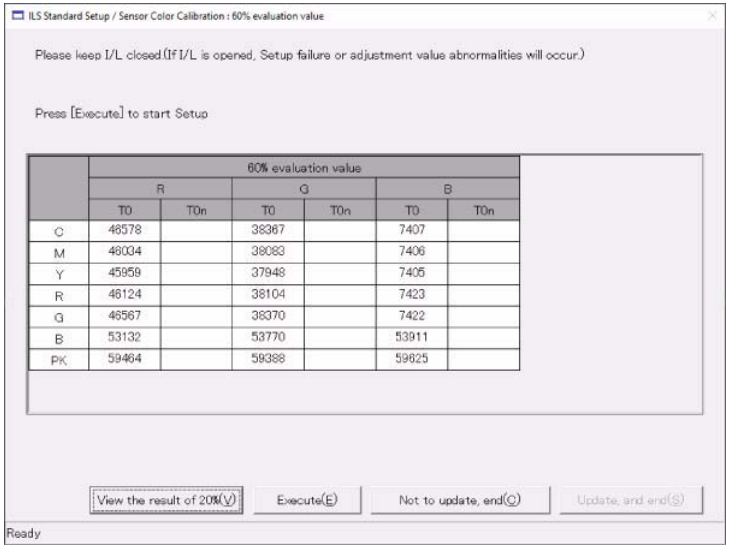


Figure 3 e0ko640033

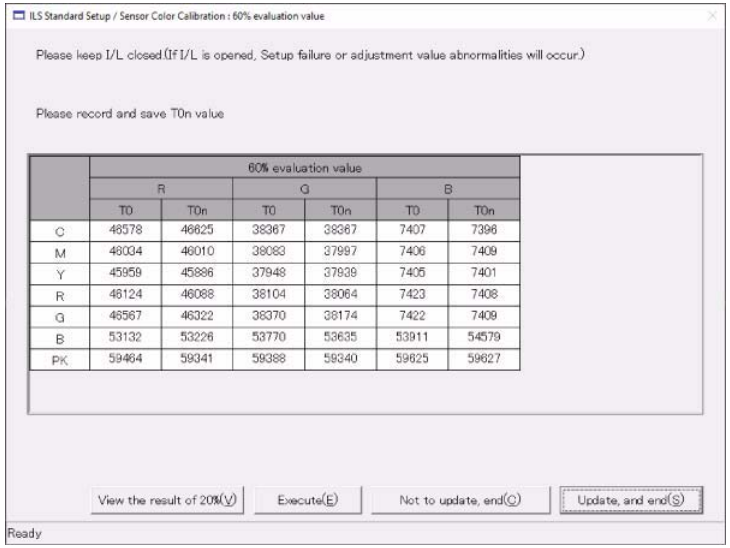

ILS Standard Setup / Sensor Color Calibration : 60% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Please record and save T0n value
60% evaluation value
R
G
B
T0
T0n
C 46578 46625 38367 38367 7407 7396
M 46034 46010 38083 37997 7406 7409
Y 45959 45886 37948 37839 7405 7401
R 46124 46088 38104 38064 7423 7408
G 46567 46322 38370 38174 7422 7409
B 53132 53226 53770 53635 53911 54579
PK 59464 59341 59388 59340 59625 59627
View the result of 20%(V)
Execute(E)
Not to update, end(C)
Update, and end(S)
Ready

Figure 4 e0ko640034

4. Clicking [Execute] on the [View the result of 60%] screen executes the Calib (CCD).
   - When in progress, the message: "Sensor color calibration in progress" is displayed.
5. If the adjustment has completed with an error, the T0n value will still be displayed on the screen along with the message: "Sensor color calibration has failed". The Calib (CCD) can be performed again.
6. If the adjustment has completed successfully, the T0n value will be displayed on the screen and the "Record/Save T0n Value." message is displayed. (Figure 4)
   - To update: clicking [Update, and end] writes the T0n value into the T0n area of NVM and ends the process.
   - To skip updating: clicking [Not to update, end] ends the process without updating the NVM.

7. The T0 values that are displayed during the adjustment and their display information are as follows.

Table 1 20% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
C	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
M	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
Y	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
R	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
G	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
B	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
PK	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

Table 2 60% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
C	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
M	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
Y	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

Table 2 60% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
R	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
G	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
B	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
PK	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

6.4.43.6 Adjustment after Lamp Replacement: DC970

Purpose

This is performed after replacing the Lamp. To scan the color proof plate and save the value as T0 value into the NVM.

Procedure

1. On the ILS Standard Setup Screen, select [Adjustment after lamp replacement]. (Figure 1)

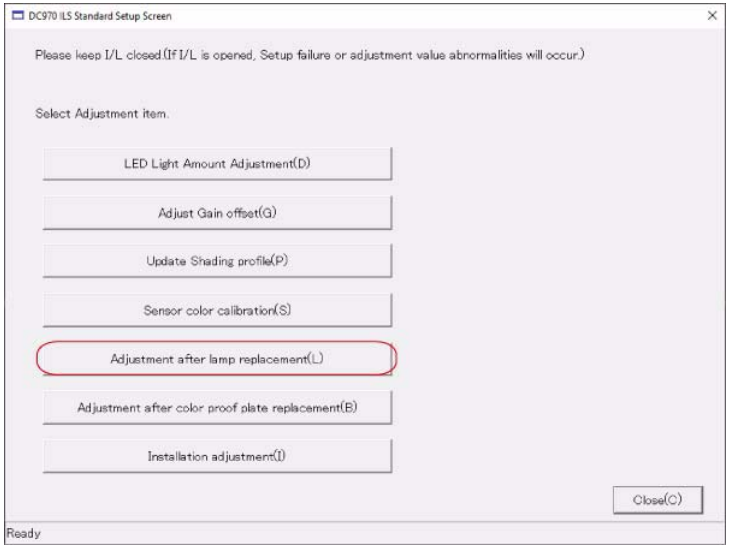

DC970 ILS Standard Setup Screen
Please keep I/L closed.(If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640035

2. The ILS Standard Setup/Adjustment after Lamp Replacement: 20% evaluation value screen is displayed. (Figure 2)
   - On the ILS Standard Setup / Adjustment after Lamp Replacement: 20% evaluation value screen, the acquired T0 values (passage of time correction target value before the replacement) and the message: "Press [View the result of 60%]" are displayed. The T0n values (new passage of time correction target value) are blank. The display of evaluation values for 20% and 60% can be switched by using the [View the result of 60%] button.

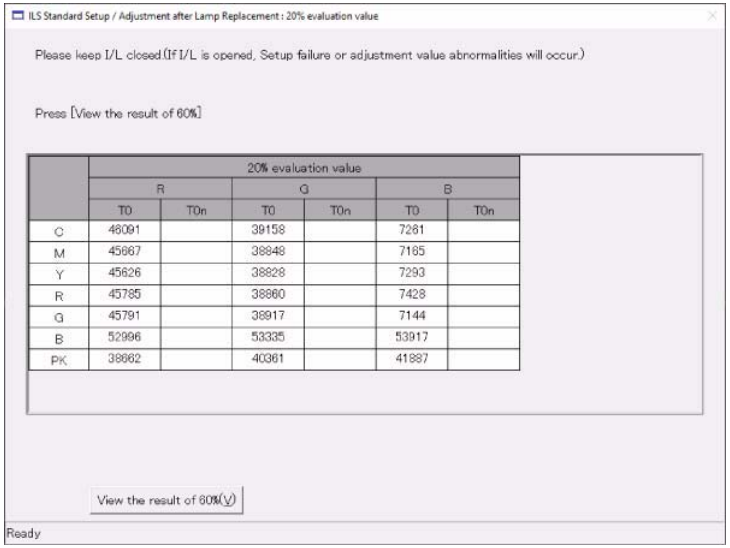

ILS Standard Setup / Adjustment after Lamp Replacement : 20% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [View the result of 60%]
20% evaluation value
R
G
B
T0
T0n
C 46091 39158 7261
M 45667 38848 7185
Y 45626 38828 7293
R 45785 38860 7428
G 45791 38917 7144
B 52996 53335 53917
PK 38662 40361 41887
View the result of 60%(V)
Ready

Figure 2 e0ko640036

3. Clicking [Execute] on the [View the result of 60%] screen executes the Setup. (Figure 3)
   - When in progress, the message: "Adjustment after lamp replacement in progress" is displayed.

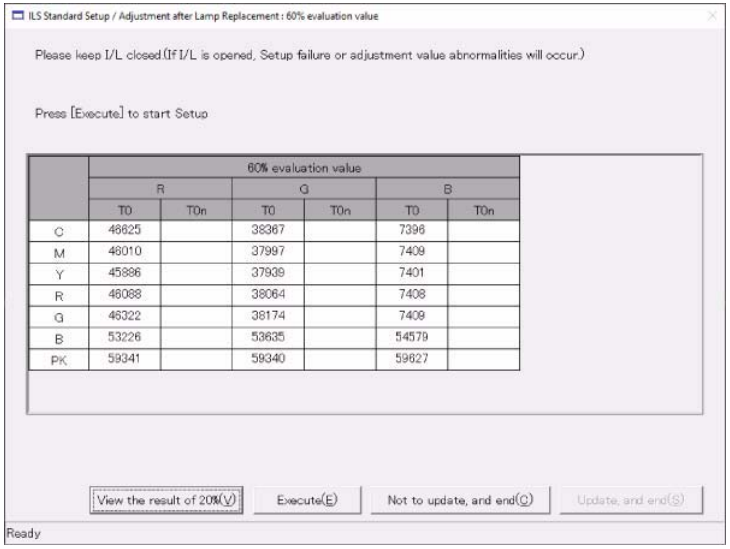

ILS Standard Setup / Adjustment after Lamp Replacement : 60% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [Execute] to start Setup
60% evaluation value
R
G
B
T0
T0n
C 46625 38367 7396
M 46010 37997 7409
Y 45886 37939 7401
R 46088 38064 7408
G 46322 38174 7409
B 53226 53635 54579
PK 59341 59340 59627
View the result of 20%(V)
Execute(E)
Not to update, and end(C)
Update, and end(S)
Ready

Figure 3 e0ko640037

4. If the adjustment has completed with an error, the T0n value will still be displayed on the screen along with the message: "Adjustment after lamp replacement has failed". The Setup can be performed again.
5. If the adjustment has completed successfully, the T0n value will be displayed on the screen and the "Record/Save T0n Value." message is displayed. (Figure 4)
   - To update: clicking [Update, and end] writes the T0n value into the T0 area of NVM and ends the process.
   - To skip updating: clicking [Not to update, end] ends the process without updating the NVM.

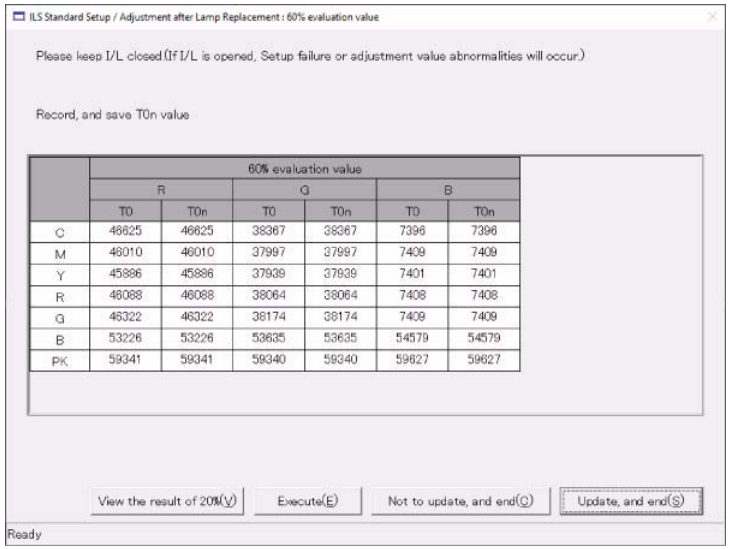

ILS Standard Setup / Adjustment after Lamp Replacement : 60% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Record, and save T0n value
60% evaluation value
R
G
B
T0
T0n
C 46625 46625 38367 38367 7396 7396
M 46010 46010 37997 37997 7409 7409
Y 45886 45886 37939 37939 7401 7401
R 46088 46088 38064 38064 7408 7408
G 46322 46322 38174 38174 7409 7409
B 53226 53226 53635 53635 54579 54579
PK 59341 59341 59340 59340 59627 59627
View the result of 20%(V)
Execute(E)
Not to update, and end(C)
Update, and end(S)
Ready

Figure 4 e0ko640038

6. The T0 values that are displayed during the adjustment and their display information are as follows.

Table 1 20% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
C	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
M	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
Y	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
R	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
G	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
B	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
PK	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

Table 2 60% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
C	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
M	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
Y	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
R	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
G	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
B	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
PK	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

6.4.43.7 Adjustment after Color Proof Plate Replacement: DC970

6.4.43.7.1 How to Process Color Proof Plate Replacement

Purpose

This is performed after replacing the color proof plate. To scan the replaced color proof plate and save the value as T0 value into the NVM.

Procedure

1. In the ILS Standard Setup screen, select [Adjustment after color proof plate replacement]. (Figure 1)

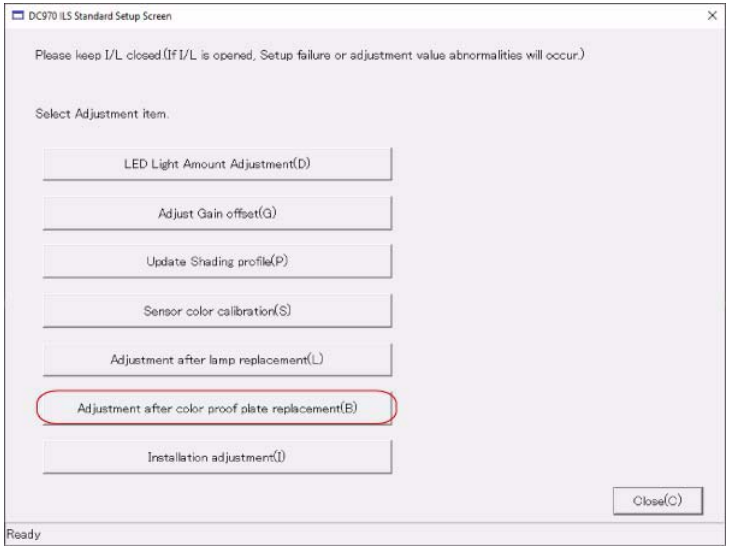

DC970 ILS Standard Setup Screen
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640039

2. The ILS Standard Setup/Adjustment after Color Proof Plate Replacement: 20% evaluation value screen is displayed. (Figure 2)
   - On the ILS Standard Setup/Adjustment after Color Proof Plate Replacement: 20% evaluation value screen, the acquired T0 values (passage of time correction target value before the replacement) and the message: "Press [View the result of 60%]". The T0n values (new passage of time correction target value) are blank. The display of evaluation values for 20% and 60% can be switched by using the [View the result of 60%] button.

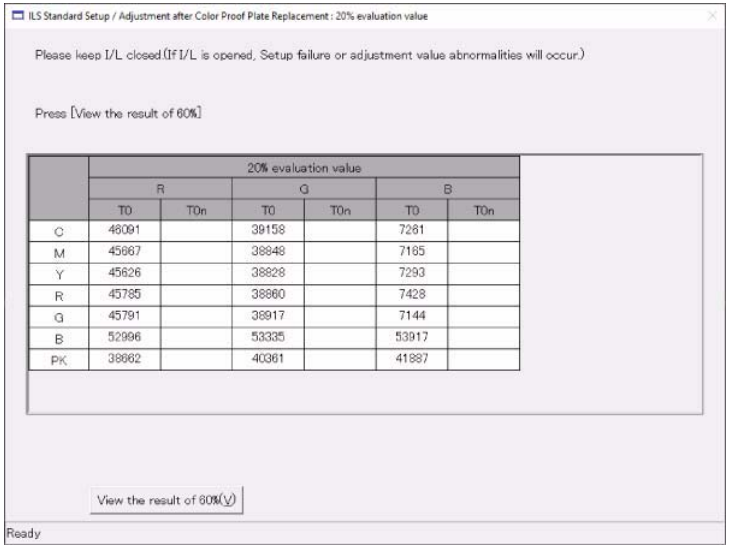

ILS Standard Setup / Adjustment after Color Proof Plate Replacement : 20% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [View the result of 60%]
20% evaluation value
R
G
B
T0
T0n
C 46091 39158 7261
M 45667 38848 7185
Y 45626 38828 7293
R 45785 38860 7428
G 45791 38917 7144
B 52996 53335 53917
PK 38662 40361 41887
View the result of 60%(V)
Ready

Figure 2 e0ko640040

3. Clicking [Execute] on the [View the result of 60%] screen executes the Setup. (Figure 3)
   - When in progress, the message: "Adjustment after color proof plate replacement in progress" is displayed.

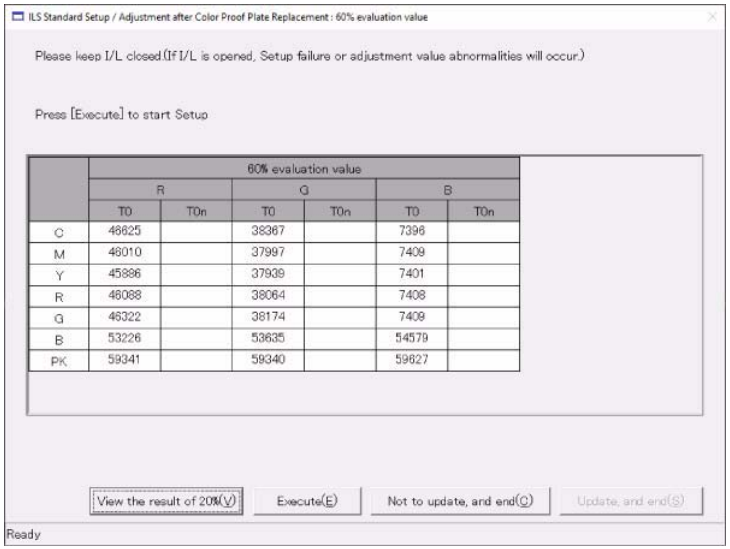

ILS Standard Setup / Adjustment after Color Proof Plate Replacement : 60% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Press [Execute] to start Setup
60% evaluation value
R
G
B
T0
T0n
C 46625 38367 7396
M 46010 37997 7409
Y 45886 37939 7401
R 46088 38064 7408
G 46322 38174 7409
B 53226 53635 54579
PK 59341 59340 59627
View the result of 20%(V)
Execute(E)
Not to update, and end(C)
Update, and end(S)
Ready

Figure 3 e0ko640041

4. If the adjustment has completed with an error, the T0n value will still be displayed on the screen along with the message: "Adjustment after color proof plate replacement has failed". The Setup can be performed again.
5. If the adjustment has completed successfully, the T0n value will be displayed on the screen and the "Record/Save T0n Value." message is displayed. (Figure 4)
   - To update: clicking [Update, and end] writes the T0n value into the T0 area of NVM and ends the process.
   - To skip updating: clicking [Not to update, end] ends the process without updating the NVM.

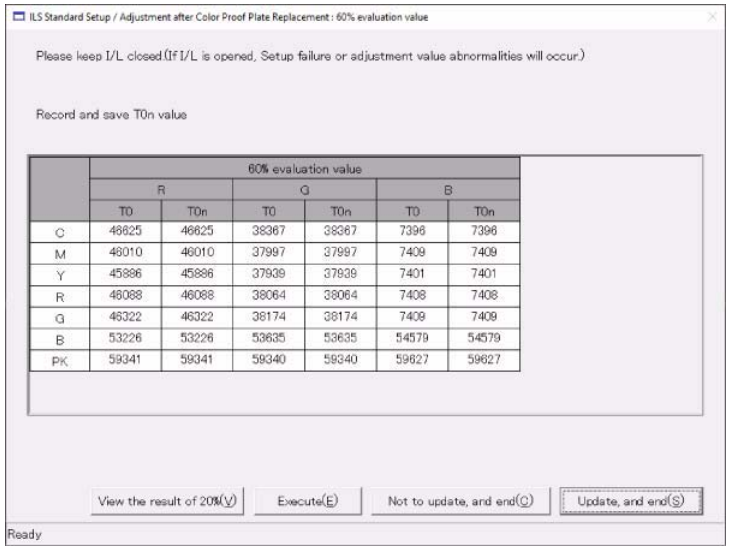

ILS Standard Setup / Adjustment after Color Proof Plate Replacement : 60% evaluation value
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Record and save T0n value
60% evaluation value
R
G
B
T0
T0n
C 46625 46625 38367 38367 7396 7396
M 46010 46010 37997 37997 7409 7409
Y 45886 45886 37939 37939 7401 7401
R 46088 46088 38064 38064 7408 7408
G 46322 46322 38174 38174 7409 7409
B 53226 53226 53635 53635 54579 54579
PK 59341 59341 59340 59340 59627 59627
View the result of 20%(V)
Execute(E)
Not to update, and end(C)
Update, and end(S)
Ready

Figure 4 e0ko640042

6. The T0 values that are displayed during the adjustment and their display information are as follows.

Table 1 20% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
C	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
M	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
Y	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
R	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
G	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
B	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
PK	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

Table 2 60% Evaluation Value

	Display range						Display Digits
	R		G		B		
	T0	T0n	T0	T0n	T0	T0n	
C	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
M	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
Y	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
R	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
G	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
B	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits
PK	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	0 to 65535	5 digits

7. If all is OK, click [Update, and end] and proceed to the next Step [6.4.44 DC973 Alignment Setup].

   NOTE: *The machine will automatically judge the adjustment value and it will be displayed in red when NG.*

8. If there is any NG, perform ADJ 20.1.13.2 Color Proof Plate Replacement - When Result is Abnormal].

6.4.43.7.2 Color Proof Plate Replacement - When Result is Abnormal

Procedure

1. Perform ADJ 20.1.11.2 Update Shading Profile - When Result is Abnormal].

6.4.43.8 Installation Adjustment: DC970

Purpose

To scan the adjustment surface and check the adjustment value for the purpose of adjusting the ILS during installation.

6.4.43.8.1 Installation Adjustment Value Verification Method

Procedure

1. In the ILS Standard Setup screen, select [Installation Adjustment]. (Figure 1)

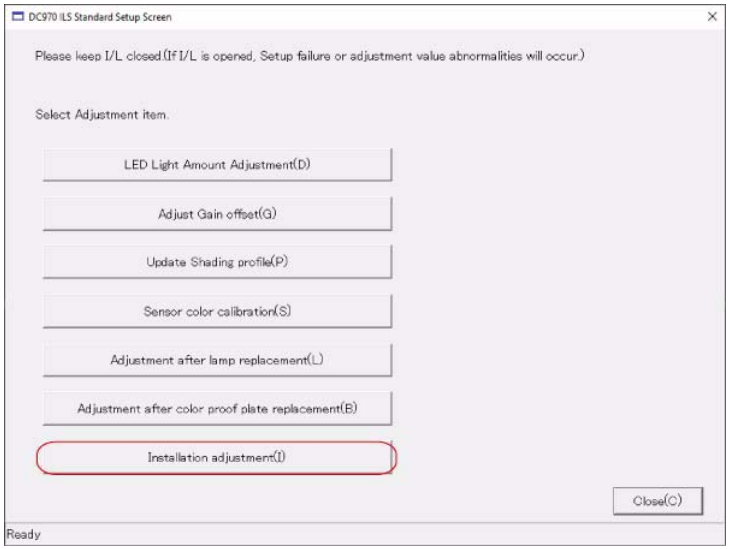

DC970 ILS Standard Setup Screen
Please keep I/L closed (If I/L is opened, Setup failure or adjustment value abnormalities will occur.)
Select Adjustment item.
LED Light Amount Adjustment(D)
Adjust Gain offset(G)
Update Shading profile(P)
Sensor color calibration(S)
Adjustment after lamp replacement(L)
Adjustment after color proof plate replacement(B)
Installation adjustment(I)
Close(C)
Ready

Figure 1 e0ko640043

2. Upon selection, the process simultaneously starts and the result will be displayed.
3. Clicking [View the value of judgment] displays the judgment values. (Figure 2)

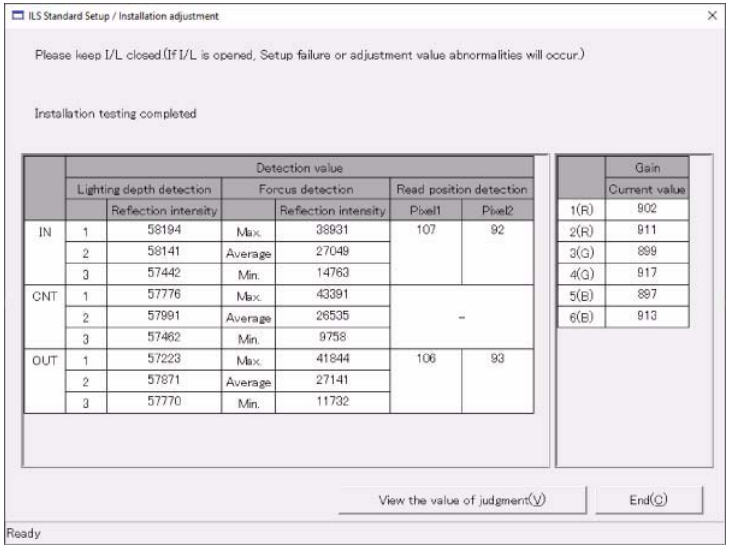


Figure 2 e0ko640044

4. Clicking [View the value of detection] displays the detection values. (Figure 3)

   NOTE: *The IOT performs judgment on the adjustment value and it will display any NG values in red.*

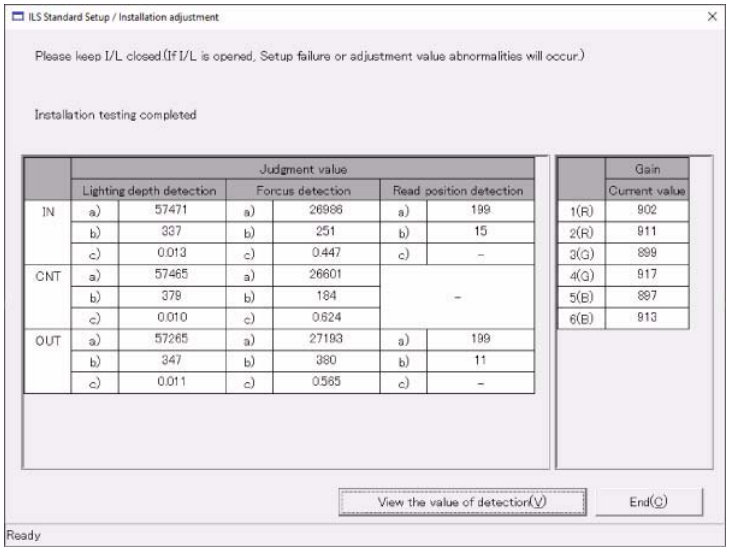


Figure 3 e0ko640045

5. [Lighting depth detection]
   Perform judgment for IN, CNT, and OUT rows 1 to 3 from the adjustment result.
   - a): Check the Min value - if it is 30000 or higher, it is OK
   - b): Subtract from 2 (average of 1 and 3) - if the absolute value is 1500 or lower, it is OK
   - c): If the value of (difference between Max and Min in 1 to 3) divided by (average of Max and Min) is 0.04 or lower, it is OK
6. [Focus detection]
   Perform judgment for Max/Avg/Min of IN, CNT, and OUT rows from the adjustment result.
   - a): If the average is 15000 or higher, it is OK
   - b): If ((Max + Min)/2 - Average) is 5000 or lower, it is OK
   - c): If ((Max - Min)/(Max + Min)) is 0.2 or higher, it is OK
7. [Read position detection]
   Perform judgment for IN and OUT rows from the adjustment result.
   - a): If (Pixel 1 + Pixel 2) is within 197 +/-10, it is OK
   - b): If (Pixel 1 - Pixel 2) is within +/-35, it is OK

   NOTE: *[Gain] will be checked in separate Step and is not necessary at this point.*
8. Click [End].
9. If all is OK, proceed to the next Step 6.4.43.7.1 How to Process Color Proof Plate Replacement].
   If there is any NG, perform ADJ 20.1.12.2 Installation Adjustment Value Verification - When Result is Abnormal].

6.4.43.8.2 Installation Adjustment Value Verification - When Result is Abnormal

Procedure

- For the first time
  Clean the Window/White Reference Surface/Inspection Side and perform ADJ 20.1.10.1 Adjust Gain Offset] again.
- For the second time

1. First, check the adjustment result of the Read Position Detection Side and perform the following according to the situation.
   (1) If Read Position Detection Side is NG and (Pixel 1 - Pixel 2) is not within +/-60
   -> proceed to Step 2
   (2) If Read Position Detection Side is NG and (Pixel 1 - Pixel 2) is within +/-60
   -> proceed to Step 3
   (3) If Read Position Detection Side is OK
   -> proceed to Step 4
2. Check the position of WR Roll for Step 1-(1).

   NOTE: *Refer to ADJ 20.1.12.3 WR Roll Position Verification Method] for the verification method.*

   (1) If the WR Roll position is NG, replace the WR Roll Assy. -> proceed to Step 3
   (2) If the WR Roll position is OK, replace the ILS main unit Assy. -> proceed to Step 6
3. For Step 1-(2) or Step 2-(1), rewrite NVM value based on the following calculation.

If the average value of IN row and OUT row of Pixel 1 is A, calculate Adjustment Value = (A - 100) x 100 / 34 (rounded to the nearest whole number).

Set the above calculation result to NVM [782-822] (WR Adjustment), then perform ADJ 20.1.12.1 Installation Adjustment Value Verification Method] again and check the result. Perform the following based on the result.

(1) If the adjustment result is OK -> proceed to Step 5

(2) If the adjustment result is NG -> proceed to Step 4

4. For Step 1-(3) or Step 3-(2), perform the following operation.
   (1) If lighting depth detection is NG, replace ILS Lamp Assy. -> proceed to Step 5
   (2) If the Focus detection is NG, replace the ILS Main Unit Assy. -> proceed to Step 6
5. For Step 3-(1) or Step 4-(1), perform from ADJ 20.1.10.1 Adjust Gain Offset] again.
6. For Step 2-(2) or Step 4-(2), perform from ADJ 20.1.16.1 How to Adjust LED Light Amount] again.

6.4.43.8.3 WR Roll Position Verification Method

Procedure

This is for checking the Roll position in Step 2 of ADJ 20.1.12.2 Installation Adjustment Value Verification - When Result is Abnormal]. (Figure 4)

Pull out the Exit Drawer and measure from the edge of the Shoot to the WR Roll hollow part axis, and replace WR if 17.5 > A, 23.5 < A, and replace ILS Assy Top if 17.5 < = A < = 23.5.

OK: 17.5 < = A < = 23.5

NG: 17.5 > A, 23.5 < A

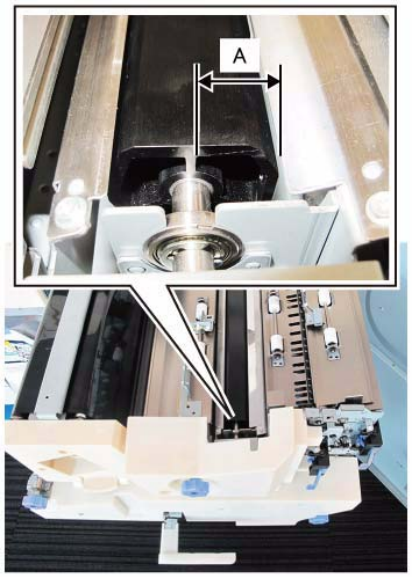


Figure 4 j0ko640065

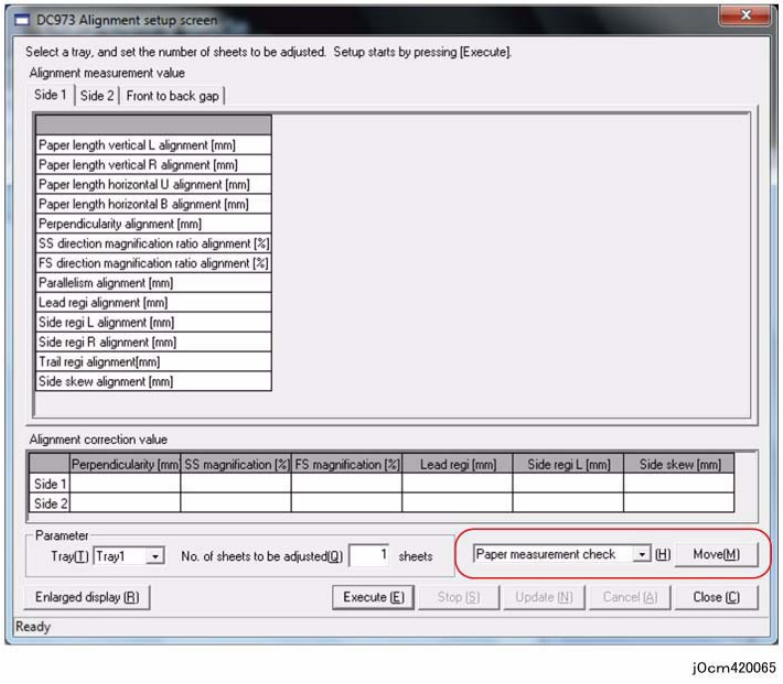
6.4.44 DC973 Alignment Setup (Paper Measurement Check)

Purpose

When ILS is installed, the paper measurement check is used to verify whether the ILS installation operation was performed correctly by checking the misalignment amount and dispersion against the specified paper from the paper corner detection.

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC973.
3. On the DC973 Alignment setup screen, the message: "Select a tray, and set the number of sheets to be adjusted. Setup starts by pressing [Execute]." is displayed.
4. Make sure that the move item at the bottom right is [Paper measurement check] and then click [Move]. (Figure 1)



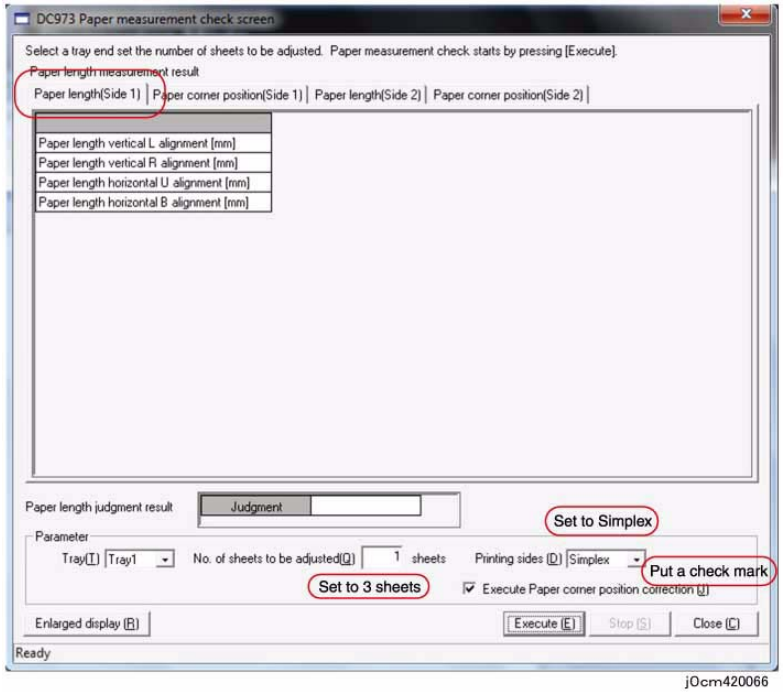
jOcm420065

Figure 1 j0cm420065

5. The DC973 Paper measurement check screen is displayed. Select the [Paper length (Side 1)] tab, set the [Tray] that was loaded with the paper and the [No. of sheets to be adjusted], put a check mark at [Execute Paper corner position correction], and then click [Execute]. (Figure 2)

Table 1 Setting Data

Item	Settings
Tray	Tray that was loaded with the paper
No. of sheets to be adjusted	3 sheets
Execute Paper corner position correction	Put a check mark (execute)
Printing sides	Simplex
Paper Size to be used	A3 (J paper)



jOcm420066

Figure 2 j0cm420066

6. Check that the judgment result is [OK]. (Figure 3)

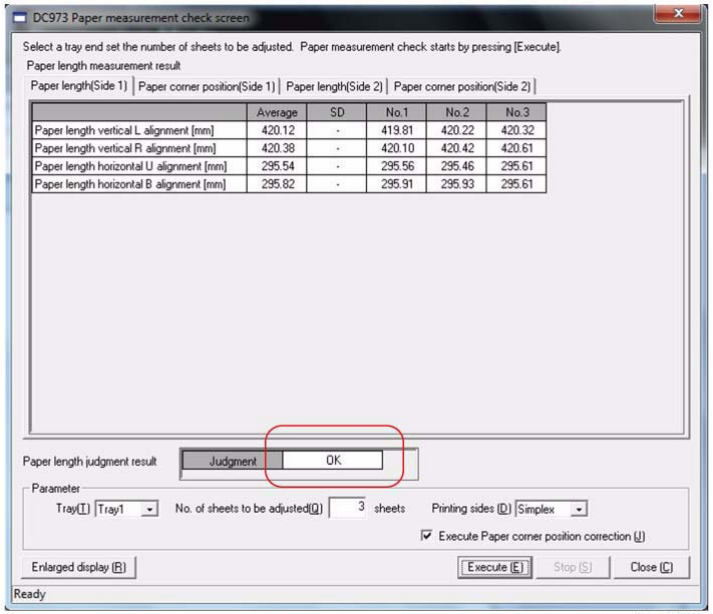

DC973 Paper measurement check screen
Select a tray end set the number of sheets to be adjusted. Paper measurement check starts by pressing [Execute].
Paper length measurement result
Paper length(Side 1)
Paper corner position(Side 1)
Paper length(Side 2)
Paper corner position(Side 2)
Average
SD
No.1
No.2
No.3
Paper length vertical L alignment [mm] 420.12 - 419.81 420.22 420.32
Paper length vertical R alignment [mm] 420.38 - 420.10 420.42 420.61
Paper length horizontal U alignment [mm] 295.54 - 295.56 295.46 295.61
Paper length horizontal B alignment [mm] 295.82 - 295.91 295.93 295.61
Paper length judgment result
Judgment
OK
Parameter
Tray(T) Tray1
No. of sheets to be adjusted(Q) 3 sheets
Printing sides (D) Simplex
Execute Paper corner position correction (J)
Enlarged display (R)
Execute (E)
Stop (S)
Close (C)
Ready
j0cm420067

Figure 3 j0cm420067

NOTE: *Putting a check mark at [Execute Paper corner position correction] makes it possible to perform both measurement and adjustment for the paper length and paper corner position correction.*

7. If the judgment result is NG, perform the adjustment again.
8. If the judgment result is OK, switch to the [Paper corner position (Side 1)] tab, remove the check mark from [Execute Paper corner position correction], and then click [Execute] again. The [Paper length judgment result] will display the judgment (OK or NG). (Figure 4)

NOTE: *Removing the check mark from [Execute Paper corner position correction] performs the judgment without performing any paper corner position correction.*

Table 2 Setting Data

Item	Settings
Tray	Tray that was loaded with the paper
No. of sheets to be adjusted	3 sheets
Execute Paper corner position correction	Remove the check mark (do not execute)
Printing sides	Simplex
Paper Size to be used	A3 (J paper)

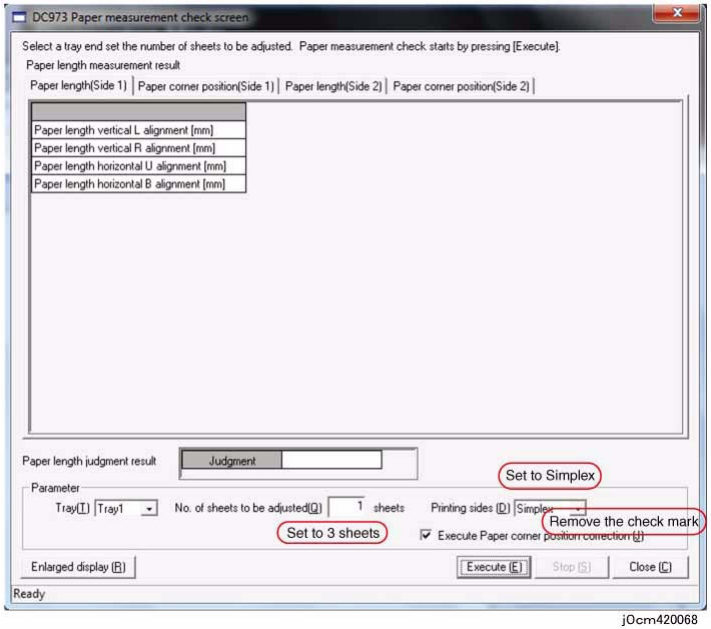

DC973 Paper measurement check screen
Select a tray end set the number of sheets to be adjusted. Paper measurement check starts by pressing [Execute].
Paper length measurement result
Paper length(Side 1)
Paper corner position(Side 1)
Paper length(Side 2)
Paper corner position(Side 2)
Paper length vertical L alignment [mm]
Paper length vertical R alignment [mm]
Paper length horizontal U alignment [mm]
Paper length horizontal B alignment [mm]
Paper length judgment result
Judgment
Set to Simplex
Parameter
Tray(T) Tray1
No. of sheets to be adjusted(Q) 1 sheets
Printing sides (D) Simplex
Set to 3 sheets
Remove the check mark
Execute Paper corner position correction (J)
Enlarged display (R)
Execute (E)
Stop (S)
Close (C)
Ready
j0cm420068

Figure 4 j0cm420068

9. If the judgment result is NG, perform the adjustment again.
   (1) For the 1st time it is NG, initialize the following NVM.
   - DC131 [NVM 782-338: ILS Scan First Pixel Position], Value: 20500 (default value)
   - DC131 [NVM 782-339: Start Scan Gap], Value: 4400 (default value)

   Perform paper measurement check again.
   (2) For the 2nd time it is NG, display the [Paper corner position (Side 1)], refer to the following formula to change the NVM, and then perform the paper measurement check again.

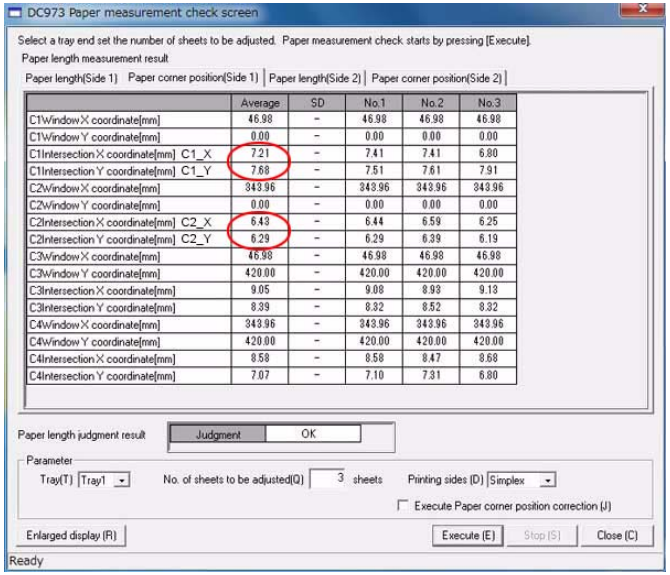

DC973 Paper measurement check screen
Select a tray end set the number of sheets to be adjusted. Paper measurement check starts by pressing [Execute].
Paper length measurement result
Paper length(Side 1)
Paper corner position(Side 1)
Paper length(Side 2)
Paper corner position(Side 2)
Average
SD
No.1
No.2
No.3
C1Window X coordinate[mm] 46.98 - 46.98 46.98 46.98
C1Window Y coordinate[mm] 0.00 - 0.00 0.00 0.00
C1Intersection X coordinate[mm] C1_X 7.21 - 7.41 7.41 6.80
C1Intersection Y coordinate[mm] C1_Y 7.68 - 7.51 7.61 7.91
C2Window X coordinate[mm] 343.96 - 343.96 343.96 343.96
C2Window Y coordinate[mm] 0.00 - 0.00 0.00 0.00
C2Intersection X coordinate[mm] C2_X 6.43 - 6.44 6.59 6.25
C2Intersection Y coordinate[mm] C2_Y 6.29 - 6.29 6.39 6.19
C3Window X coordinate[mm] 46.98 - 46.98 46.98 46.98
C3Window Y coordinate[mm] 420.00 - 420.00 420.00 420.00
C3Intersection X coordinate[mm] 9.05 - 9.08 8.93 9.13
C3Intersection Y coordinate[mm] 8.39 - 8.32 8.52 8.32
C4Window X coordinate[mm] 343.96 - 343.96 343.96 343.96
C4Window Y coordinate[mm] 420.00 - 420.00 420.00 420.00
C4Intersection X coordinate[mm] 8.58 - 8.58 8.47 8.68
C4Intersection Y coordinate[mm] 7.07 - 7.10 7.31 6.80
Paper length judgment result
Judgment
OK
Parameter
Tray(T)
Tray1
No. of sheets to be adjusted(Q)
3
sheets
Printing sides (D)
Simplex
Execute Paper corner position correction (J)
Enlarged display (R)
Execute (E)
Stop (S)
Close (C)
Ready

Figure 5 j0cx420544

A: Formula

- mv_x = (C1_x * 100 + C2_x * 100) / 2 - 700
- mv_y = (C1_y * 100 + C2_y * 100) / 2 - 700
- First_Pos (new) = First_Pos (old NVM value) + mv_x
- ILS_Lead_Gap (new) = ILS_Lead_Gap (old NVM value) + mv_y

B: Use the calculation result from A and change the value of the applicable NVM.

- Chain-Link No. 782-338: First_Pos (new)
- Chain-Link No. 782-339: LS_Lead_Gap (new)

Perform paper measurement check again.

(3) For the 3rd and subsequent time it is still NG, check the paper feed timing and skew.

Perform paper measurement check again.

10. When the judgment result becomes OK, click [Close].

6.4.45 DC973 Alignment Setup (Alignment Adjustment)

Purpose

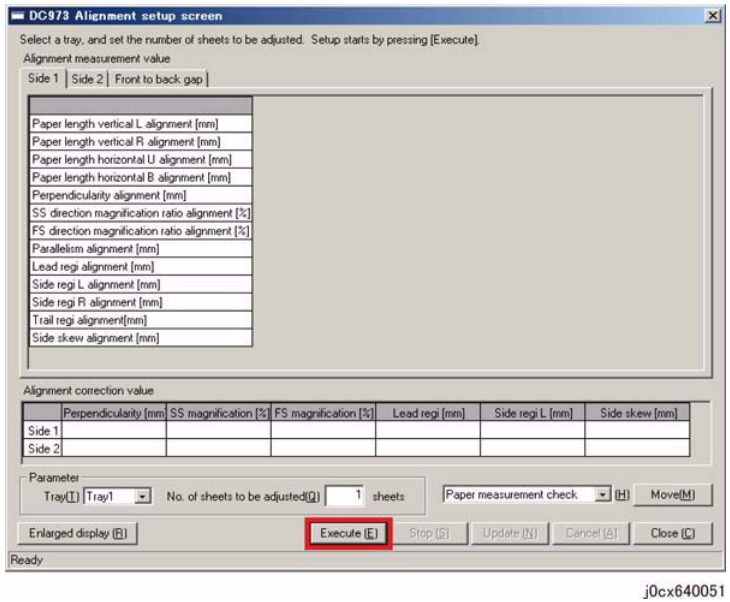
This describes the alignment adjustment method that used ILS.

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC973.
3. On the DC973 Alignment setup screen, the message: 'Select a tray, and set the number of sheets to be adjusted. Setup starts by pressing [Execute].' is displayed.
4. Set the Tray loaded with paper and the number of sheets to be adjusted, and click [Execute]. The parameter settings are as follows. (Figure 1)

Table 1 Setting Data

Item	Settings
Tray	Tray that was loaded with the paper
No. of sheets to be adjusted	3 sheets
Paper Size to be used	A3 (J paper)



j0cx640051

Figure 1 j0cx640051

5. After executing, check the last page that was printed out for misalignment and, after confirming that the misalignment has improved, click [Update]. Clicking [Update] updates the NVM value with the correction value of the various alignment types.

NOTE: *Although DC131 NVM: 742-306/742-314 Lead Correction Amount (Side 1/Side 2) is the standard correction amount targeted for 81 to 105 gsm, standard values must also be set for the NVM of other paper types (gsm). (Until individual changes are made, the same Lead Correction Amount value will be set for all paper types) When the value of NVM: 742-306/742-314 have changed, also change the value of the other NVMs in the following table.*

Table 2

gsm	Side 1 NVM	Side 2 NVM
55 to 80	742 to 305	742 to 313
81 to 105	742 to 306	742 to 314
106 to 135	742 to 307	742 to 315
136 to 150	742 to 308	742 to 316
151 to 186	742 to 309	742 to 317
187 to 220	742 to 310	742 to 318
221 to 256	742 to 311	742 to 319
257 or heavier	742 to 312	742 to 320

6.4.46 DC971 ILS CTRACS Adjustment

Purpose

To use the ILS that was installed successfully for detecting a misalignment from target density on the paper and derive the correction value (LUT) to automatically correct the IOT NVM.

Simple Auto Tone Correction Mode: Calculate the correction value (LUT) by using 1 detection. (Default setting)

High Accurate Auto Tone Correction Mode: Output Patch image -> detection by ILS -> calculate correction value and repeat until the correction result has converged.

NOTE: *This function will not work if ILS is not connected.*

NOTE: *For the paper size, use A4/Letter LEF (vertical 279.4 mm x horizontal 210.0 mm) or larger.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC971.
3. On the DC971 ILS CTRACS Adjustment Screen, the current ILS Target Value RGB, ILS Measurement Value RGB, and the message: "Set parameters. Start Auto Tone Correction by pressing [Execute]." are displayed. (Figure 1)

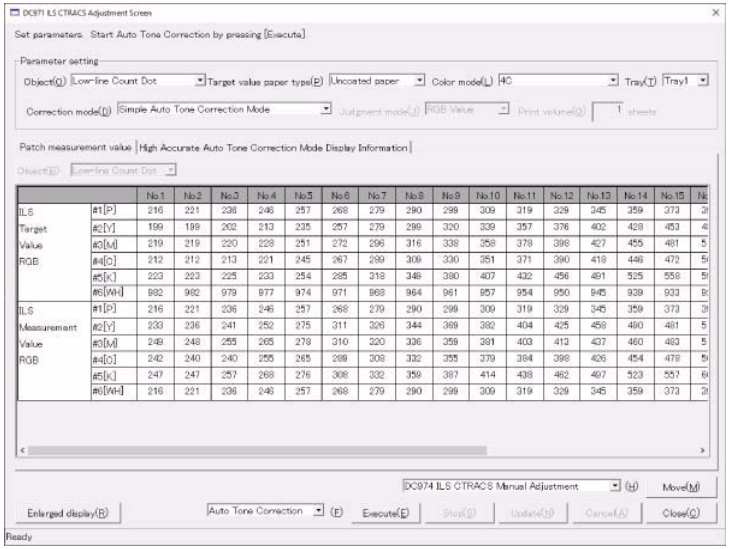


Figure 1 e0ko640046

4. Simple Auto Tone Correction Mode operation

Set the Parameter setting column as follows and click [Execute]. (Figure 2) (Operation can be stopped by [Stop] button)

Table 1 Setting Data

Item	Setting Data
Object	The default is Low-line Count Dot ***NOTE:*** *All screen groups cannot be selected at once for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *All screen groups cannot be selected at once for the Color Mode [White Correction].*
Target value paper type	Uncoated, Coated, Custom (The default setting follows the Screen Individual NVM [paper type (Target) information during measurement]. This NVM will be updated when Calibration is performed.) ***NOTE:*** *Coated paper cannot be selected for the Color Mode [White Correction].*
Color Mode	The default is 4C When Silver Toner is installed, 5C, 6C can also be selected. ***NOTE:*** *White Correction can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *White Correction cannot be selected for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *White Correction cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *White Correction cannot be selected for [Coated Paper] paper type.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction]. [Kishu Bond Black Paper] recommended*
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected.
Correction mode	Simple Auto Tone Correction Mode (default) ***NOTE:*** *High Accurate Auto Tone Correction Mode cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *High Accurate Auto Tone Correction cannot be selected for Color Mode [White Correction].*

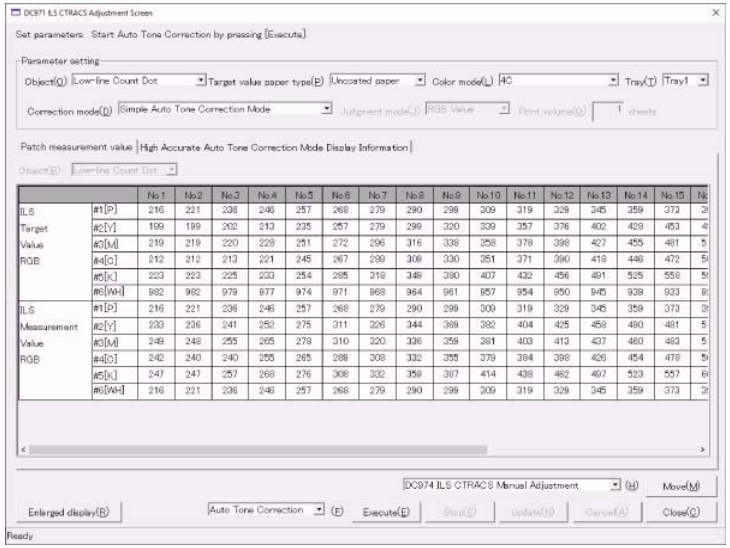


Figure 2 e0ko640047

NOTE: *If necessary, manual adjustment of Tone Correction is also possible. Click [Move] to proceed with DC974 ILS CTRACS Manual Adjustment. (Figure 3) (For details on the adjustment procedure, refer to [ADJ 20.1.4 DC974 ILS CTRACS Manual Adjustment]) Engines containing white cannot be adjusted manually.*

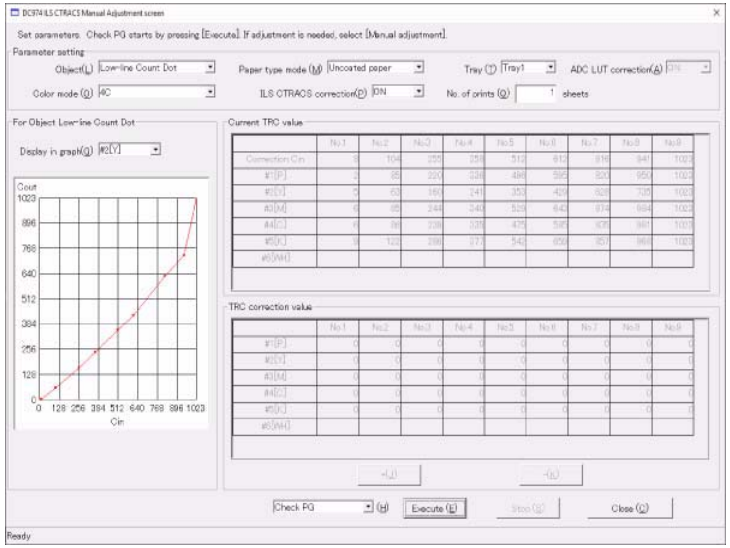

DC974 ILS CTRACS Manual Adjustment screen
Set parameters. Check PG starts by pressing [Execute]. If adjustment is needed, select [Manual adjustment].
Parameter setting
Object(L) Low-line Count Dot
Paper type mode (M) Uncoated paper
Tray (T) Tray1
Color mode (Q) 4C
ILS CTRACS correction(P) ON
No. of prints (Q) 1 sheets
For Object Low-line Count Dot
Display in graph(G) #2[Y]
Current TRC value
TRC correction value
Check PG
Execute (E)
Close (C)
Ready

Figure 3 e0ko640048

When completed, the message: "Correction is ended. Set the correction result by pressing [Update]. Start confirmation print by pressing [Execute]." and the ILS measurement values are displayed. (Figure 4)

Proceed to the process in Step 6 Confirmation Print/Update.

If the measurement result is NG, a Fail message will be displayed and the ILS measurement value column will be grayed out. Perform cancellation and try again or perform the ILS Troubleshooting procedure in Chapter 2 FIP.

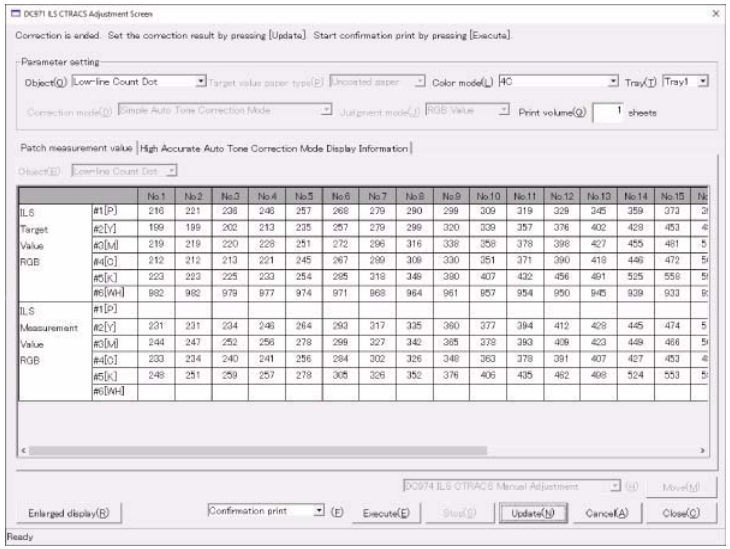

DC971 ILS CTRACS Adjustment Screen
Correction is ended. Set the correction result by pressing [Update]. Start confirmation print by pressing [Execute].
Parameter setting
Object(O) Low-line Count Dot
Target value paper type(P) Uncoated paper
Color mode(L) 4C
Tray(T) Tray1
Correction mode(N) Simple Auto Tone Correction Mode
Judgment mode(J) RGB Value
Print volume(Q) 1 sheets
Patch measurement value | High Accurate Auto Tone Correction Mode Display Information
Object(E) Low-line Count Dot
No.1 No.2 No.3 No.4 No.5 No.6 No.7 No.8 No.9 No.10 No.11 No.12 No.13 No.14 No.15
ILS Target Value RGB
#1[P] 216 221 238 246 257 268 279 290 299 309 319 329 345 359 373
#2[Y] 199 199 202 213 235 257 279 296 320 339 357 376 402 428 453
#3[M] 219 219 220 228 251 272 296 316 338 358 378 398 427 455 481
#4[C] 212 212 213 221 245 267 289 309 330 351 371 390 419 446 472
#5[K] 223 223 225 233 254 285 319 349 380 407 432 456 491 525 559
#6[WH] 982 982 979 977 974 971 968 964 961 957 954 950 945 939 933
ILS Measurement Value RGB
#1[P]
#2[Y] 231 231 234 246 264 293 317 335 360 377 394 412 429 445 474
#3[M] 244 247 252 256 278 299 327 342 365 378 393 409 423 449 466
#4[C] 233 234 240 241 256 284 302 326 348 363 378 391 407 427 453
#5[K] 248 251 259 257 278 305 326 352 376 406 435 462 498 524 553
#6[WH]
DC974 ILS CTRACS Manual Adjustment
Move(M)
Enlarged display(R)
Confirmation print
Execute(E)
Stop(S)
Update(N)
Cancel(A)
Close(C)
Ready

Figure 4 e0ko640049

Table 2 Display Data Contents

Display Data Name		Displayed Contents
Object/Color Mode/Tray		Same settings as when performing corrections
No. of prints		1 to 9999 sheets (default is 1 sheet)
ILS Target Value RGB		Displays the ILS Target Value RGB for each Engine that corresponded to the specified screen and paper type
	Engine	#1 to #6
	Tone Patch No.	No. 1 to No. 24 (value: 0 to 1023)
ILS Measurement Value RGB		Displays the ILS Measurement Value RGB after a correction is performed
	Engine	#1 to #6
	Tone Patch No.	No. 1 to No. 24 (value: 0 to 1023)

NOTE: *The columns for Engines that are not installed will be grayed out with blank value display.*

NOTE: *The columns for Engines installed with Clear Toner will be grayed out with blank value display.*

NOTE: *The measurement value of an Engine that is not applicable for the Color Mode that is specified at the execution will not be displayed.*

5. High Accurate Auto Tone Correction Mode operation

   Set the Parameter setting column as follows and click [Execute]. (Figure 5)

Table 3 Setting Data

Item	Setting Data
Object	The default is Low-line Count Dot. ***NOTE:*** *All screen groups cannot be selected at once for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *All screen groups cannot be selected at once for the Color Mode [White Correction].*
Target value paper type	Uncoated, Coated, Custom (The default setting follows the Screen Individual NVM [paper type (Target) information during measurement]. This NVM will be updated when Calibration is performed.) ***NOTE:*** *Coated paper cannot be selected for the Color Mode [White Correction].*
Color Mode	The default is 4C. When Silver Toner is installed, 5C and 6C can also be selected. ***NOTE:*** *White Correction can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *White Correction cannot be selected for the Auto Correction Mode [High Accurate Auto Tone Correction Mode].* ***NOTE:*** *White Correction cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *White Correction cannot be selected for [Coated Paper] paper type.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction]. [Kishu Bond Black Paper] recommended*
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. ***NOTE:*** *High Accurate Auto Tone Correction Mode cannot be selected for the Object [All Screen Groups].* ***NOTE:*** *High Accurate Auto Tone Correction cannot be selected for Color Mode [White Correction].*
Correction mode	High Accurate Auto Tone Correction Mode

Table 3 Setting Data

Judgment Mode	This can only be set when in High Accurate Auto Tone Correction Mode; RGB Value, Lab Value (L*a*b Delta E value), Density Value; although RGB Value is the default, the previously selected Judgment Mode will become the default value upon each execution.

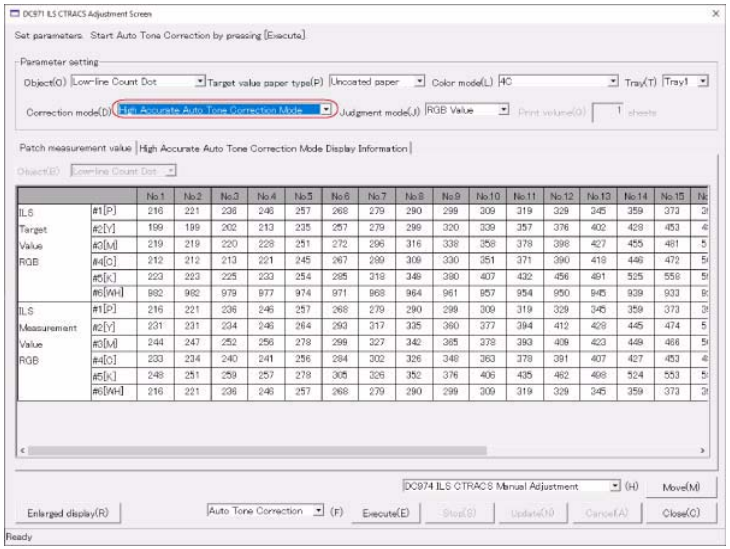


Figure 5 e0ko640050

When completed, the message: "Correction is ended. Press [End] to check the correction result and end it. and press [Continue] to continue the correction. To perform confirmation print, select [Confirmation print]." is displayed, while the Correction convergence threshold and the values during execution are displayed in the High Accurate Auto Tone Correction Mode Display Information. (Figure 6)

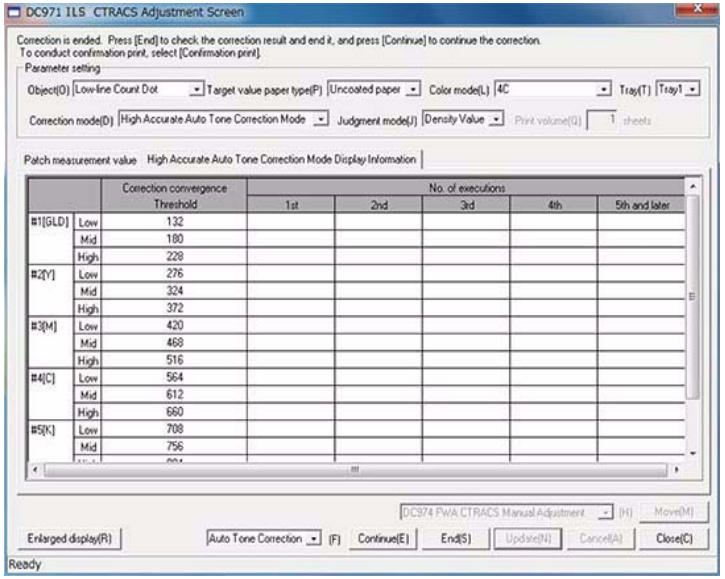


Figure 6 e0ko640051

Table 4 Display Data Contents

Display Data Name		Displayed Contents
Object/Target Value Paper Type/Color Mode/ Tray/Correction Mode/Judgment Mode		The setting values when performing corrections
Display Value		Displays the Correction convergence threshold and the values during execution that corresponded to the Judgment Mode. The display value shows the values for the 1st to 4th repetitions and the latest values for the 5th time onwards.
	Engine	#1 to #6
	Area	Low, Mid, High
	Correction Convergence Threshold	
	No. of executions	1 to 5 onwards (0 to 65535)

NOTE: *When the Low/Mid/High areas of each color is lower than the value of Correction convergence threshold or the execution result after 1st and 2nd time is saturated (repeating the operation does not yield a smaller value), do not use [Continue] anymore.*

NOTE: *Although the operation can be repeated more than 5 times, the reduction in execution gradient after each repetition could cause errors such as Tone Jump. The recommended number of repetitions is up to 3. Also, the basic recommendation is to use the Simple Auto Tone Correction Mode.*

6. Confirmation Print/Update

At the bottom left window, check that Confirmation print is selected, specify the Print volume at the Parameter settings column (default: 1 sheet (setting: 1 to 9999 sheets)), and click [Execute]. (Figure 7)

To update: clicking [Update] writes the correction value into the NVM.

To keep as is: clicking [Cancel] discards the correction value.

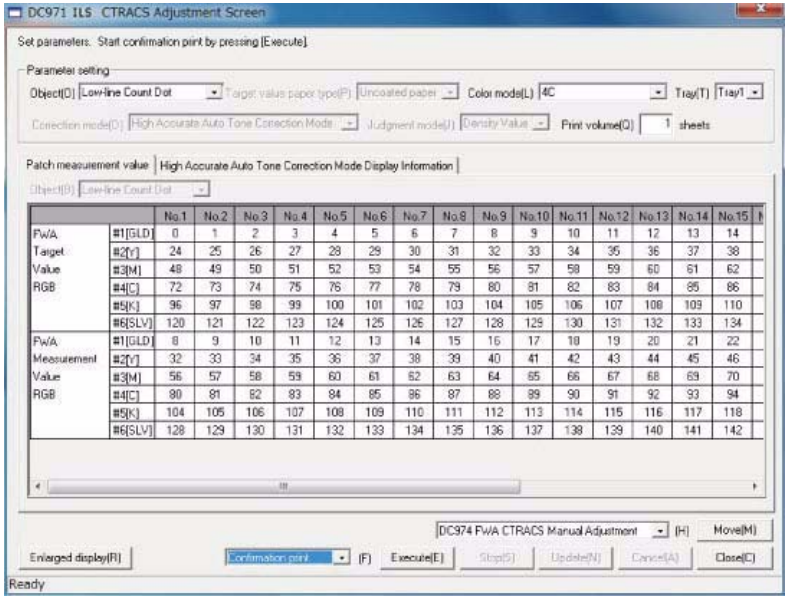

DC971 ILS CTRACS Adjustment Screen
Set parameters. Start confirmation print by pressing [Execute].
Parameter setting
Object(O) Low-line Count Dot
Target value paper type(P) Uncoated paper
Color mode(L) 4C
Tray(T) Tray1
Correction mode(D) High Accurate Auto Tone Correction Mode
Judgment mode(J) Density Value
Print volume(Q) 1 sheets
Patch measurement value
High Accurate Auto Tone Correction Mode Display Information
Object(O) Low-line Count Dot
No.1 No.2 No.3 No.4 No.5 No.6 No.7 No.8 No.9 No.10 No.11 No.12 No.13 No.14 No.15
FWA Target Value RGB
#1[GLD] 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
#2[Y] 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38
#3[M] 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62
#4[C] 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86
#5[K] 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110
#6[SLV] 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134
FWA Measurement Value RGB
#1[GLD] 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
#2[Y] 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46
#3[M] 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70
#4[C] 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94
#5[K] 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118
#6[SLV] 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142
DC974 FWA CTRACS Manual Adjustment
(H)
Move(M)
Enlarged display(R)
Confirmation print
(F)
Execute(E)
Stop(S)
Update(N)
Cancel(A)
Close(C)
Ready

Figure 7 e0ko640052

NOTE: *The pattern output in Execute/Confirmation print will output the following contents.*

Table 5 Performing Auto Tone Correction

Color Mode	Object (Screen Group)	PG Pattern	Number of output paper per correction (*2) (m: Dummy output number of sheets) (*3)
4C	Low-line Count Dot, High-line Count Dot, Line Screen	CTRACS Adjustment PG (PG-1)	m + 1 sheet
	All (one batch) (*1)		m + 3 sheets (3 screen types x 1 sheet)
5C (#1)/5C (#6)/6C	Low-line Count Dot, High-line Count Dot, Line Screen	CTRACS Adjustment PG (PG-1) CTRACS Adjustment PG (PG-2)	m + 2 sheets (2 PG Pattern types x 1 sheet)
	All (one batch) (*1)		m + 6 sheets (3 screen types x 2 PG Pattern types x 1 sheet)
White Correction	Low-line Count Dot High-line Count Dot Line Screen	CTRACS ADC Adjustment (White) PG	m +1 sheets (perform White Correction only)

- Output Color: The color that is installed in the Engine selected at Color Mode
- Print Side: Simplex
- Paper Size during Auto Tone Correction: Can be performed using A4/Letter LEF (vertical 279.4 mm x horizontal 210.0 mm) or larger.

*1: Output is done in the order of Low-line Count Dot representative screen (200C), High-line Count Dot representative screen (FM), and Line Screen representative screen (200R). All (one batch) cannot be specified in High Accurate Auto Tone Correction Mode.

*2: In High Accurate Auto Tone Correction Mode, the output will repeat until the correction ends. The number of output sheets is doubled for the 1st correction repeat

*3: During Auto Tone Correction, Dummy print is performed before the Adjustment print. The Dummy output number of sheets is saved in the NVM.

Table 6 Performing Confirmation Print

Color Mode	Object (Screen Group)	PG Pattern	Output Paper (n: No. of prints)
4C	Low-line Count Dot, High-line Count Dot, Line Screen	CTRACS Adjustment PG (PG-3)	n sheets (1 PG Pattern type x n sheets)
	All (one batch) (*1)		7 x n sheets (7 screen types x n sheets)

Table 6 Performing Confirmation Print

Color Mode	Object (Screen Group)	PG Pattern	Output Paper (n: No. of prints)
5C (#1)/5C (#6)/6C	Low-line Count Dot, High-line Count Dot, Line Screen	CTRACS Adjustment PG (PG-3) CTRACS Adjustment PG (PG-4)	2 x n sheets (2 PG Pattern types x n sheets)
	All (one batch) (*1)		14 x n sheets (7 screen types x 2 PG Pattern types x n sheets)
White Correction	Low-line Count Dot High-line Count Dot Line Screen	CTRACS ADC Adjustment (White) PG	n sheets (perform White Correction only)

- Output Color: The color that is installed in the Engine selected at Color Mode
- Print Side: Simplex

*1: Outputs is done in the order of 200C, 175C, 150C, 300C, FM, 200R, and 150R. All (one batch) cannot be specified in High Accurate Auto Tone Correction Mode.

7. Click [Close] to return to DC971 ILS CTRACS Adjustment Screen. (Figure 8)

   At this time, if update was not performed, the message: "Do you want to update the correction result?" will be displayed on a dialog box. Select [Yes] to update and end or [No] to end without updating.

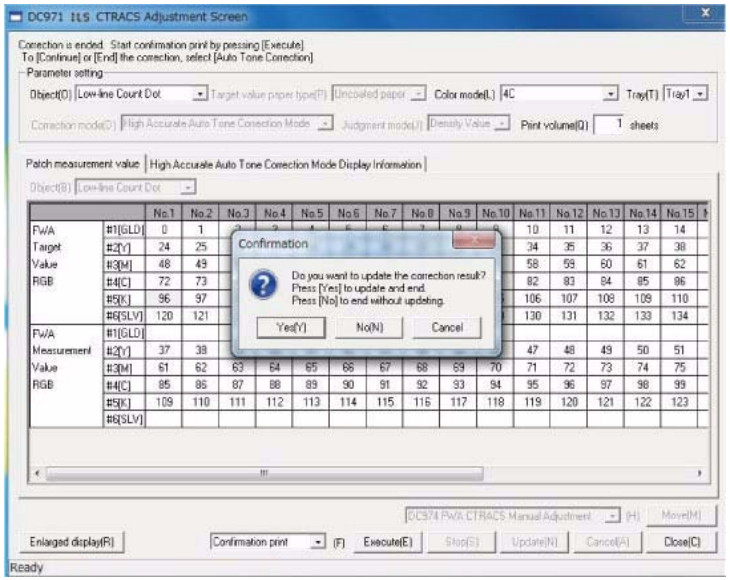


Figure 8 e0ko640053

6.4.47 DC974 ILS CTRACS Manual Adjustment

Purpose

To manually adjust the Procon TRC (LUT), which is the result that was calculated at ILS CTRACS, as required.

NOTE: *This function will not work if ILS is not connected.*

NOTE: *Use the Manual Adjustment with caution as it superimposes the value that is set regardless of the CTRACS result. Do not use it unless the situation is unavoidable, such as for fixing problems. (This is because when the IOT status has changed since the setting was made, it could result in an over-correction)*

NOTE: *Unable to be performed with white toner.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC974.
3. The DC974 ILS CTRACS Manual Adjustment screen is displayed. (Figure 1)

   When the current data is displayed, select [Manual adjustment] in the box at the bottom of the screen. (At the start, this will display [Check PG])

   The "Set Correction value. Adjustment starts by pressing [Execute]." message is displayed.

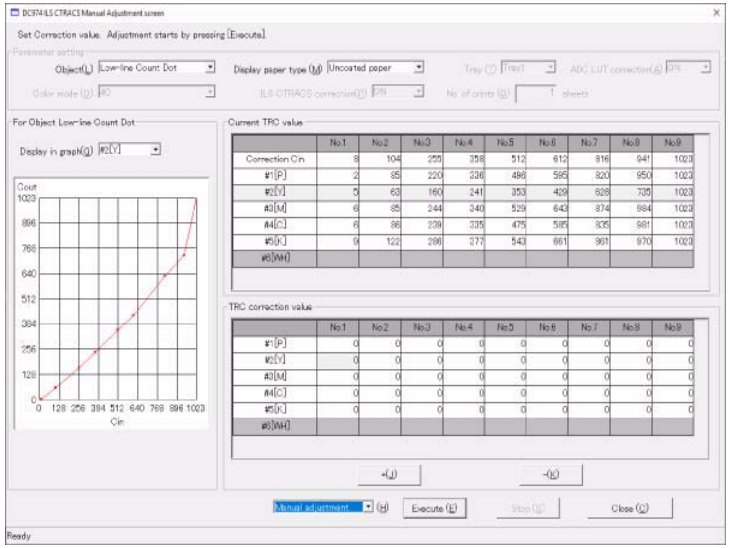


Figure 1 e0ko640054

4. Performing Manual Adjustment

   Check the parameters in Table 1, change the TRC correction value column as required, and click [Execute].

On the screen, the Procon LUT is calculated based on the correction value and displayed as the Current TRC value, while the Current LUT values 9 points + origin point (Cin = 0, Cout = 0) of the selected Screen Group, Paper Type, and Engine are added and displayed as 10 points in a directly interpolated graph.

NOTE: *Once started, this cannot be canceled.*

Table 1 Setting Data

Item	Setting Data
Object	The default is Low-line Count Dot
Paper Type Mode	Uncoated, Coated
Display in graph	Select a color to display its graph
TRC Correction Value	Change this when adjustment is required (range: -512 to 511); select the relevant TRC correction value and use the [+] [-] buttons (or keypad) to enter the number.

<CTRACS Manual Adjustment Display Info>

Table 2 Display Data Contents

Display Data Name	Parameter Range	Description
Object	Low-line Count Dot/ High-line Count Dot/ Line Screen	The screen specification when performing adjustment
Displayed Paper Type	Uncoated/Coated	The paper type when performing adjustment
<Current TRC Value>		
TRC Repair Cin	0 to 1023	No. 1 to No. 9
Engine	0 to 1023	(#1 to #6) x (No. 1 to No. 9)
<TRC Correction Value>		
Engine	-512 to 511	(#1 to #6) x (No. 1 to No. 9)
Display in graph		The defaults are - Screen: 200C, Paper Type: Uncoated, Engine: #2 [Y]

NOTE: *The TRC values for Engines that are not installed and Engines installed with Clear and White Toners will be grayed out with blank value display.*

5. Performing Check PG

   At the bottom left of the screen, change the box entry from [Manual adjustment] to [Check PG], set the required parameters, and click [Execute]. (Figure 2)

   All installed colors at the Color Mode will have the specified No. of prints (n sheets) output in Simplex. (4C: n sheets, 5C (#2) and 6C: 2 x n sheets) If Check PG was performed before the Manual Adjustment, the currently set correction value will be applied for the output.

   This can still be canceled after it has started.

PG Pattern of 4C Color Mode: CTRACS Adjustment PG (PG-3)

Table 3 Setting Data

Item	Setting Data
Object	The screen group to be referenced/changed; the default is Low-line Count Dot
Paper Type Mode	Uncoated (default), Coated
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected.
Color Mode	The default is 4C, and Color Mode that includes Clear Toner and White Toner Engine is unavailable. When Silver Toner is installed, 5C and 6C can also be selected.
ILS CTRACS Correction	ON (default)/OFF
No. of prints	The default is 1 sheet (1 to 9999 sheets)
Display in graph	Select a color to display its graph
Show ADC LUT status	ADC LUT status is ON, ADC LUT status is OFF

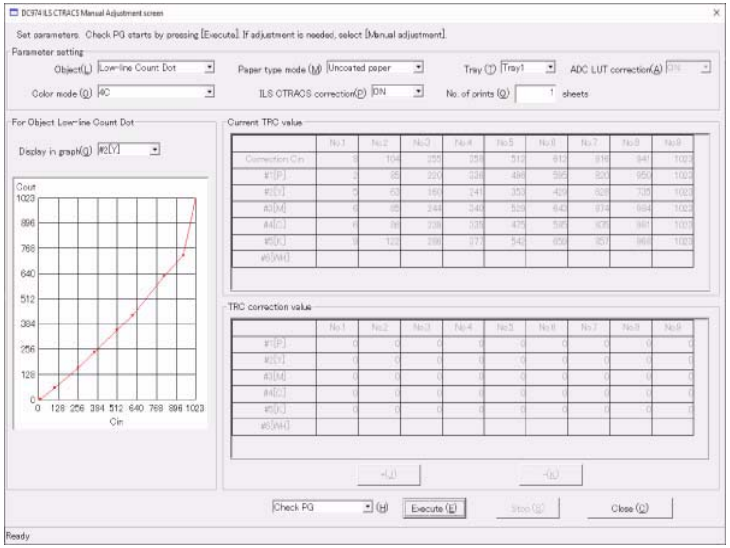


Figure 2 e0ko640055

6. Saving Data

   At the bottom left of the screen, select [Save] and click [Execute] to save the changed data. (If the CTRACS Manual Adjustment is not performed, saving is not possible)

7. Click [Close] to return to the top screen.

At this time, if the data is not saved, the message: "Adjustment result is not saved. Do you want to save the result of adjustment and end it?" will be displayed on a dialog box. Select [Yes] to update and end or [No] to end without updating. (Figure 3)

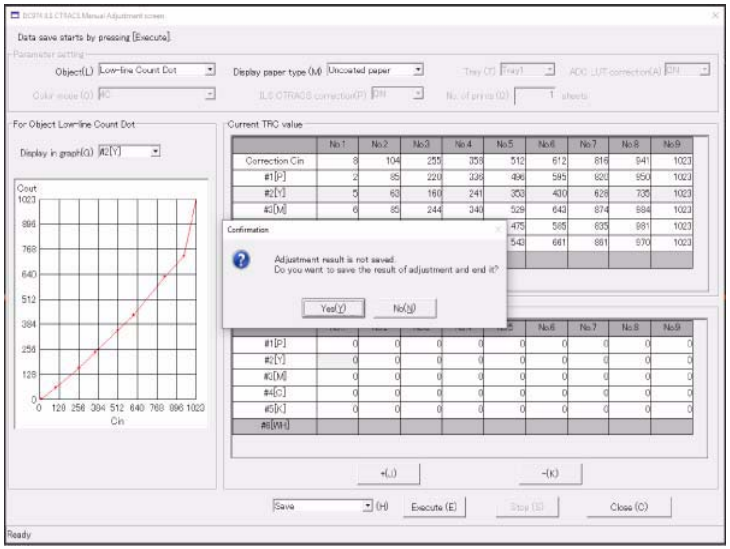


Figure 3 e0ko640056

6.4.48 DC975 ILS CTRACS User Target Set

Purpose

To detect the test pattern that had been adjusted to the target state by using Custom paper with ILS and record that value as a target value for the purpose of setting the target value of Custom paper (with high-light reproducibility, Tone Characteristics that includes Dmax, and shade (Gray Balance) in adjusted state) in ILS CTRACS.

NOTE: *This function will not work if ILS is not connected.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC975.
3. The DC975 ILS CTRACS User Target Set: Check PG & Adjust screen is displayed.

   When the current data is displayed, select [Manual adjustment] in the box at the bottom of the screen. (At the start, this will display [Check PG])

   The "Enter numerical values to Color/Density areas to be adjusted. Adjustment starts by pressing [Execute]. Select [Check PG], and confirm the correction result by pressing [Execute]." message is displayed. (Figure 1)

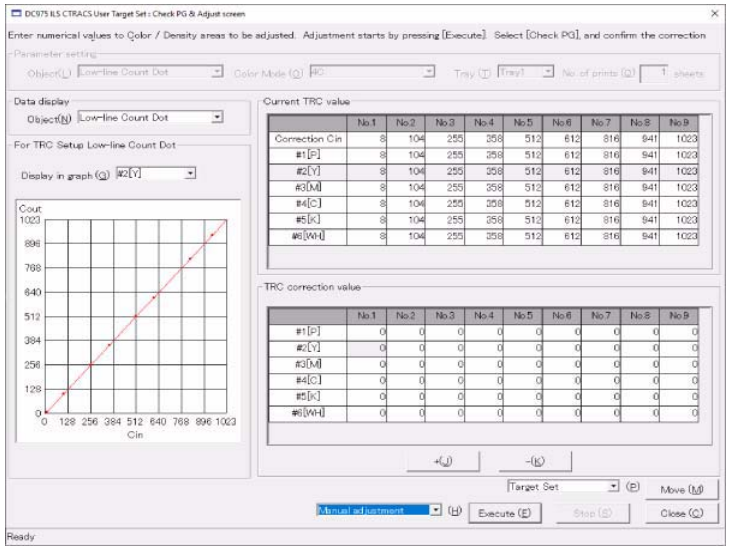

DC975 ILS CTRACS User Target Set : Check PG & Adjust screen
Enter numerical values to Color / Density areas to be adjusted. Adjustment starts by pressing [Execute]. Select [Check PG], and confirm the correction
Data display
Current TRC value
For TRC Setup Low-line Count Dot
TRC correction value
Target Set
Move (M)
Manual adjustment
Execute (E)
Close (C)
Ready

Figure 1 e0ko640057

4. Manual Adjustment

Select the applicable Screen Group and select a color to display its graph. Change the TRC correction value column as required and click [Execute]. (Table 1 contents) On the screen, the LUT for CTRACS User Target Set is calculated based on the correction value and displayed as the Current TRC value, while the Current LUT values 9 points + origin point (Cin = 0, Cont = 0) of the selected Screen Group and Engine are added and displayed as 10 points in a directly interpolated graph. Once started, this cannot be canceled.

Table 1 Parameter Settings Content

Item	Setting Data
Object	The default is Low-line Count Dot
Display in graph	Select a color to display its graph
TRC Correction Value	Change this when adjustment is required (range: -512 to 511); select the relevant TRC correction value and use the [+] [-] buttons (or keypad) to enter the number.

<CTRACS User Target Set Display Info>

Table 2 Display Data Contents

Display Data Name	Parameter Range	Remarks
Object	Low-line Count Dot/High-line Count Dot/Line Screen/All Screen Group (one batch)	The Screen Group specification when performing adjustment
<Current TRC Value>		
TRC Repair Cin	0 to 1023	No. 1 to No. 9
Engine	0 to 1023	(#1 to #6) x (No. 1 to No. 9)
<TRC Correction Value>		
Engine	-512 to 511	(#1 to #6) x (No. 1 to No. 9)
Display in graph		The defaults are - Screen: 200C, Engine: #2 [Y]

NOTE: *The TRC values for Engines that are not installed and Engines installed with Clear Toner will be grayed out with blank value display.*

5. Check PG

At the bottom left of the screen, change the box entry from [Manual adjustment] to [Check PG], set the required parameters (Table 3), and click [Execute]. All installed colors at the Color Mode will have the specified No. of prints (n sheets) output in Simplex and their LUT values displayed. (4C: n sheets) If Check PG was performed before the Manual Adjustment, the currently set LUT value will be applied for the output. (Figure 2)

This can still be canceled after it has started.

Table 3 Parameter Settings Content

Item	Setting Data
Parameter Object	The screen group to be referenced/changed; the default is Low-line Count Dot ***NOTE:*** *[All Screen Groups] cannot be selected for the Color Mode [White Correction].*

Table 3 Parameter Settings Content

Color Mode	The default is 4C. When Silver Toner is installed, 5C and 6C can also be selected. ***NOTE:*** *[White Correction] Mode can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction].*
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected.
No. of prints	The default is 1 sheet (1 to 9999 sheets)
Data Display Object	Low-line Count Dot/High-line Count Dot/Line Screen
Display in graph	Select a color to display its graph

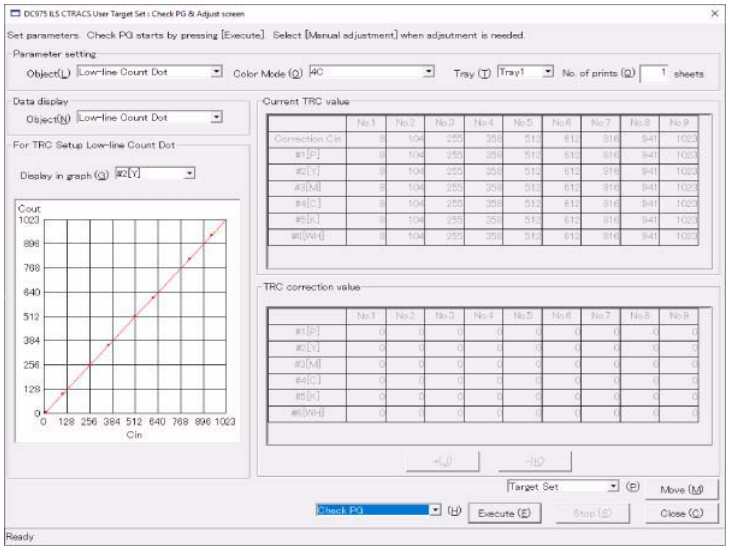


Figure 2 e0ko640058

6. Target Set

With the bottom right window in [Target Set] state, clicking [Move] displays the DC975 ILS CTRACS User Target Set: Target Set screen. Set the parameters (Table 4) and click [Execute]. (Figure 3)

After Mini Setup is performed with the Screen Group and Color Mode that was selected in parameters, a Patch is created on the paper while the ILS CTRACS User Target Set LUT is in ON state. (Patch creation and detection is performed with the potential setting that corresponded to the Tray's paper settings and the LUT ON by ADC Tone Correction)

All installed colors at the Color Mode will have 1 sheet of printout and their measurement values displayed. Print paper size should be A4/Letter LEF (279.4 mm x 210.0 mm) or larger.

This can still be canceled after it has started.

If the measurement result is NG, a message (Fail Code) is displayed and the measurement value column is displayed as blank and grayed out.

Table 4 Parameter Settings Content

Item	Setting Data
Target Value Setting Object	The screen group to be referenced/changed; the default is Low-line Count Dot ***NOTE:*** *[All Screen Groups] cannot be selected for the Color Mode [White Correction].*
Target Value Setting Color Mode	The default is 4C and Color Mode that includes Clear Toner Engine is unavailable. When Silver Toner is installed, 5C and 6C can also be selected. ***NOTE:*** *White Correction Mode can only be selected when the loaded colors include the White Engine.* ***NOTE:*** *The Tray must be set to black paper for Color Mode [White Correction].*
Tray (T)	The default is Tray 1. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected.
CTRACS User Target Set Object	Same as Target Value Setting Object

NOTE: *The target values/measurement values for Engines that are not installed and Engines installed with Clear Toner will be grayed out with blank value display.*

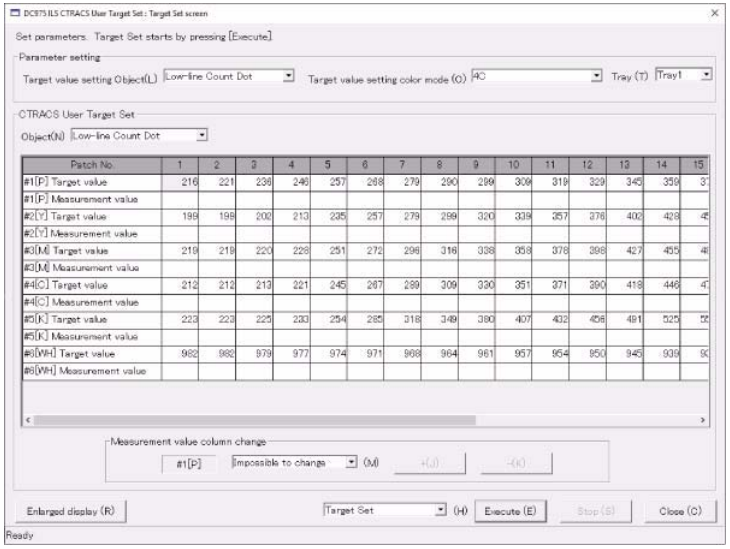


Figure 3 e0ko640059

7. Change the target value [Target Set] box to [Target Value Set] and click [Execute].
   The ILS Target Values are updated with the ILS Measurement Values and then displayed.

<CTRACS User Target Set Display/Change Info>

Table 5 Display Data Contents

Display Data Name	Parameter Range	Description
<#1 to #6>		
Target Value (No. 1 to No. 24)	0 to 1023	For the selected target value, use the [+] [-] buttons (or keypad) to enter the number.
Measurement Value (No. 1 to No. 24)	0 to 1023	For the selected measurement value, use the [+] [-] buttons (or keypad) to enter the number.

Note) For the Measurement value column change, the measurement value will change according to whether it is possible/impossible to change (measurement value column is blank) for each Engine of every Screen Group. Target Value Set can be performed as long as the measurement value is [Possible to change] for at least 1 engine from among all the Screen Groups.

When manually switched to possible to change, a value that is the same as target value will be displayed in the measurement value column. This switch can also be performed before performing Target Set.

After performing Target Set, the measurement values for Screen Group and Color Mode Engine that was selected in Parameter setting are displayed and automatically switched to [Possible to change].

8. Click [Close] to return to DC975 ILS CTRACS User Target Set: Check PG & Adjust screen. At this time, if Target Value Set was not performed, the message: "Setting has not been done. Press [Yes] to execute setting. Press [No] to end without setting." will be displayed on a dialog box.

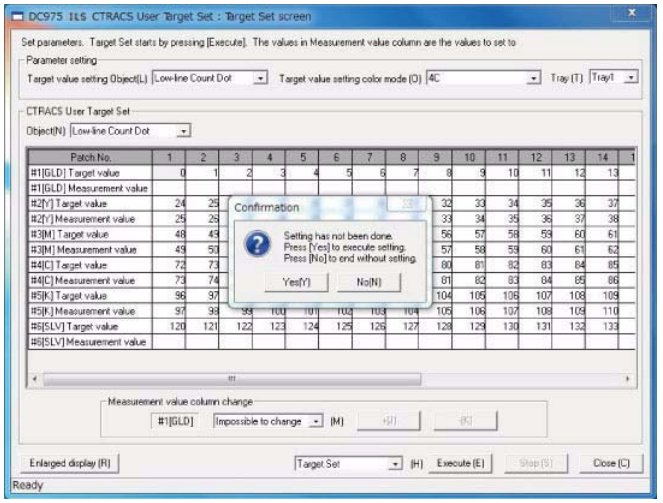


Figure 4 e0ko640060

9. Select [Close] to end.

6.4.49 DC972 Within Page Density Adjustment Cycle

Purpose

- Mainly used during shipment and field installation to automatically adjust the uneven density within image area in FS direction for standard paper by using ILS Sensor.
- Readjustment of SS direction (paper orientation) is necessary for exchange of YMCK Drum Cartridge/Developer or MM Assembly attachment/detachment.

NOTE: *It also can perform corrections while being limited to individual colors (Single Color, Secondary Color, Process Color). The correction values are saved in the IOT NVM.*

NOTE: *Gold and Silver Toner are supported in FS direction (right angle designation) only*

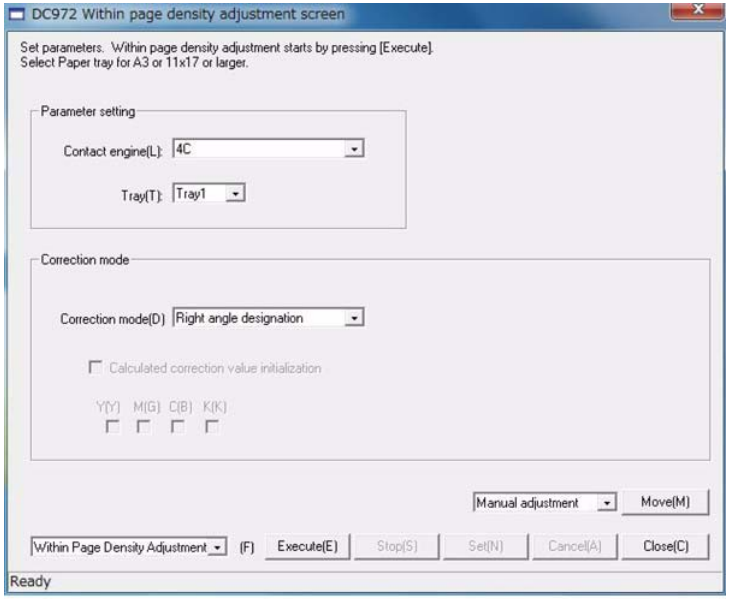
NOTE: *Clear Toner is not supported.*

NOTE: *For details on the adjustment procedure of DC972, refer to* ADJ 20.1.6 *in Chapter 4.*

Procedure

[Within page density adjustment in FS direction (right angle designation)]

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC972.
3. The DC972 Within page density adjustment screen is displayed to start the adjustment. (Figure 1)
   The "Set parameters. Within page density adjustment starts by pressing [Execute].
   Select Paper tray for A3, or 11x17 or larger." message is displayed.



j0cx420516

Figure 1 j0cx420516

4. Within page density adjustment

   At the bottom left of the screen, check that the box shows [Within Page Density Adjustment], set the parameters (Table 1), select [Right angle designation] for Correction mode, and click [Execute].

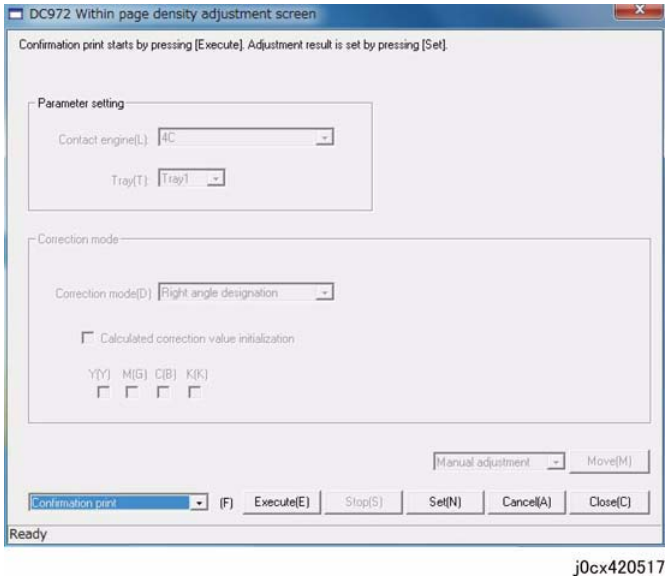
Table 1 Parameter Settings Content

Item	Setting Data
Contact Engine	4C [Default]
Tray	Tray 1 (default) to Tray 6. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected. The paper has to be A3, or 11x17 or larger.

5. Process after performing Within page density adjustment

   (1) If it has completed successfully: The "Confirmation print starts by pressing [Execute]. Adjustment result is set by pressing [Set]." message is displayed. (Figure 2)

   (2) If it has completed with an error: A Fail Code and message will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.



j0cx420517

Figure 2 j0cx420517

6. Perform the confirmation print.

   With the box at the bottom left of the screen remaining as [Confirmation print], click [Execute]. (The parameters for Contact engine and Tray also remains as how they were set during Within page density adjustment) If it has completed with an error, a Fail Code will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.

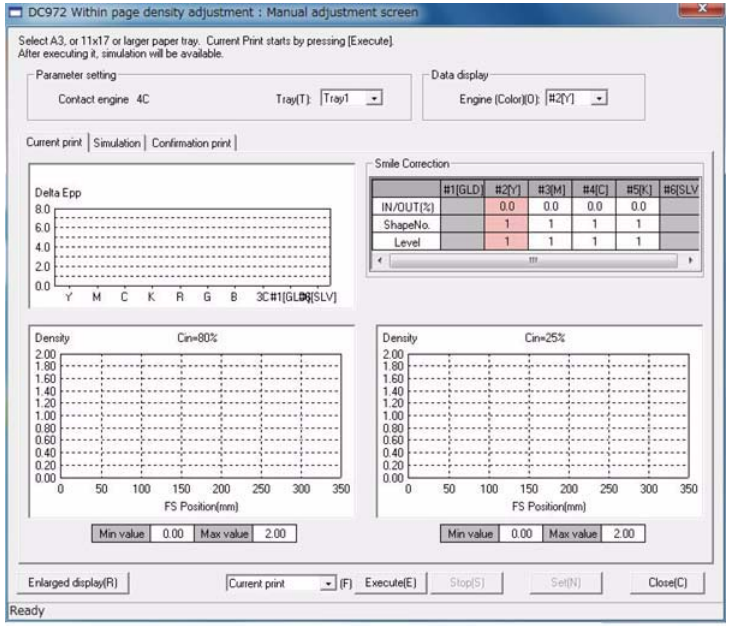
7. To reflect the correction value that was obtained by using the Within page density adjustment calculation result into the IOT NVM, click [Set].
8. To end without updating the Within page density adjustment calculation result, click [Cancel].
9. If [Close] was selected.

   Follow the instruction: "Set the setting values? Press [Yes] to set and end, press [No] to end without setting." that is displayed on a dialog box and end.

   - Yes: Update (same as 7.)
   - No: Do not update (same as 8.)

10. Performing Manual Adjustment

    On the DC972 Within page density adjustment screen, set the bottom right box to [Manual adjustment] and click [Move]. The screen changes to DC972 Within page density adjustment: Manual adjustment screen and the current Smile setting values (Smile Correction) are displayed. (Figure 3)



j0cx420518

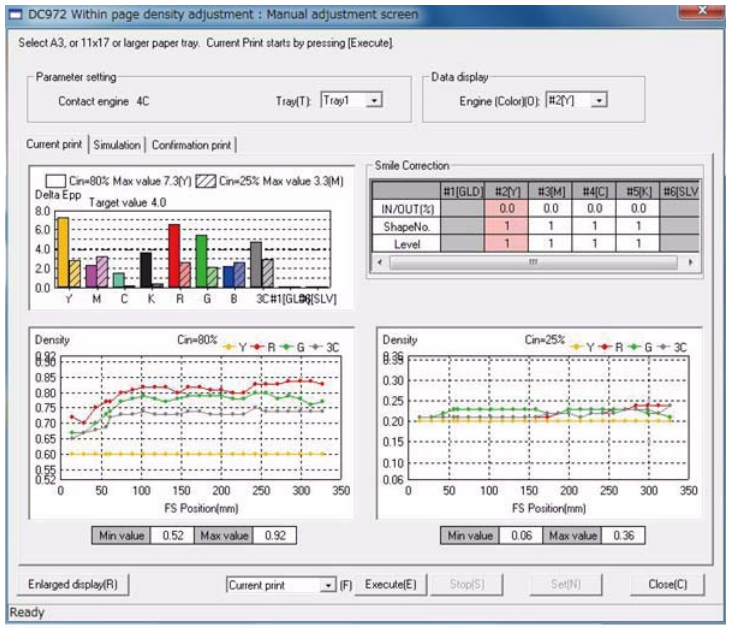
Figure 3 j0cx420518

11. Instruct to perform Current Print

    The "Select A3, or 11x17 or larger paper tray. Current Print starts by pressing [Execute]. After executing it, simulation will be available." message is displayed. Select the Tray and Engine (Color), then click [Execute] to print by using the current correction value.

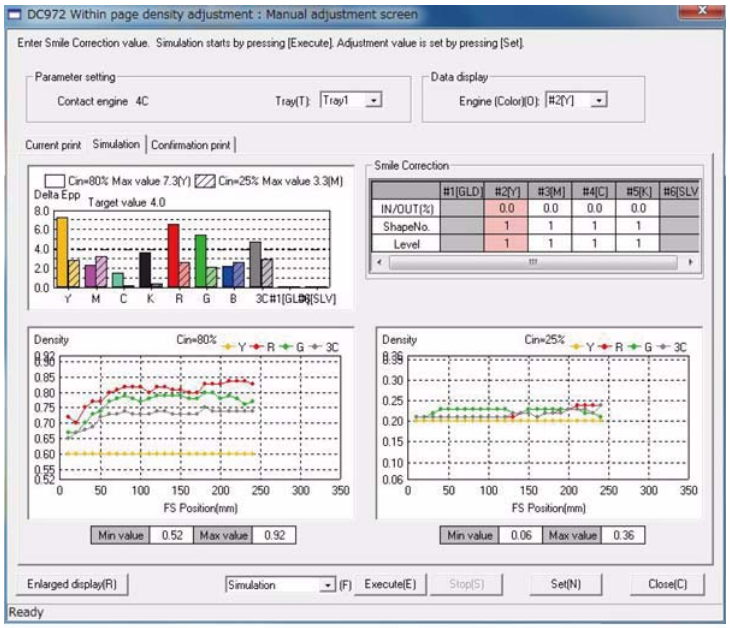
    (1) If the adjustment result is OK, the ILS detection result is displayed in a density distribution graph and a Delta E confirmation graph, and the simulation can now be performed. (Figure 4)

    (2) If it has completed with an error, a Fail Code and message will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.



j0cx420519

Figure 4 j0cx420519



j0cx420520

Figure 5 j0cx420520

12. Instruct to perform Simulation

    Upon selecting [Simulation] in the box at the bottom of the screen, the "Enter Smile correction value. Simulation starts by pressing [Execute]." message is displayed.

    Set the various items (IN/OUT (%), Shape No., Level) for Smile Correction according to the following settings content and click [Execute]. (Figure 5)

Table 2 Parameter Settings Content

Item	Setting Data
IN/OUT correction amount	Sets the In/Out correction amount. -32.8 to 32.8%. In 0.1% units.
Correction Shape No.	Select any one of the No. 1 to No. 10 correction shapes.
Correction Level	Select any one of the 1 to 9 correction levels.

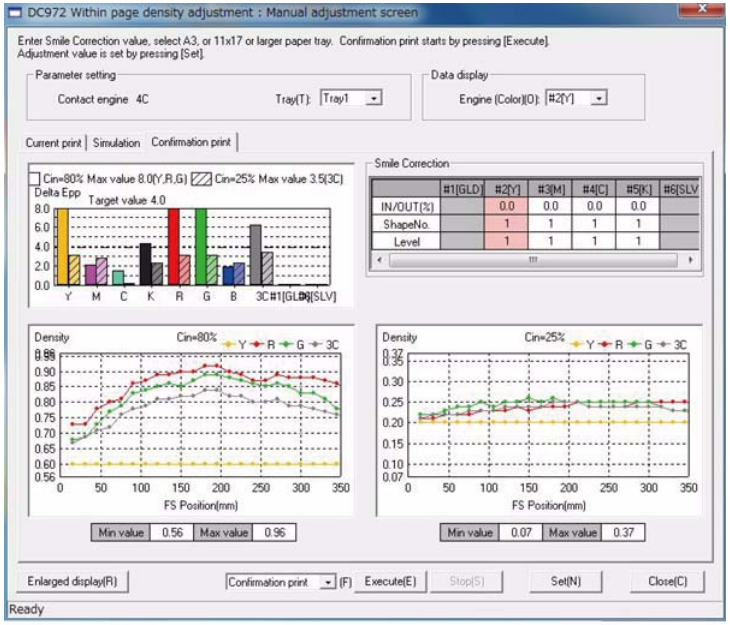
    The recalculated predicted density distribution graph and Delta E graph are displayed.

13. Instruct to perform Confirmation Print

    Upon selecting [Confirmation print] in the box at the bottom of the screen, the "Enter Smile correction value, select A3, or 11x17 or larger paper tray. Confirmation print starts by pressing [Execute]. Adjustment value is set by pressing [Set]." message is displayed. Reflect the correction value and perform the print.

    (1) If the adjustment result is OK, the ILS detection result is displayed in a density distribution graph and a Delta E confirmation graph, and the settings operation becomes available. (Figure 6)

    (2) If it has completed with an error, a Fail Code and message will be displayed. Click [Close].



j0cx420521

Figure 6 j0cx420521

14. Performing Settings

    To reflect the correction value after performing the last simulation or confirmation print into the NVM, click [Set].

15. Setting when clicking [Close]

    If [Close] was clicked without performing settings, the message: "Set the setting values? Press [Yes] to set and end, press [No] to end without setting." will be displayed on a dialog box. Select an operation.

    - Yes: Update
    - No: Do not update
    - Cancel: Do not update

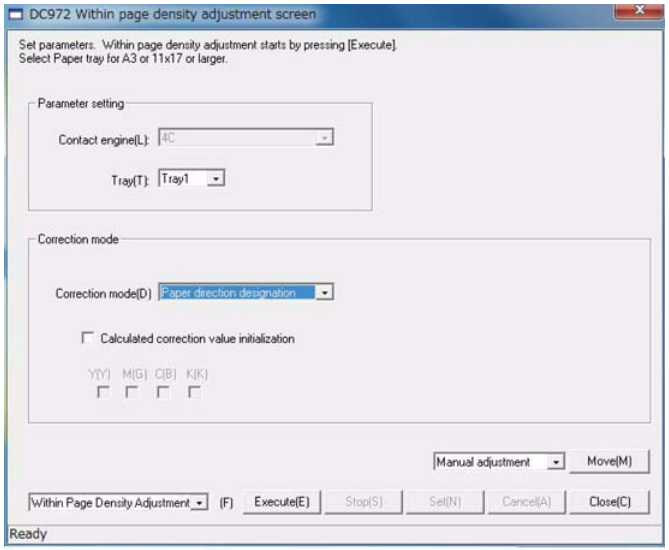
Procedure

[Within page density adjustment in SS direction (paper direction designation)]

NOTE: *When inserting/removing the MM Assembly, as the Correction Value is not automatically initialized, it is necessary to initialize Correction Value by the following method.*

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC972.
3. The DC972 Within page density adjustment screen is displayed to start the adjustment. (Figure 7)

   The "Set parameters. Within page density adjustment starts by pressing [Execute].
   Select Paper tray for A3 or 11x17 or larger." message is displayed.



j0cx420523

Figure 7 j0cx420523

4. Within page density adjustment

   At the bottom left of the screen, check that the box shows [Within Page Density Adjustment], set the parameters (Table 1), select [Paper direction designation] for Correction mode, and click [Execute].

Table 3 Parameter Settings Content

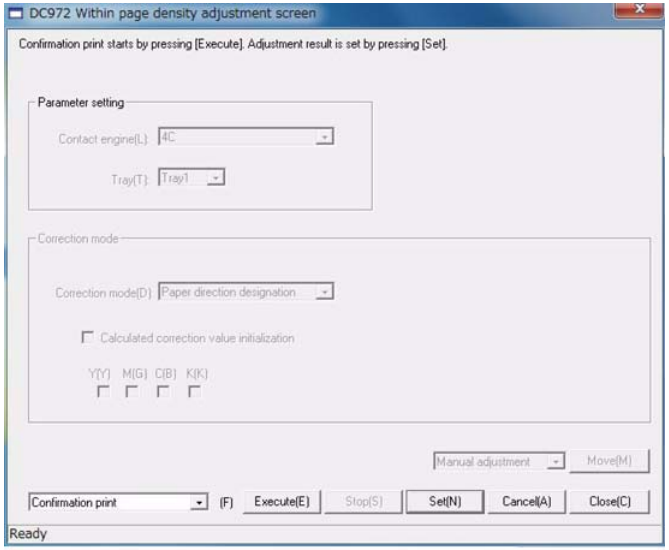
Item	Setting Data
Contact Engine	4C
Tray	Tray 1 (default) to Tray 6. Tray 3 and 4 can be selected only when the HCF A3 (Option) is connected. Tray 5 and 6 can be selected only when the 2nd HCF A3 (Option) is connected. MBT can be selected only when the HCF A3 (Option) is connected. The paper has to be A3, 11x17" or larger.

NOTE: *When initializing the correction value, put check marks at [Calculated correction value initialization] and the checkbox of the applicable color.*

5. Process after performing Within page density adjustment

   (1) If it has completed successfully: The "Confirmation print starts by pressing [Execute]. Adjustment result is set by pressing [Set]." message is displayed. (Figure 8)

   (2) If it has completed with an error, a Fail Code and message will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.



j0cx420524

Figure 8 j0cx420524

6. Perform the confirmation print.

   With the box at the bottom left of the screen remaining as [Confirmation print], click [Execute]. (The parameters for Contact engine and Tray also remains as how they were set during Within page density adjustment) If it has completed with an error, a Fail Code will be displayed. Depending on the condition, perform the ILS Troubleshooting procedure in Chapter 2 FIP.

7. To reflect the correction value that was obtained by using the Within page density adjustment calculation result into the IOT NVM, click [Set].

8. To end without updating the Within page density adjustment calculation result, click [Cancel].

9. If [Close] was selected.

   Follow the instruction: "Set the setting values? Press [Yes] to set and end, press [No] to end without setting." that is displayed on a dialog box and end.

   - Yes: Update (same as 7.)

   - No: Do not update (same as 8.)

6.4.50 DC805 Cooling Module BeltSteering Information

Purpose

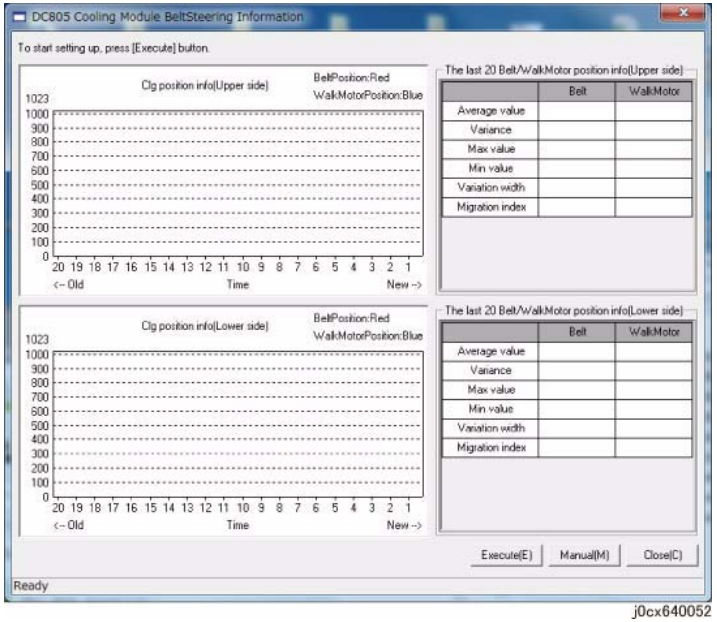
Graph the location information of Belt and WalkMotorPosition for the purpose of grasping the state of the cooling device in the market, isolating the cause when LimitFail occurs, setting the adjustment contents, adjustment amount.

NOTE: *For details on the adjustment procedure of DC805, refer to* ADJ 18.1.20 *in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC805.
3. DC805 Cooling Module BeltSteering Information screen is displayed. (Figure 1).

   [Select/Check with [Execute].] message is displayed.



j0cx640052

Figure 1 j0cx640052

4. Retrieval/display of NVM information and graphing

   Click [Execute] according to the message. (Figure 2).

   (1) If completed successfully, the respective values of Upper/Lower for Belt/WalkMotor from the retrieved NVM information are displayed in the position information. The following applies for details of the displayed data.

   - Average Value: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Average Value
   - Dispersion: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Dispersion

- Maximum Value: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Maximum Value
- Minimum Value: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Minimum Value
- Range: Maximum value to Minimum value
- Movement Index: CLG Position Info Acquisition_UPPER/LOWER_BELT/WALK_MOTOR_POSITION_Movement Index

NOTE: *For retrieval of NVM information, obtain the NVM value of Clg Position Information Acquisition (NVM [999-001] to [999-101]). Refer to 6.3.8 NVM 999 RMT List for the details.*

(2) The respective values of Upper/Lower for Belt/WalkMotor from the retrieved NVM information are graphed as position information. The details of graph display are as follows.

- Display in a graph the BeltPosition and WalkMotorPosition for the last 20 times.
- All the data on the upper side are plotted together in a single graph.
- All the data on the lower side are also plotted together in a single graph.
- BeltPosition and WalkMotorPosition differs in point color or shape.
- The vertical axis is from 0 to 1023, and grid lines are displayed every 100.
- The horizontal axis shows the first time (the latest data) to the 20th time (the oldest data), the 20th time on the left side and the 1st time on the right side.

5. Click the [Manual] button to display the document. According to the instructions of the document, confirm the isolation of the cause at the occurrence of Upper / Lower Limit Fail, check the adjustment content, adjustment amount and make adjustment.

   For details, refer to Chapter 4 ADJ 18.1.20 DC805 Cooling Module See Belt Steering Information.

6. After DC805 Cooling Module BeltSteering Information is completed, select [Close] to return to the IQ Adjustment screen

6.4.51 DC806 ILS Image Quality Defect Detection Screen

Purpose

Link IOT with M/C (Inline) image scan module (In Line Sensor: ILS), output PG using a dedicated sequence, and check the presence/absence, level, position, etc. of defects from the image scan by ILS Detect, and save the results in the Controller HDD. Also, the detection result is displayed on the UI screen.

Overview

- Configure the output mode to perform defect detection of spots (spots detection) and streaks (streaks detection).
- The defect detection result is extracted and displayed.

NOTE: *This feature is for quickly checking defects which are difficult to detect visually on the spot. The corrective actions are not indicated here. For corrective action, execute [Auto Stripe Detection] feature (Streaks Detection Function) in System Administrator mode, transmit diagnostic data to TQMS, and check the corrective action with AST. (This is equivalent to the flow of the past machine)*

Procedure

1. On the PC-Diag screen, select [Subsystem Check].
2. On the Subsystem Check screen, select DC806.
3. DC806 ILS Image Quality Defect Detection Screen is displayed. (Figure 1)

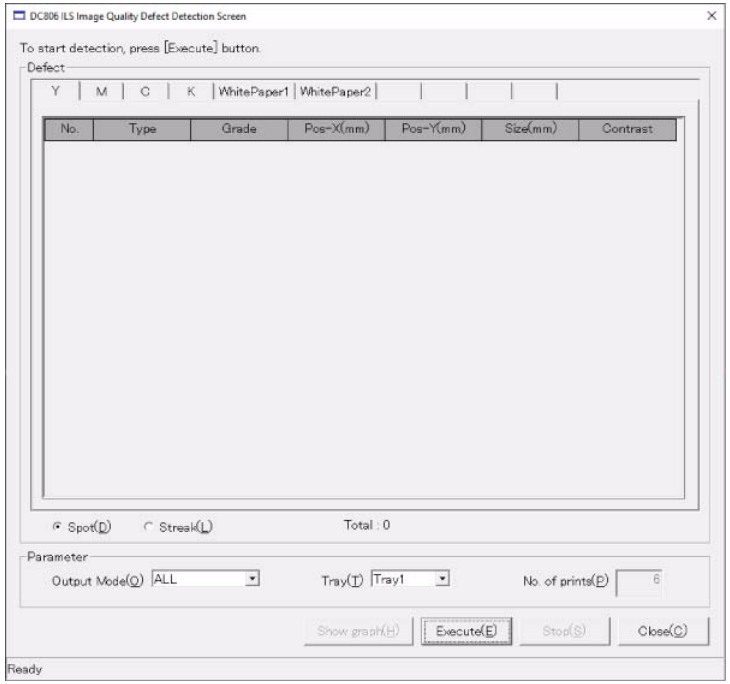


Figure 1 e0ko640061

4. Select the output mode, point (point detection), or stripe (streak detection) to perform defect detection.
5. Set the output mode, tray, number of output sheets in the parameter setting column, and click [Execute].
   - Output mode: Select the setting items from the following.

Table 1 Setting Data

Setting Item	Description
ALL	Output in the order of Y -> M -> C -> K -> White Paper 1 -> White Paper 2 (Default)
Y	Select #2 (Y).
M	Select #3 (M).
C	Select #4 (C).
K	Select #5 (K).
White Paper 1	Select White Paper 1.
White Paper 2	Select White Paper 2.
#1	Select #1.
#6	Select #6.

   - Tray: Select Tray 1 to Tray 6 or MBT.

     NOTE:
     – *If the paper setting is less than A3, 11 x 17-inch size, treat it as non-supported and do not execute it.*
     – *Do not execute if it is not plain or coated paper as it is not supported.*
     – *Maximum paper size is 13 x 19.2-inch. It is not possible to use the Multi Sheet Inserter for Banner Print.*

   - Number of output sheets: Select 1 to 10 sheets (Default is 1 sheet). However, when ALL is selected in output mode, the above 6 colors are fixed.
6. Upon successful completion, the defect data is displayed on the DC806 ILS Image Quality Defect Detection Screen. (Figure 2)

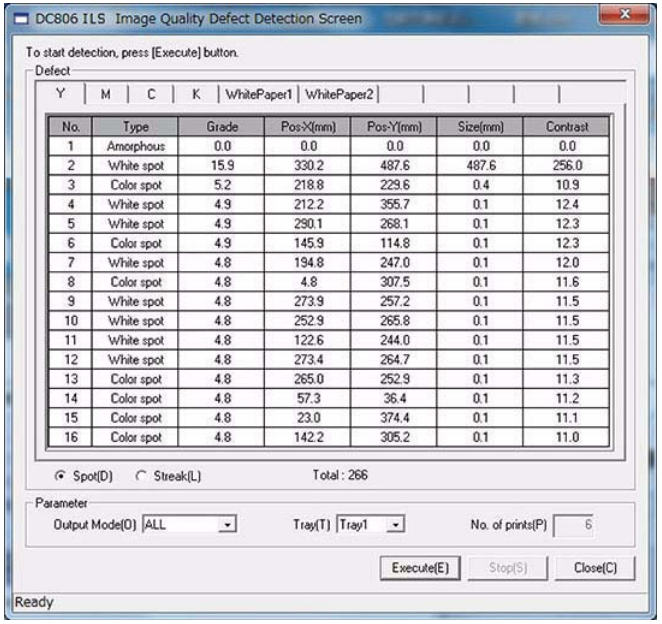

DC806 ILS Image Quality Defect Detection Screen
To start detection, press [Execute] button.
Defect
Y
M
C
K
WhitePaper1
WhitePaper2
No. Type Grade Pos-X(mm) Pos-Y(mm) Size(mm) Contrast
1 Amorphous 0.0 0.0 0.0 0.0 0.0
2 White spot 15.9 330.2 487.6 487.6 256.0
3 Color spot 5.2 218.8 229.6 0.4 10.9
4 White spot 4.9 212.2 355.7 0.1 12.4
5 White spot 4.9 290.1 268.1 0.1 12.3
6 Color spot 4.9 145.9 114.8 0.1 12.3
7 White spot 4.8 194.8 247.0 0.1 12.0
8 Color spot 4.8 4.8 307.5 0.1 11.6
9 White spot 4.8 273.9 257.2 0.1 11.5
10 White spot 4.8 252.9 265.8 0.1 11.5
11 White spot 4.8 122.6 244.0 0.1 11.5
12 White spot 4.8 273.4 264.7 0.1 11.5
13 Color spot 4.8 265.0 252.9 0.1 11.3
14 Color spot 4.8 57.3 36.4 0.1 11.2
15 Color spot 4.8 23.0 374.4 0.1 11.1
16 Color spot 4.8 142.2 305.2 0.1 11.0
Spot(D)
Streak(L)
Total : 266
Parameter
Output Mode(O) ALL
Tray(T) Tray1
No. of prints(P) 6
Execute(E)
Stop(S)
Close(C)
Ready

Figure 2 e0ko640062

- The display contents of the defect data are displayed for each of the engines (Y, M, C, K, White Paper, White Paper 2) and for each page number (P1-P10).

  NOTE: *Data that does not satisfy the maximum number of display results or data of non-applicable pages is displayed with [-].*

- The display contents of spot detection results are the display of the defect data as follows.

Table 2 Spot Detection Results

ILS data	Description	Display range	Units	Display Digits
No.	Defect ID	1 to 16	-	1 to 2
Type	Defect Type	0: Non-standard 1: White spot 2: Color spot	-	-
Grade	Grade	0.0 to 16.0	-	2 to 3
Position X (mm)	X position from Upper Left Corner of the Paper	0.0 to 330.2	mm	2 to 4
Position Y (mm)	Y position from Upper Left Corner of the Paper	0.0 to 487.6	mm	2 to 4
Size (mm)	Spot Size	0.0 to 487.6	mm	2 to 4
"Contrast (Perceptual)"	Difference with the Background	0.0 to 255.9	-	1 to 5

- The display contents of the streak detection results are the display of the defect data as follows.

Table 3 Streak Detection Results

ILS data	Description	Display range	Units	Display Digits
No.	Defect ID	1 to 16	-	1 to 2
Type	Defect Type	0: White streak 1: Color streak 2: Step	-	-
Grade	Grade	0.0 to 16.0	-	2 to 3
Position X (mm)	X position from Upper Left Corner of the Paper	0.0 to 330.2	mm	2 to 4
Position Y (mm)	Y position from Upper Left Corner of the Paper	[-] is displayed as fixed	-	-
Size (mm)	Line width	0.0 to 487.6	mm	2 to 4
"Contrast (Perceptual)"	Difference with the Background	0.0 to 255.9	-	1 to 5

7. After DC806 ILS Image Quality Defect Detection Screen is completed, select [Close] to return to the Subsystem Check screen.

6.4.52 DC807 White ADC Sensitivity Correction Cycle

Purpose

Automatically adjusts ADC sensor sensitivity used for white toner control by using standard paper (black standard paper) or customer-selected paper (user paper: black paper) at shipment, installation adjustment, or customer adjustment.

Overview

- Correct individual differences in ADC sensor sensitivity used for white toner control.
- Select standard paper or user paper as adjustment target.
- When ADC sensitivity correction is executed, a colorimetric chart is output from the selected tray and measured with ILS. The ADC sensor sensitivity is automatically adjusted based on the colorimetric result.
- The key operator can execute this feature from Tools.

NOTE: *With the execution of DC807 White ADC Sensitivity Correction Cycle, substitution can be done in DC800 ADC Sensor Setup Adjustment Mode [White].*

NOTE:

- *Do not execute if there is no black standard paper or black paper selected by the customer (recommended paper is specified separately). Additionally, for black standard paper, use Kishu color bond black extra heavyweight paper.*
- *After adjusting the ADC sensor sensitivity used for white toner control using this feature, do not perform adjustment with Adjustment Mode [White] of DC800 ADC Sensor Setup as the adjusted value set by the feature will be overwritten.*
- *If the ADC Sensor is replaced, perform the procedure after the replacement.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC807.
3. DC807 White ADC Sensitivity Correction Cycle screen is displayed. (Figure 1)

   [Set parameter. White toner ADC sensitivity correction will be started by [Execute]. Select a tray in which A4 or 8.5 x 11L or larger, black paper is loaded.] is displayed together with the screen display parameters and the default value of the white toner ADC sensitivity correction. (Table 1)

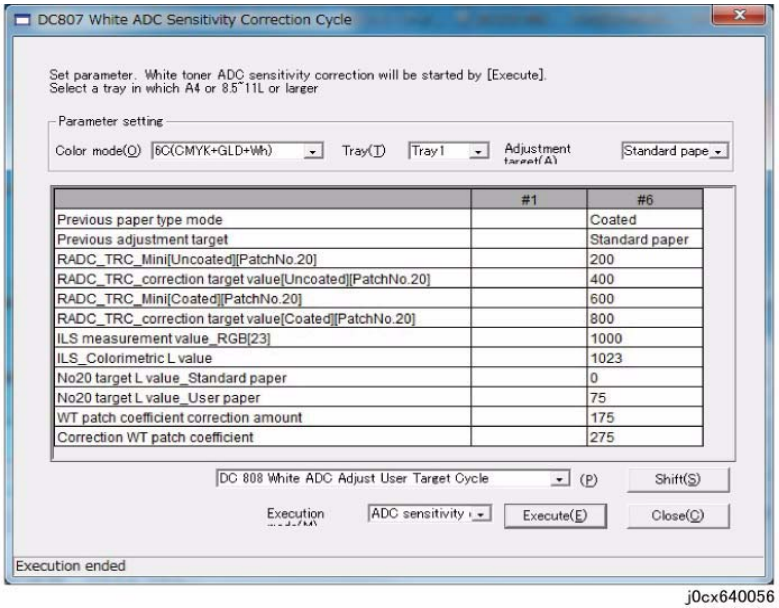

DC807 White ADC Sensitivity Correction Cycle
Set parameter. White toner ADC sensitivity correction will be started by [Execute].
Select a tray in which A4 or 8.5"11L or larger
Parameter setting
Color mode(O) 6C(CMYK+GLD+Wh)
Tray(T) Tray1
Adjustment target(A) Standard pape
#1 #6
Previous paper type mode Coated
Previous adjustment target Standard paper
RADC_TRC_Mini[Uncoated][PatchNo.20] 200
RADC_TRC_correction target value[Uncoated][PatchNo.20] 400
RADC_TRC_Mini[Coated][PatchNo.20] 600
RADC_TRC_correction target value[Coated][PatchNo.20] 800
ILS measurement value_RGB[23] 1000
ILS_Colorimetric L value 1023
No20 target L value_Standard paper 0
No20 target L value_User paper 75
WT patch coefficient correction amount 175
Correction WT patch coefficient 275
DC 808 White ADC Adjust User Target Cycle (P)
Shift(S)
Execution
ADC sensitivity
Execute(E)
Close(C)
Execution ended
j0cx640056

Figure 1 j0cx640056

Table 1 Display/Setting Item

Display/Setting Item	Display range
Previous Paper Type Mode	0: Uncoated 1: Coated
Previous Adjustment Target	0: Standard Paper 1: User Paper
RADC_TRC_Mini [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Mini [Coated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Coated] [PatchNo.20]	0 to 1023
ILS Measurement Value_RGB[23]	0 to 1023
ILS_ Colorimetric L Value	0 to 1023
No 20 Target L Value_Standard Paper	0 to 1023
No 20 Target L Value_User Paper	0 to 1023
WT Patch Coefficient Correction Amount	-1024 to 1023
Correction WT Patch Coefficient	0 to 1023

4. Select the color mode. Recommendation is 6C.

(1) Color mode: Select the setting items from the following.

Table 2 Setting Data

Setting Item	Description
6C	Select 6C (CMYK + GLD or SLV or CLR or Wh + Wh) (Default).
5C#1	Select 5C#1 (CMYK+Wh).
5C#6	Select 5C#6 (CMYK+Wh).
1C#1	Select 1C#1 (Wh).
1C#6	Select 1C#6 (Wh).

- Color mode that does not include White engine can not be selected.
- Default in the order of 6C -> 5C#1 -> 5C#6 is determined based on the installed engine.

5. Select the adjustment target, standard paper (default) or user paper. When using black standard paper, select [Standard Paper]. When adjusting with DC808 White ADC Adjust User Target Set Cycle the target which is set, select [User Paper].

NOTE:

- *To perform this adjustment for the first time, select [Standard Paper].*
- *Since this adjustment is made so that the key operator can repeat it from Tools, decide with the customer whether to use standard paper or user paper for adjustment in future.*
- *In future, when adjusting with user paper, immediately after adjustment with standard paper, set the user paper target with DC808 White ADC Adjust User Target Set Cycle.*

6. Select a tray. Set 1 or more sheets of paper (black paper) corresponding to the adjustment target in the tray and select it. Tray options are Tray 1 (Default) to Tray 6, or MBT.
7. Select the execution mode. Select [ADC Sensitivity Correction] and select [Execute]. (Figure 1)
   Options for the execution mode are ADC Sensitivity Correction (Default), Test Print, or Initialization.
8. 1 sheet of colorimetric chart (PG No. 385 CTRACS Pattern (for correction/6C/ILS)) is output and the ADC sensor sensitivity used for white toner control is automatically adjusted. The display of the set values on the screen is updated.
9. To check the current state or adjustment result, select the execution mode, [Test print] and select [Execute]. (Figure 2)
   - 1 sheet of single sided PG No.386 CTRACS Pattern (for check/6C/ILS) will be printed.

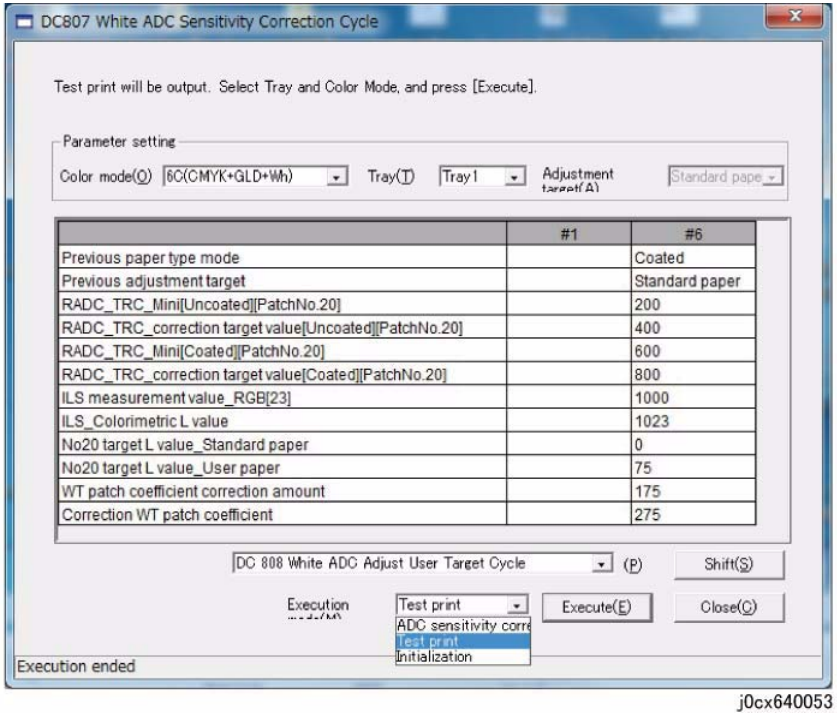


Figure 2 j0cx640053

10. To initialize the adjustment result, select the execution mode, [Initialization] and select [Execute].
11. When transitioning to DC808 White ADC Adjust User Target Set Cycle, select [Shift], and the DC808 White ADC Adjust User Target Set Cycle screen will be displayed.

6.4.53 DC808 White ADC Adjust User Target Set Cycle

Purpose

A user paper target for automatically adjusting the ADC sensor sensitivity used for white toner control is set using customer selected paper (user paper: black paper) at the time of customer adjustment.

Overview

- Set the target when performing DC807 White ADC Sensitivity Correction Cycle with adjustment target, [User Paper].
- When User Paper Target Setting is executed, a colorimetric chart is output from the selected tray and measured with ILS. The user paper target based on the colorimetric result is automatically set.

NOTE:

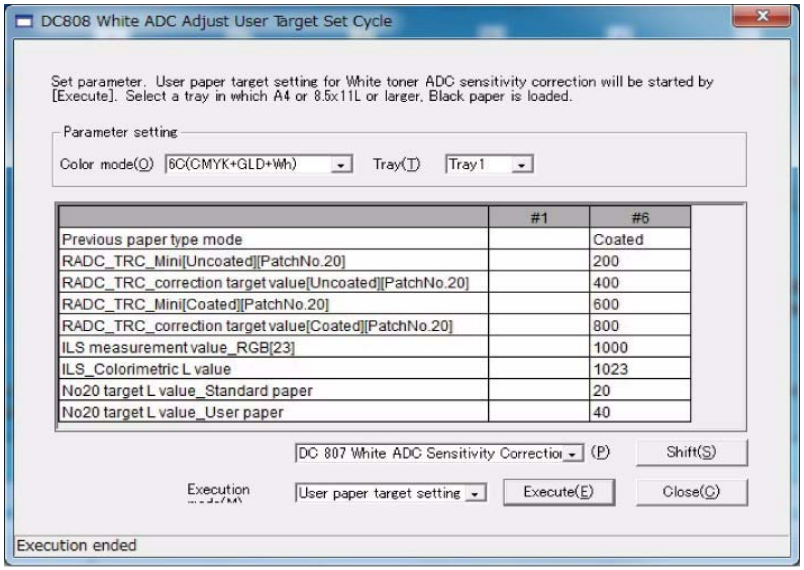
- *If there is no customer-selected black paper, do not execute it.*
- *Before executing this feature, execute DC807 White ADC Sensitivity Correction Cycle using standard paper with the adjustment target, [Standard Paper]. Additionally, for black standard paper, use Kishu color bond black extra heavyweight paper.*
- *If the ADC Sensor is replaced, perform the procedure after the replacement.*

NOTE: *For details on the adjustment procedure of DC808, refer to* ADJ 18.1.22 *in Chapter 4.*

Procedure

1. On the PC-Diag screen, select [IQ adjustment].
2. On the IQ Adjustment screen, select DC808.
3. The DC808 White ADC Adjust User Target Set Cycle screen is displayed. (Figure 1)

   [Set parameter. User paper target setting for White toner ADC sensitivity correction will be started by [Execute]. Select a tray in which A4 or 8.5 x 11L or larger, black paper is loaded.] is displayed together with the screen display parameters and the default value of the user paper target setting for white toner ADC sensitivity correction. (Table 1)



j0cx640058

Figure 1 j0cx640058

Table 1 Display/Setting Item

Display/Setting Item	Display range
Last Paper Type Mode	0: Uncoated 1: Coated
RADC_TRC_Mini [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Uncoated] [PatchNo.20]	0 to 1023
RADC_TRC_Mini [Coated] [PatchNo.20]	0 to 1023
RADC_TRC_Correction Target Value [Coated] [PatchNo.20]	0 to 1023
ILS Measurement Value_RGB[23]	0 to 1023
ILS_ Colorimetric L Value	0 to 1023
No 20 Target L Value_Standard Paper	0 to 1023
No 20 Target L Value_User Paper	0 to 1023

4. Select the color mode. Recommendation is 6C.
   (1) Color mode: Select the setting items from the following.

Table 2 Setting Data

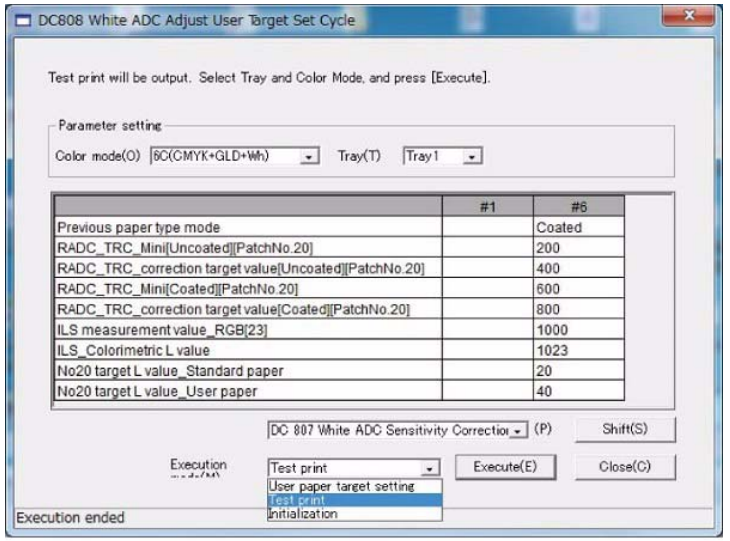
Setting Item	Description
6C	Select 6C (CMYK + GLD or SLV or CLR or Wh + Wh) (Default).
5C#1	Select 5C#1 (CMYK+Wh).
5C#6	Select 5C#6 (CMYK+Wh).
1C#1	Select 1C#1 (Wh).
1C#6	Select 1C#6 (Wh).

Table 2 Setting Data

5C#6	Select 5C#6 (CMYK+Wh).
1C#1	Select 1C#1 (Wh).
1C#6	Select 1C#6 (Wh).

- Color mode that does not include White engine can not be selected.
- Default in the order of 6C -> 5C#1 -> 5C#6 is determined based on the installed engine.

5. Select a tray. Set 1 or more sheets of customer-selected paper (black paper) corresponding to the adjustment target in the tray and select it. Tray options are Tray 1 (Default) to Tray 6, or MBT.
6. Select the execution mode. Select [User paper target setting] and select [Execute]. (Figure 1)
   Options for the execution mode are User Paper Target Setting (Default), Test Print, or Initialization.
7. 1 sheet of colorimetric chart (PG No. 385 CTRACS Pattern (for correction/6C/ILS)) is output and the user paper target for automatically adjusting the ADC sensor sensitivity used for white toner control is set. Furthermore, the display of the set values on the screen is updated.
8. To check the current state or adjustment result, select the execution mode, [Test print] and select [Execute]. (Figure 2)
   - 1 sheet of single sided PG No.386 CTRACS Pattern (for check/6C/ILS) will be printed.



j0cx640059

Figure 2 j0cx640059 (Newly added)

9. To initialize the user paper target, select the execution mode, [Initialization] and select [Execute].
10. When transitioning to DC807 White ADC Sensitivity Correction Cycle, select [Shift], and the DC807 White ADC Sensitivity Correction Cycle screen will be displayed.

6.5.1 How to Disable the ILS Function (Other Task Procedures)

When ILS related problem occurs, the ILS function may be disabled to continue with the Job until the recovery task for the ILS can be performed. The following explains how to disable the ILS function.

1. Rewrite NVM [782-330] from '1' to '0'.
2. Turn OFF the power.
3. Swap the Stopper Bracket and disconnect the connector.

   NOTE: *Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.*

4. Open the IOT-R Front Left/Right Cover.
5. Remove the WR Roll Assembly. (Refer to Chapter 4 REP 20.1.3)
6. Swap the Stopper Bracket. (Figure 1)
   (1) Remove the screw.
   (2) Remove the Stopper Bracket.
   (3) Swap the Stopper Bracket.
   (4) Tighten the screw.

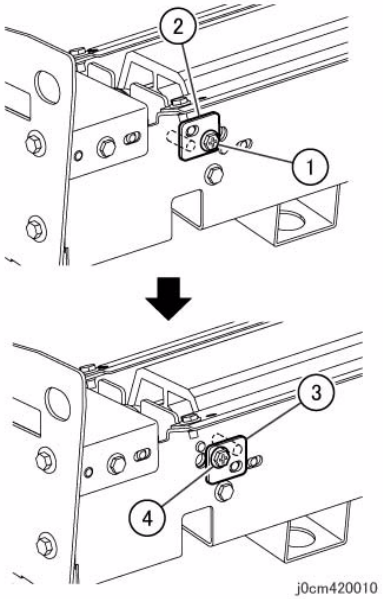


Figure 1 j0cm420010

7. Reinstall all parts that were removed.
8. Remove the Inner Left Upper Cover. (Figure 2)
   (1) Remove the screw (x2).
   (2) Remove the Inner Left Upper Cover.

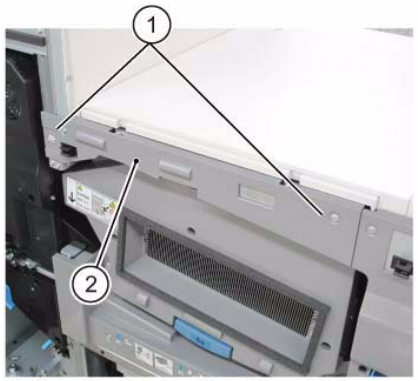


Figure 2 j0kol650001

9. Remove the bracket. (Figure 3)
   (1) Remove the screw.
   (2) Remove the bracket.

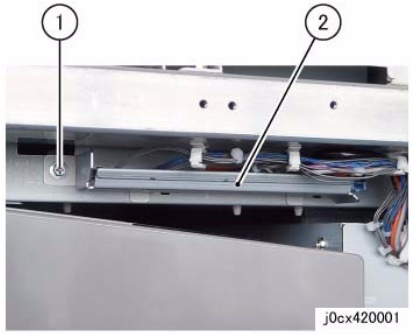


Figure 3 j0cx420001

10. Disconnect the connector. (Figure 4)
    (1) Disconnect the connector (P/J965).

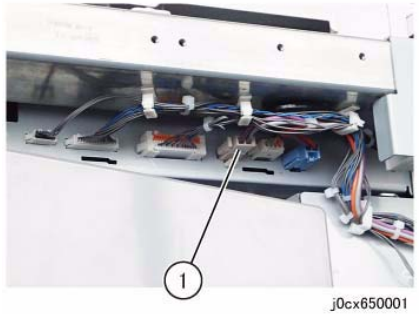


Figure 4 j0cx650001

11. Reinstall the Inner Left Upper Cover.
12. Close the IOT-R Front Left/Right Cover.

Chapter 7 Wiring Data

7 Wiring Data

7.1 Plug/Jack Locations

7.1.1 How to Use the Plug/Jack Location List 3
7.1.2 Plug/Jack Location List 3
7.1.3 Plug/Jack Positions 24

7.1.1 How to Use the Plug/Jack Location List

- To know the installation position of the connector, refer to the Figure and Item Number of "7.1.2 Plug/Jack Location List" from the Figure and Item Number of "7.1.3 Plug/Jack Locations" to check the position.
- P/J No. on “7.1.2 Plug/Jack Location List” is expressed in the nine ways below:
  - P/J250 represents Plug/Jack 250.
  - P250 represents Plug 250.
  - J250 represents Jack 250.
  - DP250 represents Double Plug 250.
  - DJ250 represents Double Jack 250.
  - CN1 represents Connector 1.
  - FS1 represents Faston Terminal 1.
  - SJ1 represents Shorting Jack 1.
  - T1 represents Terminal 1.

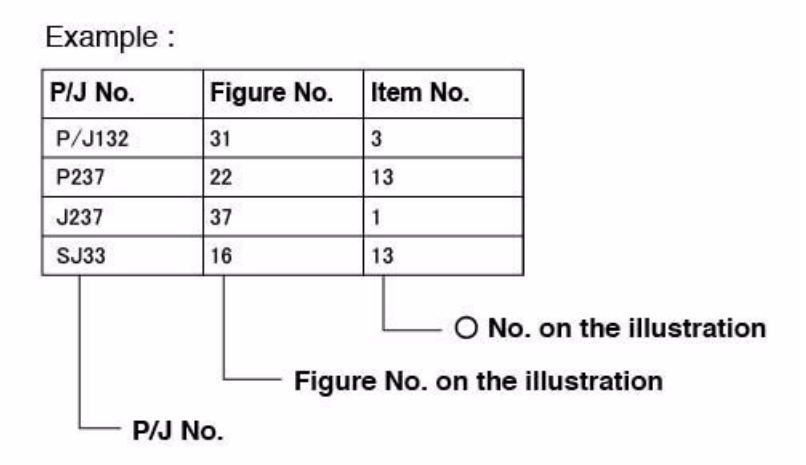


Figure 1 e710001

7.1.2 Plug/Jack Location List

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J1	29	1	LDD PWB
P/J1	29	7	MPD PWB
P/J1	30	1	LDD PWB (OP)
P/J1	30	7	MPD PWB (OP)
P/J1	76	16	TRIAC PWB
P/J1_1	90	8	LVPS S24-1
P/J1_2	90	14	LVPS S24-2
P/J1_3	90	7	LVPS S24-3
P/J1_4	90	16	LVPS S24-4
P/J1_5	90	15	LVPS S24-5
P/J1-6	89	9	LVPS S24-6 (OP)
P/J1-7	89	8	LVPS S36-1
P/J1_8	75	8	LVPS S36-2
P/J1_FL	97	5	ILS Lamp 2
P/J1_FR	97	4	ILS Lamp 3
P/J1_ID	96	3	ILS DC Power PWB
P/J1_IL	97	2	ILS Lamp Drive PWB
P/J1_RL	97	7	ILS Lamp 1
P/J1_RR	97	6	ILS Lamp 4
P1 (#1,#6)	88	3A	HALFTONE PWB #1/#6
P1 (Y,M)	88	3B	HALFTONE PWB YM
P1 (C,K)	88	3C	HALFTONE PWB CK
J1A	77	3	Inlet GFI 1
J1B	77	2	Inlet GFI 1
P/J2_1	90	9	LVPS S24-1
P/J2_2	90	11	LVPS S24-2
P/J2_3	90	5	LVPS S24-3
P/J2_4	90	2	LVPS S24-4
P/J2_5	90	1	LVPS S24-5
P/J2_6	89	10	LVPS S24-6 (OP)
P/J2_7	89	5	LVPS S36-1
P/J2_8	75	1	LVPS S36-2
P/J2	76	15	TRIAC PWB
J2A	77	4	Inlet GFI 1
J2B	77	5	Inlet GFI 1
P/J2X	8	7	2nd BTB DTR/ESB HVPS (08Z3G)
P/J2_IL	97	1	ILS Lamp Drive PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J3	76	14	TRIAC PWB
P/J3_1	90	10	LVPS S24-1
P/J3_2	90	12	LVPS S24-2
P/J3_3	90	4	LVPS S24-3
P/J3_4	90	3	LVPS S24-4
P/J3_5	90	6	LVPS S24-5
P/J3_6	89	7	LVPS S24-6 (OP)
P/J3_7	89	6	LVPS S36-1
P/J3_8	75	2	LVPS S36-2
P/J3_9	75	5	LVPS DP2R
J3A	77	6	Inlet GFI 2
J3B	77	18	Inlet GFI 2
P3_DM	95	4	CONNECTOR (N.C)
P/J3_ID	96	2	ILS DC Power PWB
P/J3_IL	97	3	ILS Lamp Drive PWB
P4	76	13	TRIAC PWB (N.C)
J4A	77	7	Inlet GFI 2
J4B	77	8	Inlet GFI 2
J5A	77	9	Inlet GFI 3
J5B	77	10	Inlet GFI 3
P/J6	76	8	TRIAC PWB
J6A	77	11	Inlet GFI 3
J6B	77	12	Inlet GFI 3
P/J7AL	44	6	TRAY 1 AIR HEATER PWB
P/J7AR	45	6	TRAY 2 AIR HEATER PWB
P/J7B_1	44	8	TRAY 1 AIR HEATER PWB
P/J7B_2	45	8	TRAY 2 AIR HEATER PWB
P/J7	76	6	TRIAC PWB
P/J8	76	5	TRIAC PWB
P/J8_1	44	5	CONNECTOR (Tray 1)
P/J8_2	45	5	CONNECTOR (Tray 2)
P/J9_1	57	9	TRAY 1 AIR HEATER
P/J9_2	57	9	TRAY 2 AIR HEATER
P/J9	76	3	TRIAC PWB
P/J10	76	7	TRIAC PWB
P/J11_U	89	1	LVPS H1U
P/J12_ID	96	5	ILS DC Power PWB
P/J13_ID	96	9	ILS DC Power PWB
P14	76	4	POWER SUPPLY TRIAC (N.C)
P/J14_ID	96	8	ILS DC Power PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J18_ID	96	7	ILS DC Power PWB
P19	76	20	TRANS FORMER (240V) (N.C)
P20	76	21	TRANS FORMER (230V) (N.C)
J20FS	82	19	MAIN SWITCH
P/J20_ID	96	4	ILS DC Power PWB
P21	76	19	TRANS FORMER (220V) (N.C)
J21FS	82	21	MAIN SWITCH
P22	76	18	TRANS FORMER (208V) (N.C)
J22FS	82	20	MAIN SWITCH
P/J25LA1	20	1	IOT_L F_COVER INTERLOCK SWITCH L
P/J25LB1	20	12	IOT_L F_COVER INTERLOCK SWITCH L
P/J25LA2	20	10	IOT_L F_COVER INTERLOCK SWITCH L
P/J25LB2	20	11	IOT_L F_COVER INTERLOCK SWITCH L
P/J25RA1	20	7	FR COVER INTERLOCK SWITCH R
P/J25RB1	20	4	FR COVER INTERLOCK SWITCH R
P/J25RA2	20	8	FR COVER INTERLOCK SWITCH R
P/J25RB2	20	9	FR COVER INTERLOCK SWITCH R
J37	59	8	EMERGENCY SWITCH
J38	59	7	EMERGENCY SWITCH
J41A1	59	1	IOT_R F-COVER INTERLOCK SWITCH L
J41A2	59	16	IOT_R F-COVER INTERLOCK SWITCH L
J41B1	59	2	IOT_R F-COVER INTERLOCK SWITCH L
J41B2	59	15	IOT_R F-COVER INTERLOCK SWITCH L
J42A1	59	3	IOT_R F-COVER INTERLOCK SWITCH R
J42A2	59	4	IOT_R F-COVER INTERLOCK SWITCH R
J42B1	59	6	IOT_R F-COVER INTERLOCK SWITCH R
J42B2	59	5	IOT_R F-COVER INTERLOCK SWITCH R
P/J100	1	2	PRE-REGI IN SENSOR
P/J100R	76	23	AC RELAY PWB
P/J101	1	1	MULTI FEED SENSOR
P/J101R	76	22	AC RELAY PWB
P/J101	29	9	LDD PWB
P/J101	30	9	LDD PWB (OP)
P/J102	29	5	ROS MOTOR Y/M/C/K
P/J102	30	5	ROS MOTOR 1/6 (OP)
P/J102R	76	12	AC RELAY PWB
P/J103	1	6	PRE-REGI PATH SENSOR
P/J103R	76	10	AC RELAY PWB
P/J104	1	4	PRE-REGI ROLL 1 N/R SENSOR
P/J104R	76	9	AC RELAY PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J105	1	8	PRE-REGI OUT SENSOR
P/J105R	76	25	AC RELAY PWB
P/J106	1	7	PRE-REGI ROLL 2 N/R SENSOR
P/J106R	76	2	AC RELAY PWB
P/J107	11	7	H-TRA PATH SENSOR 1
P/J107R	76	24	AC RELAY PWB
P/J107_ID	96	1	ILS DC Power PWB
P/J108	11	3	H-TRA PATH SENSOR 2
P/J108R	76	1	AC RELAY PWB
P/J109	13	1	J-Tra 1 CHUTE OPEN SWITCH
P/J110	13	2	J-Tra 1 FEED OUT SENSOR
P/J111	15	1	J-Tra 2 CHUTE OPEN SWITCH
P/J112	15	2	J-Tra 2 FEED OUT SENSOR
P/J113	14	1	H-TRA PATH SENSOR 3
P/J115	14	6	H-TRA PATH SENSOR 5
P/J116	1	13	I-Tra CHUTE OPEN SWITCH (OP)
P/J117	1	11	HCF IN SENSOR (OP)
P/J118	12	1	BURR PRESS PATH SENSOR
P/J119	12	2	BURR PRESS RETRACT SENSOR
P/J120	6	2	REGI SIDE SHIFT HOME SENSOR
P/J121	5	6	REGI N/R HOME SENSOR
P/J122	5	5	REGI OUT SENSOR
P/J123	5	1	ALIGNER SHIFT REAR LIMIT SENSOR
P/J124	5	2	ALIGNER SHIFT HOME SENSOR
P/J126	4	1	ALIGNER CROSSED N/R SENSOR 1
P/J127	4	3	ALIGNER CROSSED N/R SENSOR 2
P/J128	4	4	ALIGNER CROSSED N/R SENSOR 3
P/J129	4	2	ALIGNER PATH SENSOR 2
P/J131	4	5	REGI IN SENSOR
P/J132	3	3	PRE ALIGER N/R SENSOR
P/J133	3	4	ALIGNER PATH SENSOR 1
P/J134	3	6	ALIGER UNIT HOME SENSOR
P/J134	58	1	TRAY 1/2 LOWER NO PAPER SENSOR
P/J135	8	10	2nd BTB RETRACT SENSOR
P/J135C	55	2	TRAY 1/2 SHIFT HOME SENSOR
P/J136	9	4	V-TRA SENSOR 1
P/J136_2	9	2	V-TRA SENSOR 3
P/J136_3	10	3	V-TRA SENSOR 5
P/J136C	55	1	TRAY 1/2 SHIFT FRONT LIMIT SENSOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J137	9	3	V-TRA SENSOR 2
P/J137_2	9	1	V-TRA SENSOR 4
P/J137_3	10	2	V-TRA SENSOR 6
P/J137C	55	3	TRAY 1/2 SHIFT REAR LIMIT SENSOR
P/J138	17	1	1st BTR CONTACT/RETRACT SENSOR R2
P/J139	17	4	BELT EDGE SENSOR 3
P/J140	17	7	1st BTR CONTACT/RETRACT SENSOR R1
P/J141	17	10	BELT HOME POSITION SENSOR 1
P/J142	19	11	BELT ENCORDER SENSOR A
P/J143	19	20	BELT HOME POSITION SENSOR 2
P/J144	19	9	BELT ENCORDER SENSOR B
P/J144Z	19	10	BELT ENCORDER SENSOR Z
P/J145	19	7	BELT EDGE SENSOR 2
P/J146	16	1	BELT EDGE SENSOR 1
P/J148	16	3	1st BTR CONTACT/RETRACT SENSOR R4-R5
P/J149	16	5	1st BTR CONTACT/RETRACT SENSOR R3
P/J151	39	10	IBT DRAWER INTERLOCK SWITCH
P/J152	66	1	DUP OUT SENSOR
P/J152A	58	6	TRAY 1/2 FRONT MISSET SENSOR
P/J153	56	5	TRAY 1/2 PRE FEED SENSOR
P/J153	66	3	DUP IN SENSOR
P/J154	56	4	TRAY 1/2 FEED OUT SENSOR
P/J154	66	5	DUP PATH SENSOR
P/J155	58	7	TRAY 1/2 SIZE SENSOR 1
P/J155	67	1	DUP INVERT SENSOR
P/J155B	58	9	TRAY 1/2 SIZE SENSOR 0
P/J156	58	8	TRAY 1/2 SIZE SENSOR 2
P/J156	67	4	D-TRA SENSOR 1
P/J157	58	4	TRAY 1/2 SIZE SENSOR 3
P/J158	58	3	TRAY 1/2 SIZE SENSOR 4
P/J158	67	5	D-TRA SENSOR 3
P/J159	58	2	TRAY 1/2 SIZE SENSOR 5
P/J159	70	11	INVERT N/R SENSOR
P/J159A	58	5	TRAY 1/2 SIZE SENSOR 6
P/J160	56	3	TRAY 1/2 LEVEL SENSOR
P/J160	70	16	INVERT SENSOR
P/J161	56	2	TRAY 1/2 UPPER NO PAPER SENSOR
P/J161	70	5	INVERT GATE SENSOR
P/J162	70	3	INVERT UPPER SENSOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J162T	45	7	TEMP & HUMIDITY SENSOR
P/J163	57	6	TRAY 1/2 LEAD HEATER TEMP SENSOR
P/J163	70	8	INVERT OUT SENSOR
P/J164	70	2	INVERT IN SENSOR
P/J165	57	2	TRAY 1/2 LEAD SHUTTER HOME SENSOR
P/J165	68	6	INVERT END SENSOR
P/J165A	57	1	TRAY 1/2 END SHUTTER HOME SENSOR
P/J166	68	2	INVERT PATH SENSOR
P/J167	59	13	IOT EXIT SENSOR
P/J168	65	8	COOLING LOWER STEERING POS SENSOR
P/J169	65	13	COOLING LOWER BELT POSITION SENSOR
P/J170	65	7	COOLING UPPER STEERING POS SENSOR
P/J171	65	2	COOLING UPPER BELT POSITION SENSOR
P/J172	69	1	DECULER BELT CAM SENSOR
P/J173	69	2	DECULER CAM ROLL SENSOR
P/J174	69	7	DECULER EXIT SENSOR
P/J1781	24	3	LOW TONER SENSOR #1
P/J178	23	3	LOW TONER SENSOR #2
P/J1783	23	3	LOW TONER SENSOR #3
P/J1784	23	3	LOW TONER SENSOR #4
P/J1785	23	3	LOW TONER SENSOR #5
P/J1786	24	3	LOW TONER SENSOR #6
P/J1791	24	4	TN CTRG CRUM #1
P/J179	23	4	TN CTRG CRUM #2
P/J1793	23	4	TN CTRG CRUM #3
P/J1794	23	4	TN CTRG CRUM #4
P/J1795	23	4	TN CTRG CRUM #5
P/J1796	24	4	TN CTRG CRUM #6
P/J1891	27	11	ATC SENSOR 1 (OP)
P/J180	25	11	ATC SENSOR Y
P/J1803	25	11	ATC SENSOR M
P/J1804	25	11	ATC SENSOR C
P/J1805	25	11	ATC SENSOR K
P/J1806	27	11	ATC SENSOR 6 (OP)
DP/DJ1811	27	5	CONNECTOR
DP/DJ181	25	5	CONNECTOR
DP/DJ1813	25	5	CONNECTOR
DP/DJ1814	25	5	CONNECTOR
DP/DJ1815	25	5	CONNECTOR
DP/DJ1816	27	5	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J181D1	27	4	CRUM ANTTENNA PWB #1 (OP)
P/J181_D	25	4	CRUM ANTTENNA PWB Y
P/J181_D3	25	4	CRUM ANTTENNA PWB M
P/J181_D4	25	4	CRUM ANTTENNA PWB C
P/J181_D5	25	4	CRUM ANTTENNA PWB K
P/J181D6	27	4	CRUM ANTTENNA PWB #6 (OP)
P/J182	43	17	IOT-L & R Joint Sensor
P/J183	74	18	WASTE TONERN BOTTLE FULL SENSOR 1
P/J183_2	74	16	WASTE TONERN BOTTLE FULL SENSOR 2
P/J184	74	17	WASTE TONERN BOTTLE POSITION SENSOR 1
P/J184_2	74	14	WASTE TONERN BOTTLE POSITION SENSOR 2
P/J1851	28	4	ERASE LAMP 1 (OP)
P/J185	26	4	ERASE LAMP Y
P/J1853	26	4	ERASE LAMP M
P/J1854	26	4	ERASE LAMP C
P/J1855	26	4	ERASE LAMP K
P/J1856	28	4	ERASE LAMP 6 (OP)
P/J1861	27	2	CC INTERLOCK SWITCH 1 (OP)
P/J186	25	2	CC INTERLOCK SWITCH 2 (Y)
P/J1863	25	2	CC INTERLOCK SWITCH 3 (M)
P/J1864	25	2	CC INTERLOCK SWITCH 4 (C)
P/J1865	25	2	CC INTERLOCK SWITCH 5 (K)
P/J1866	27	2	CC INTERLOCK SWITCH 6 (OP)
P/J1876	28	1	ESV SENSOR 1 (OP)
P/J187	26	1	ESV SENSOR 2 (Y)
P/J1873	26	1	ESV SENSOR 3 (M)
P/J1874	26	1	ESV SENSOR 4 (C)
P/J1875	26	1	ESV SENSOR 5 (K)
P/J1876	28	1	ESV SENSOR 6 (OP)
P/J1881	38	1	DRUM ENCODER SENSOR ASSEMBLY 1
P/J1882	38	4	DRUM ENCODER SENSOR ASSEMBLY 2
P/J1883	37	1	DRUM ENCODER SENSOR ASSEMBLY 3
P/J1884	37	3	DRUM ENCODER SENSOR ASSEMBLY 4
P/J1885	36	1	DRUM ENCODER SENSOR ASSEMBLY 5
P/J1886	36	3	DRUM ENCODER SENSOR ASSEMBLY 6
P/J190	6	1	CIS SENSOR
P/J191	69	4	CONNECTOR
P/J1911	27	1	CONNECTOR
P/J191	25	1	CONNECTOR
P/J1913	25	1	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J1914	25	1	CONNECTOR
P/J1915	25	1	CONNECTOR
P/J1916	27	1	CONNECTOR
P/J208	21	1	REAR ReC SENSOR
P/J209	21	2	CENTOR ReC SENSOR
P/J210	21	3	FRONT ReC SENSOR
P/J213	21	5	REAR ADC SENSOR
P/J214	21	4	FRONT ADC SENSOR
P/J231F	19	1	2nd NIP ADJUSTABLE CAM HOME SENSOR (OUT)
P/J231R	19	8	2nd NIP ADJUSTABLE CAM HOME SENSOR (OUT)
P/J232	17	12	CONNECTOR
P/J233	61	1	FUSING BELT STEERING SENSOR
P/J234	61	11	P/R LATCH SENSOR
P/J235	61	21	E/R STS 1/2/3 (TEMP SENSOR)
P/J238	63	14	BELT POSITION IN CONTROL SENSOR
P/J239	63	16	BELT POSITION OUT CONTROL SENSOR
P/J240	63	15	BELT POSITION LIMIT SENSOR
P/J241	60	1	REFRESH ROLL RETRACT SENSOR
J242_R1	63	7	IRS SENSOR 1 (R)
J242_R2	63	4	IRS SENSOR 2 (F)
P/J243	63	2	BELT SPEED SENSOR
P/J244	60	17	I/R STS 1/2/3
P/J245	60	18	H/R STS 1/2/3
P/J246	63	9	V-TRA SENSOR 7
P/J247	62	5	FUSING EXIT SENSOR
P/J248	22	1	TEMP & HUMIDITY SENSOR 1
P/J249	22	2	TEMP & HUMIDITY SENSOR 2
P/J251A1	44	13	TRAY 1 INTERLOCK SWITCH
P/J251A2	44	14	TRAY 1 INTERLOCK SWITCH
P/J251B1	44	12	TRAY 1 INTERLOCK SWITCH
P/J251B2	44	11	TRAY 1 INTERLOCK SWITCH
P/J251_L1	20	2	DISPENSER COVER INTERLOCK SWITCH L
P/J251_L2	20	3	DISPENSER COVER INTERLOCK SWITCH L
P/J251_R1	20	6	DISPENSER COVER INTERLOCK SWITCH R
P/J251_R2	20	5	DISPENSER COVER INTERLOCK SWITCH R
P/J252A1	45	13	TRAY 2 INTERLOCK SWITCH
P/J252A2	45	15	TRAY 2 INTERLOCK SWITCH
P/J252B1	45	12	TRAY 2 INTERLOCK SWITCH
P/J252B2	45	11	TRAY 2 INTERLOCK SWITCH

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
J253	59	10	SERVICE INTERLOCK SWITCH
J254	59	9	SERVICE INTERLOCK SWITCH
P/J255_1	74	9	FUSING DRAWER INTERLOCK SWITCH (LOGIC)
P/J255_2	74	6	FUSING DRAWER INTERLOCK SWITCH (LOGIC)
P/J256_1	74	8	FUSING DRAWER INTERLOCK SWITCH (POWER)
P/J256_2	74	7	FUSING DRAWER INTERLOCK SWITCH (POWER)
J257_1	71	9	EXIT DRAWER INTERLOCK SWITCH (LOGIC)
J257_2	71	10	EXIT DRAWER INTERLOCK SWITCH (LOGIC)
J258_1	71	8	EXIT DRAWER INTERLOCK SWITCH (POWER)
J258_2	71	7	EXIT DRAWER INTERLOCK SWITCH (POWER)
P/J274	60	9	CONNECTOR
P/J275	60	10	CONNECTOR
P/J276	60	11	CONNECTOR
P/J288	57	3	TRAY 1/2 LEAD SHUTTER MOTOR
P/J288A	57	10	TRAY 1/2 END SHUTTER MOTOR
P/J289	57	4	TRAY 1/2 LEAD BLOWER FAN
P/J289A	56	7	TRAY 1/2 FRONT BLOWER FAN
P/J290	57	8	TRAY 1/2 END BLOWER FAN
P/J290A	56	6	TRAY 1/2 REAR BLOWER FAN
P/J291	56	1	TRAY 1/2 NUDGER SOLENOID
P/J300	98	3	CONNECTOR (LED Type)
P/J301	95	6	ILS Fan_1 (LED Type)
P/J302	95	7	ILS Fan_2 (LED Type)
P/J303	95	1	ILS Fan_3 (LED Type)
P/J304	95	2	ILS Fan_4 (LED Type)
P/J305	95	3	ILS Fan_5 (LED Type)
P/J306	98	2	White Ref. Home Sensor (LED Type)
P/J307	98	1	White Ref. Drive Motor (LED Type)
P309	95	5	CONNECTOR (N.C)
J309_ID	95	5	CONNECTOR (N.C)
P/J310	55	5	TRAY 1/2 LIFT MOTOR
P/J311	55	8	TRAY 1/2 FEED MOTOR
P/J312	55	6	TRAY 1/2 SHIFT MOTOR
P/J341	29	10	LDD PWB
P/J341	30	10	LDD PWB (OP)
P/J342	29	6	SOS
P/J342	30	6	SOS (OP)
P/J343	29	8	LDD PWB
P/J343	30	8	LDD PWB (OP)

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J344	56	10	CONNECTOR (Tray 1) (Tray 2)
P/J345	56	9	CONNECTOR (Tray 1) (Tray 2)
P/J345C	29	3C	ROS Assembly C
P/J345K	29	3D	ROS Assembly K
P/J345M	29	3B	ROS Assembly M
P/J3451	30	3B	ROS Assembly 1 (OP)
P/J3456	30	3A	ROS Assembly 6 (OP)
P/J345Y	29	3A	ROS Assembly Y
P/J350	2	1	TRANSPORT MOTOR
P/J351	2	2	PRE-REGI MOTOR 1
P/J351	55	7	TRAY 1/2 TAKEAWAY MOTOR
P/J352	2	3	PRE-REGI MOTOR 2
P/J353	1	3	PRE-REGI 1 N/R MOTOR
P/J354	1	5	PRE-REGI 2 N/R MOTOR
P/J355	11	1	H-TRA 1 MOTOR 1
P/J356	11	2	H-TRA 1 MOTOR 2
P/J357	11	8	H-TRA 1 CLUTCH
P/J358	13	4	J-TRA 1 MOTOR
P/J359	15	4	J-TRA 2 MOTOR
P/J366P	14	4	H-TRA 2 MOTOR (IN)
P/J366S	14	5	H-TRA 2 MOTOR (IN)
P/J367P	14	2	H-TRA 2 MOTOR (OUT)
P/J367S	14	3	H-TRA 2 MOTOR (OUT)
P/J368	1	12	I-TRA MOTOR (OP)
P/J369	12	5	BURR PRESS RETRACT MOTOR
P/J370	43	6	BURR PRESS MOTOR (2Pin)
P/J371	43	7	BURR PRESS MOTOR (8Pin)
P/J372	6	3	REGI SIDE SHIFT MOTOR
P/J373	6	7	REGI MOTOR
P/J374	5	7	REGI N/R MOTOR
P/J375	5	8	ALIGNER SHIFT MOTOR
P/J376	5	4	ALIGNER DRIVE MOTOR
P/J377	4	8	ALIGNER CROSSED N/R MOTOR 1
P/J378	4	7	ALIGNER CROSSED N/R MOTOR 2
P/J379	4	6	ALIGNER CROSSED N/R MOTOR 3
P/J380	3	2	PRE ALIGNER N/R MOTOR
P/J381	3	1	PRE ALIGNER DRIVE REAR MOTOR
P/J381F	3	5	PRE ALIGNER DRIVE FRONT MOTOR
P/J382	3	7	ALIGNER UNIT SKEW MOTOR
P/J382	8	5	V-TRA SUCTION FAN

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J384	8	9	2nd BTB CLEANING MOTOR
P/J385	8	1	2nd BTB RETRACT MOTOR
P/J386	8	4	2nd BTB MOTOR
P/J387	9	6	V-TRA MOTOR 1
P/J387_2	9	8	V-TRA MOTOR 2
P/J387_3	10	4	V-TRA MOTOR 3
P/J388	39	20	V-TRA FAN 1
P/J389	39	21	V-TRA FAN 2
P/J390	43	18	V-TRA FAN 3
P/J391	16	6	1st BTR CONTACT/RETRACT MOTOR R2
P/J392	17	8	1st BTR CONTACT/RETRACT MOTOR R1
P/J393F	17	13	2nd NIP ADJUSTABLE MOTOR (OUT)
P/J393R	19	6	2nd NIP ADJUSTABLE MOTOR (IN)
P/J394P	19	19	IBT DRIVE MOTOR
P/J394S	19	18	IBT DRIVE MOTOR
P/J396	17	11	IBT CLENAER MOTOR
P/J397	16	11	IBT STEERING MOTOR
P/J398	16	2	1st BTR CONTACT/RETRACT MOTOR R4-R5
P/J399	16	10	1st BTR CONTACT/RETRACT MOTOR R3
P/J400	66	2	DUPLEX MOTOR
P/J401	66	7	DUP OUT MOTOR
P/J402	66	4	DUP INVERT MOTOR
P/J403	67	2	D-TRA MOTOR 2
P/J404	67	3	D-TRA MOTOR 1
P/J405	70	12	INVERT N/R MOTOR
P/J406	70	1	INVERT IN GATE MOTOR
P/J407	70	6	INVERT MOTOR
P/J408	68	1	INVERT PATH MOTOR
P/J409	59	14	IOT EXIT MOTOR
P/J410_1	71	16	INVERT UPPER MOTOR
P/J410	71	13	INVERT IN MOTOR
P/J412	71	18	INVERT ENTRANCE MOTOR
P/J413	65	9	COOLING LOWER WALK MOTOR
P/J414	65	1	COOLING UPPER WALK MOTOR
P/J415	69	3	DECURLER ROLL DRIVE MOTOR
P/J416	69	5	DCR ROLL DRIVE MOTOR
P/J418	71	12	COOLING LOWER MOTOR
P/J419	71	5	COOLING UPPER MOTOR
P/J420	71	4	COOLING UPPER MOTOR
P/J421	71	2	DECURLER BELT DRIVE MOTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J422	71	3	DECURLER BELT DRIVE MOTOR
P/J423	71	11	DCR ROLL PENE MOTOR
P/J424	71	15	DECURLER BELT PENE MOTOR
P/J425	6	6	CIS CONTROL PWB
P/J426	6	5	CIS CONTROL PWB
P/J4271	24	2	TONER CARTRIDGE MOTOR_1 (OP)
P/J427	23	2	TONER CARTRIDGE MOTOR 2 (OP)
P/J4273	23	2	TONER CARTRIDGE MOTOR_Y
P/J4274	23	2	TONER CARTRIDGE MOTOR_M
P/J4275	23	2	TONER CARTRIDGE MOTOR_C
P/J4276	24	2	TONER CARTRIDGE MOTOR_K
P/J4281	24	1	TONER DISPENSE MOTOR_1
P/J428	23	1	TONER DISPENSE MOTOR_2
P/J4283	23	1	TONER DISPENSE MOTOR_Y
P/J4284	23	1	TONER DISPENSE MOTOR_M
P/J4285	23	1	TONER DISPENSE MOTOR_C
P/J4286	24	1	TONER DISPENSE MOTOR_K
P/J4291	27	8	DEVE MOTOR 1 (OP)
P/J429	25	8	DEVE MOTOR_Y
P/J4293	25	8	DEVE MOTOR_M
P/J4294	25	8	DEVE MOTOR_C
P/J4295	25	8	DEVE MOTOR_K
P/J4296	27	8	DEVE MOTOR 6 (OP)
P/J4301	38	11	CLEANER MOTOR 1
P/J4302	38	8	CLEANER MOTOR 2
P/J4303	37	10	CLEANER MOTOR 3
P/J4304	37	7	CLEANER MOTOR 4
P/J4305	36	11	CLEANER MOTOR 5
P/J4306	36	7	CLEANER MOTOR 6
P/J4311	33	7	CC CLEANER MOTOR_1
P/J4312	33	5	CC CLEANER MOTOR_2
P/J4313	32	18	CC CLEANER MOTOR_3
P/J4314	32	16	CC CLEANER MOTOR_4
P/J4315	32	14	CC CLEANER MOTOR_5
P/J4316	32	12	CC CLEANER MOTOR_6
P/J432	36	9	AUGER MOTOR 1
P/J433	43	21	TONER COLLECT MOTOR
P/J434	74	10	AUGER MOTOR 2
P/J435	74	12	ACTIVE BOTTLE SWITCHING MOTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J436F	99	3	Power Save PWB (Option)
P/J437F	99	6	Power Save PWB (Option)
P/J438F	99	4	Power Save PWB (Option)
P/J4361	35	3	CC FAN 1
P/J4362	35	7	CC FAN 2
P/J4363	34	17	CC FAN 3
P/J4364	34	15	CC FAN 4
P/J4365	34	11	CC FAN 5
P/J4366	34	10	CC FAN 6
P/J437	25	3	MAGROLL ENCORDER SENSOR Y
P/J4371	27	3	MAGROLL ENCORDER SENSOR #1
P/J4373	25	3	MAGROLL ENCORDER SENSOR M
P/J4374	25	3	MAGROLL ENCORDER SENSOR C
P/J4375	25	3	MAGROLL ENCORDER SENSOR K
P/J4376	27	3	MAGROLL ENCORDER SENSOR #6
P/J439	33	9	CONNECTOR
P/J440	43	15	REAR COOLING FAN 9
P/J441	38	13	REAR COOLING FAN 10
P/J441	87	3	IOT MAIN PWB / NVM PWB
P/J441_H	48	16	PH CORE PWB / NVM PWB
P/J441_D	52	25	MK_DRV CORE PWB / NVM PWB
P/J441_X	53	23	MK_EPG CORE PWB/NVM PWB
P/J441_F	81	12	FSR/INV CORE PWB/NVM PWB
P/J442	20	14	ROS FAN 1
P/J442	87	6	IOT MAIN PWB / NVM PWB
P/J442	48	20	PH CORE PWB / NVM PWB
P/J442	52	18	MK_DRV CORE PWB / NVM PWB
P/J442	53	16	MK_EPG CORE PWB/NVM PWB
P/J442	81	5	FSR/INV CORE PWB/NVM PWB
P/J444C	34	14	REAR DRIVE COOLING FAN 5
P/J444K	34	13	REAR DRIVE COOLING FAN 6
P/J444M	34	16	REAR DRIVE COOLING FAN 4
P/J444S	35	9	REAR DRIVE COOLING FAN 1
P/J444T	35	8	REAR DRIVE COOLING FAN 2
P/J444Y	34	18	REAR DRIVE COOLING FAN 3
P/J445	73	2	FUSING EXTHUST FAN 1
P/J446	73	1	FUSING EXTHUST FAN 2
P/J447	71	1	IOT-R REAR COOLING FAN
P/J448	73	12	FUSING WASTE FAN

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J451	72	2	COOLING FAN 1
P/J452	72	1	COOLING FAN 2
P/J454S	91	1	BLOWER FAN 1
P/J455C	91	5	BLOWER FAN 5
P/J455K	91	6	BLOWER FAN 6
P/J455M	91	4	BLOWER FAN 4
P/J455T	91	2	BLOWER FAN 2
P/J455Y	91	3	BLOWER FAN 3
P/J456	61	10	P/R LATCH MOTOR
P/J457	60	4	FUSING WEB MOTOR
P/J458	61	16	FUSING BELT WALK MOTOR
P/J459	63	1	RFRESH ROLL RETRACT MOTOR
P/J460	61	8	FUSING MOTOR
P/J461	61	9	FUSING MOTOR
P/J475	60	8	V-TRA FAN 4
P/J476	63	3	FUSING BELT FAN 1
P/J477	63	13	FUSING BELT FAN 2
P/J478	63	17	FUSING BELT FAN 3
P/J479	63	5	FUSING P/R FAN 1
P/J480	63	6	FUSING P/R FAN 2
P/J480_C1	46	5A	TONER CARTRIDGE MOTOR DRIVE PWB #1
P/J480_C2	46	5B	TONER CARTRIDGE MOTOR DRIVE PWB Y
P/J480_C3	46	5C	TONER CARTRIDGE MOTOR DRIVE PWB M
P/J480_C4	46	5D	TONER CARTRIDGE MOTOR DRIVE PWB C
P/J480_C5	46	5E	TONER CARTRIDGE MOTOR DRIVE PWB K
P/J480_C6	46	5F	TONER CARTRIDGE MOTOR DRIVE PWB #6
P/J480_D1	46	7A	TONER DISPENS MOTOR DRIVE PWB #1
P/J480_D2	46	7B	TONER DISPENS MOTOR DRIVE PWB Y
P/J480_D3	46	7C	TONER DISPENS MOTOR DRIVE PWB M
P/J480_D4	46	7D	TONER DISPENS MOTOR DRIVE PWB C
P/J480_D5	46	7E	TONER DISPENS MOTOR DRIVE PWB K
P/J480_D6	46	7F	TONER DISPENS MOTOR DRIVE PWB #6
P/J481	63	8	FUSING P/R FAN 3
P/J481_C1	46	4A	TONER CARTRIDGE MOTOR DRIVE PWB #1
P/J481_C2	46	4B	TONER CARTRIDGE MOTOR DRIVE PWB Y
P/J481_C3	46	4C	TONER CARTRIDGE MOTOR DRIVE PWB M
P/J481_C4	46	4D	TONER CARTRIDGE MOTOR DRIVE PWB C
P/J481_C5	46	4E	TONER CARTRIDGE MOTOR DRIVE PWB K
P/J481_C6	46	4F	TONER CARTRIDGE MOTOR DRIVE PWB #6
P/J481_D1	46	6A	TONER DISPENS MOTOR DRIVE PWB #1

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J481_D2	46	6B	TONER DISPENS MOTOR DRIVE PWB Y
P/J481_D3	46	6C	TONER DISPENS MOTOR DRIVE PWB M
P/J481_D4	46	6D	TONER DISPENS MOTOR DRIVE PWB C
P/J481_D5	46	6E	TONER DISPENS MOTOR DRIVE PWB K
P/J481_D6	46	6F	TONER DISPENS MOTOR DRIVE PWB #6
P/J482	63	10	V-TRA MOTOR 4
P/J482_C1	46	3A	TONER CARTRIDGE MOTOR DRIVE PWB #1
P/J482_C2	46	3B	TONER CARTRIDGE MOTOR DRIVE PWB Y
P/J482_C3	46	3C	TONER CARTRIDGE MOTOR DRIVE PWB M
P/J482_C4	46	3D	TONER CARTRIDGE MOTOR DRIVE PWB C
P/J482_C5	46	3E	TONER CARTRIDGE MOTOR DRIVE PWB K
P/J482_C6	46	3F	TONER CARTRIDGE MOTOR DRIVE PWB #6
P/J482_D1	46	2A	TONER DISPENS MOTOR DRIVE PWB #1
P/J482_D2	46	2B	TONER DISPENS MOTOR DRIVE PWB Y
P/J482_D3	46	2C	TONER DISPENS MOTOR DRIVE PWB M
P/J482_D4	46	2D	TONER DISPENS MOTOR DRIVE PWB C
P/J482_D5	46	2E	TONER DISPENS MOTOR DRIVE PWB K
P/J482_D6	46	2F	TONER DISPENS MOTOR DRIVE PWB #6
P/J483	62	9	EXIT V-TRA MOTOR
P/J484_1	62	7	EXIT V-TRA FAN 1
P/J484_2	62	6	EXIT V-TRA FAN 2
P/J485	73	17	E/R MOTOR
P/J486	73	16	E/R MOTOR
P/J487	82	6	LVPS FAN 1
P/J488	82	9	LVPS FAN 2
P/J489	82	10	LVPS FAN 3
P/J490	29	4	ROS MOTOR Y/M/C/K
P/J490	30	4	ROS MOTOR 1/6 (OP)
P/J4901	38	12	DRUM MOTOR 1
P/J4902	38	9	DRUM MOTOR_Y
P/J4903	37	12	DRUM MOTOR 3
P/J4904	37	8	DRUM MOTOR 4
P/J4905	36	13	DRUM MOTOR 5
P/J4906	36	8	DRUM MOTOR 6
P/J492	82	4	VIDEO BOX FAN
P/J491	84	20	LV FAN 4
P/J509	75	4	LVPS DP2R
P/J501_U	89	3	LVPS H1U
P/J503_U	89	18	LVPS H1U
P/J504_U	89	17	LVPS H1U

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J506_U	89	15	LVPS H1U
P/J507_U	89	2	LVPS H1U
P/J508_U	89	4	LVPS H1U
P/J509_U	89	16	LVPS H1U
P/J5711	42	7	PCC HVPS_1 (08Z9)
P/J5712	42	4	PCC HVPS_Y (08Z9)
P/J5713	41	23	PCC HVPS_M (08Z9)
P/J5714	41	21	PCC HVPS_C (08Z9)
P/J5715	41	12	PCC HVPS_K (08Z9)
P/J5716	41	11	PCC HVPS_6 (08Z9)
P/J5721	42	10	DEVE BIAS HVPS_1 (08Z5)
P/J5722	42	1	DEVE BIAS HVPS_Y (CH51)
P/J5723	41	1	DEVE BIAS HVPS_M (CH51)
P/J5724	41	3	DEVE BIAS HVPS_C (CH51)
P/J5725	41	5	DEVE BIAS HVPS_K (CH51)
P/J5726	41	7	DEVE BIAS HVPS_6 (08Z5)
P/J5731	17	9	1st BTR HVPS_1 (08Z13)
P/J5732	17	14	1st BTR HVPS_Y (08Z13)
P/J5733	16	7	1st BTR HVPS_M (08Z13)
P/J5734	16	8	1st BTR HVPS_C (08Z13)
P/J5735	16	9	1st BTR HVPS_K (08Z13)
P/J5736	16	13	1st BTR HVPS_6 (08Z13)
P/J574	19	3	2nd BTB HVPS (08Z12)
P574	99	1	CONNECTER (Option)
J574N	99	5	2nd BTB HVPS (08Z12) (Option)
P/J576	8	6	2nd BTB DTR/ESB HVPS (08Z3G)
P/J577	8	8	2nd BTB DTR/ESB HVPS (08Z3G)
P/J578_IR	18	2	R5 HVPS (08Z7)
P/J578_MR	18	1	ReC ROLL HVPS (08Z7)
J578R4	18	3	CONNECTOR (N.C)
P/J586_H1	42	9	CC HVPS_#1 (S6)
P/J586_H2	42	6	CC HVPS_Y (S6)
P/J586_H3	41	19	CC HVPS_M (S6)
P/J586_H4	41	17	CC HVPS_C (S6)
P/J586_H5	41	15	CC HVPS_K (S6)
P/J586_H6	41	13	CC HVPS_#6 (S6)
P594	99	2	CONNECTER (Option)
J594	19	2	CONNECTOR (N.C)
P/J595	19	4	IBT CLN BRUSH HVPS (S11)

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J595_H	48	4	PH2 SENSOR PWB
P/J595_D	51	2	MK_DRIVE 1 SENSOR PWB
P/J595_F	81	26	FSR/INV2 SENSOR PWB
PA595	81	27	FSR/INV1 SENSOR PWB
PA595	48	5	PH1 SENSOR PWB (PB595/PA595)
PA595	51	3	MK_DRIVE 2 SENSOR PWB (PB595/PA595)
PB595	81	28	FSR/INV1 SENSOR PWB (NC)
P595_D2	51	4	D2 SENSOR PWB (N.C)
PB595	81	27	FSR/INV2 SENSOR PWB (PB595/PA595)
PB595	48	28	PH1 SENSOR PWB (N.C)
PB595	48	5	PH2 SENSOR PWB (PB595/PA595)
PB595	51	3	MK_DRIVE 1 SENSOR PWB (PB595/PA595)
P/J596_D1	51	7	MK_DRIVE 1 SENSOR PWB
P/J596_D2	51	5	MK_DRIVE 2 SENSOR PWB
P/J596_F1	81	30	FSR/INV1 SENSOR PWB
P/J596_F2	81	1	FSR/INV2 SENSOR PWB
P/J597_H1	48	10	PH_1 SENSOR PWB
P/J597_H2	48	3	PH_2 SENSOR PWB
P/J5961	42	8	CC HVPS_#1 (S6)
P/J5962	42	5	CC HVPS_Y (S6)
P/J5963	41	20	CC HVPS_M (S6)
P/J5964	41	18	CC HVPS_C (S6)
P/J5965	41	16	CC HVPS_K (S6)
P/J5966	41	14	CC HVPS_#6 (S6)
P/J597_D1	51	1	MK_DRV 1 SENSOR PWB
P/J597_D2	51	6	MK_DRV 2 SENSOR PWB
P/J597_F1	81	29	FSR/INV 1 SENSOR PWB
P/J597_F2	81	2	FSR/INV 2 SENSOR PWB
P/J597_H1	48	1	PH1 SENSOR PWB
P/J597_H2	48	3	PH2 SENSOR PWB
P/J6001	42	11	DEVE BIAS HVPS_#1 (08Z5)
P/J6002	42	2	DEVE BIAS HVPS_Y (CH51)
P/J6003	41	2	DEVE BIAS HVPS_M (CH51)
P/J6004	41	4	DEVE BIAS HVPS_C (CH51)
P/J6005	41	6	DEVE BIAS HVPS_K (CH51)
P/J6006	41	8	DEVE BIAS HVPS_#6 (08Z5)
J601_IR	18	7	RET ROLL #5 HVPS (08Z7)
J601_MR	18	8	ReC ROLL HVPS (08Z7)
P/J6021	42	12	PCC HVPS_1 (08Z9)

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J6022	42	3	PCC HVPS_Y (08Z9)
P/J6023	41	24	PCC HVPS_M (08Z9)
P/J6024	41	22	PCC HVPS_C (08Z9)
P/J6025	41	9	PCC HVPS_K (08Z9)
P/J6026	41	10	PCC HVPS_6 (08Z9)
P/J606	100	1	ATTENTION LIGHT PWB
P/J618_1	84	17	FLY_1 PWB
P/J618_2	79	10	FLY_2 PWB
P/J618_3	84	22	FLY_3 PWB
P/J618_4	84	25	FLY_4 PWB
P/J618_5	84	27	FLY_5 PWB
P/J618_6	84	3	FLY_6 PWB
P/J618_7	84	34	FLY_7 PWB
P/J618_8	84	6	FLY_8 PWB
P/J618_9	79	14	FLY_9 PWB
P/J618_10	84	31	FLY_10 PWB
P/J618_11	84	8	FLY_11 PWB
P/J619_1	84	11	FLY_1 PWB
P/J619_2	79	11	FLY_2 PWB
P/J619_3	84	19	FLY_3 PWB
P/J619_4	84	23	FLY_4 PWB
P/J619_5	84	28	FLY_5 PWB
P/J619_6	84	1	FLY_6 PWB
P/J619_7	84	32	FLY_7 PWB
P/J619_8	84	4	FLY_8 PWB
P/J619_9	79	13	FLY_9 PWB
P/J619_10	84	29	FLY_10 PWB
P/J619_11	84	7	FLY_11 PWB
P/J620_1	84	18	FLY_1 PWB
P/J620_2	79	12	FLY_2 PWB
P/J620_3	84	21	FLY_3 PWB
P/J620_4	84	24	FLY_4 PWB
P/J620_5	84	26	FLY_5 PWB
P/J620_6	84	2	FLY_6 PWB
P/J620_7	84	33	FLY_7 PWB
P/J620_8	84	5	FLY_8 PWB
P/J620_9	79	15	FLY_9 PWB
P/J620_10	84	30	FLY_10 PWB
P/J620_11	84	9	FLY_11 PWB
P/J630	87	8	IOT MAIN PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J631	87	10	IOT MAIN PWB
P/J632	87	12	IOT MAIN PWB
P/J633	87	9	IOT MAIN PWB
P/J634	87	11	IOT MAIN PWB
P/J635	87	7	IOT MAIN PWB
P/J636	87	1	IOT MAIN PWB
P/J640	86	1	SYS PWB
P/J640_D	52	5	MK_DRV CORE PWB
P/J640_F	81	20	FSR/INV CORE PWB
P/J640_H	48	12	PH CORE PWB
P/J640_X	53	5	MK_EPG CORE PWB
P/J641	53	6	MK_EPG CORE PWB / MK_EPG ADC PWB
P/J641	52	6	MK_DRV CORE PWB / MK_DRV ADC PWB
P/J641	48	13	PH CORE PWB / PH ADC PWB
P/J641	81	21	FSR/INV CORE PWB / FSR/INV ADC PWB
P/J642_D	52	4	MK_DRV CORE PWB
P/J642_X	53	4	MK_EPG CORE PWB
P/J642_F	81	19	FSR/INV CORE PWB
P/J642_H	48	11	PH CORE PWB
P/J643	86	2	SYS PWB
P/J643_D	52	3	MK_DRV CORE PWB
P/J643_F	81	18	FSR/INV CORE PWB
P/J643_H	48	10	PH CORE PWB
P/J643_X	53	3	MK_EPG CORE PWB
P/J644	86	3	SYS PWB
P/J644_X	53	2	MK_EPG CORE PWB
P644	48	9	PH CORE PWB (N.C)
P644	52	2	MK_DRV CORE PWB (N.C)
P644	81	17	FSR/INV CORE PWB (N.C)
P/J645_F	81	14	FSR/INV CORE PWB
P/J645_X	53	25	MK_EPG CORE PWB
P645	48	8	PH CORE PWB
P645	52	27	MK_DRV CORE PWB (N.C)
P/J646_X	53	26	MK_EPG CORE PWB
P646	48	6	PH CORE PWB (N.C)
P646	52	28	MK_DRV CORE PWB (N.C)
P646	81	15	FSR/INV CORE PWB (N.C)
P/J647	86	4	SYS PWB
P647	48	7	PH CORE PWB (N.C)
P647	52	1	MK_DRV CORE PWB (N.C)

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P647	53	1	MK_EPG CORE PWB (N.C)
P647	81	16	FSR/INV CORE PWB (N.C)
P/J648_D	52	26	MK_DRV CORE PWB
P/J648_F	81	13	FSR/INV CORE PWB
P/J648_H	48	27	PH CORE PWB
P/J648_X	53	24	MK_EPG CORE PWB
P/J649	86	5	SYS PWB
P/J649_D	52	24	MK_DRV CORE PWB
P/J649_F	81	11	FSR/INV CORE PWB
P/J649_H	48	26	PH CORE PWB
P/J649_X	53	22	MK_EPG CORE PWB
P649	52	24	MK_DRV CORE PWB (N.C)
P/J650_D	52	15	MK_DRV CORE PWB
P/J650_F	81	23	FSR/INV CORE PWB
P/J650_H	48	17	PH CORE PWB
P/J650_X	53	13	MK_EPG CORE PWB
P/J651_D	52	16	MK_DRV CORE PWB
P/J651_F	81	3	FSR/INV CORE PWB
P/J651_H	48	18	PH CORE PWB
P/J651_X	53	14	MK_EPG CORE PWB
P/J652_D	52	23	MK_DRV CORE PWB
P/J652_F	81	10	FSR/INV CORE PWB
P/J652_H	48	25	PH CORE PWB
P/J652_X	53	21	MK_EPG CORE PWB
P/J653_F	81	9	FSR/INV CORE PWB
P/J653_H	48	24	PH CORE PWB
P/J653_X	53	20	MK_EPG CORE PWB
P653	52	22	MK_DRV CORE PWB (N.C)
P/J654_H	48	23	PH CORE PWB
P654	52	21	MK_DRV CORE PWB (N.C)
P654	53	19	MK_EPG CORE PWB (N.C)
P654	81	8	FSR/INV CORE PWB (N.C)
P/J655_D	52	17	MK_DRV CORE PWB
P655	53	15	MK_EPG CORE PWB (N.C)
P655	48	19	PH CORE PWB (N.C)
P655	53	15	MK_EPG CORE PWB (N.C)
P655	81	4	FSR/INV CORE PWB (N.C)
P/J656_F	81	6	FSR/INV CORE PWB
P/J656_H	48	21	PH CORE PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P656	52	19	MK_DRV CORE PWB (N.C)
P656	53	17	MK_EPG CORE PWB (N.C)
P657	48	22	PH CORE PWB (N.C)
P657	52	20	MK_DRV CORE PWB (N.C)
P656	53	17	MK_EPG CORE PWB (N.C)
P657	81	7	FSR/INV CORE PWB (N.C)
P/J660_D	54	23A	MK_DRV MD PWB
P/J660_F1	80	23A	FSR/INV_1 MD PWB
P/J660_F2	80	23B	FSR/INV_2 MD PWB
P657	48	22	PH CORE PWB (N.C)
P/J660_H1	49	23A	PH_1 MD PWB
P/J660_H2	49	23B	PH_2 MD PWB
P/J660_X1	54	23C	MK_EPG 1 MD PWB
P/J660_X2	54	23B	MK_EPG 2 MD PWB
P/J661_D	54	25A	MK_DRV MD PWB
P/J661_F1	80	24A	FSR/INV_1 MD PWB
P/J661_F2	80	24B	FSR/INV_2 MD PWB
P/J661_H1	49	24A	PH_1 MD PWB
P/J661_H2	49	24B	PH_2 MD PWB
P/J661_X1	54	25C	MK_EPG 1 MD PWB
P/J661_X2	54	25B	MK_EPG 2 MD PWB
P/J663_X1	54	26C	MK_EPG 1 MD PWB
P663	54	26B	MK_EPG 2 MD PWB(N.C)
P663	54	26A	MK_DRV MD PWB (N.C)
P663	49	25A	PH_1 MD PWB (N.C)
P663	49	25B	PH_2 MD PWB (N.C)
P663	80	26A	FSR/INV_1 MD PWB (N.C)
P663	80	26B	FSR/INV_2 MD PWB (N.C)
P/J665_D	54	27A	MK_DRV MD PWB
P/J665_F1	80	25A	FSR/INV_1 MD PWB
P/J665_F2	80	25B	FSR/INV_2 MD PWB
P/J665_H1	49	26A	PH_1 MD PWB
P/J665_H2	49	26B	PH_2 MD PWB
P/J665_X2	54	27B	MK_EPG 2 MD PWB
P665	54	27C	MK_EPG 1 MD PWB (N.C)
P/J666_D	54	28A	MK_DRV MD PWB
P/J666_F1	80	27A	FSR/INV_1 MD PWB
P/J666_F2	80	27B	FSR/INV_2 MD PWB
P/J666_H1	49	27A	PH_1 MD PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J666_H2	49	27B	PH_2 MD PWB
P666	54	28C	MK_EPG 1 MD PWB (N.C)
P666	54	28B	MK_EPG_2 MD PWB (N.C)
P/J667_D	54	1A	MK_DRV MD PWB
P/J667_F1	80	28A	FSR/INV_1 MD PWB
P/J667_H1	49	28A	PH_1 MD PWB
P/J667_H2	49	28B	PH_2 MD PWB
P/J667_X1	54	1C	MK_EPG 1 MD PWB
P667	54	1B	MK_EPG_2 MD PWB (N.C)
P667	80	28B	FSR/INV_2 MD PWB (N.C)
P/J668_D	54	2A	MK_DRV MD PWB
P668	80	1A	FSR/INV_1 MD PWB
P/J668_F2	80	1B	FSR/INV_2 MD PWB
P/J668_H1	49	1A	PH_1 MD PWB
P/J668_H2	49	1B	PH_2 MD PWB
P/J668_X1	54	2C	MK_EPG 1 MD PWB
P/J668_X2	54	2B	MK_EPG-2 MD PWB
P/J669_D	54	3A	MK-DRV MD PWB
P/J669_F1	80	2A	FSR/INV_1 MD PWB
P/J669_F2	80	2B	FSR/INV_2 MD PWB
P/J669_H1	49	2A	PH_1 MD PWB
P/J669_H2	49	2B	PH_2 MD PWB
P/J669_X1	54	3C	MK_EPG 1 MD PWB
P/J669_X2	54	3B	MK_EPG 2 MD PWB
P/J670_D	54	4A	MK_DRV MD PWB
P/J670_F1	80	3A	FSR/INV_1 MD PWB
P/J670_F2	80	3B	FSR/INV_2 MD PWB
P/J670_H1	49	3A	PH_1 MD PWB
P/J670_H2	49	3B	PH_2 MD PWB
P/J670_X1	54	4C	MK_EPG 1 MD PWB
P/J670_X2	54	4B	MK_EPG_2 MD PWB
P/J671_F1	80	6A	FSR/INV_1 MD PWB
P/J671_F2	80	6B	FSR/INV_2 MD PWB
P/J671_H1	49	6A	PH_1 MD PWB
P/J671_H2	49	6B	PH_2 MD PWB
P/J671_D	54	7A	MK_DRV MD PWB
P671	54	7B	MK_EPG 2 MD PWB (N.C)
P671	54	7C	MK_EPG 2 MD PWB (N.C)
P/J672_H1	49	4A	PH_1 MD PWB
P/J672_H2	49	4B	PH_2 MD PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P672	54	5A	MK_DRV MD PWB (N.C)
P672	54	5B	MK_EPG 2 MD PWB (N.C)
P672	54	5C	MK_EPG 1 MD PWB (N.C)
P672	80	4A	FSR/INV_1 MD PWB (N.C)
P672	80	4B	FSR/INV_2 MD PWB (N.C)
P/J673_F1	80	5A	FSR/INV_1 MD PWB
P/J673_F2	80	5B	FSR/INV_2 MD PWB
P673	49	5A	PH_1 MD PWB (N.C)
P673	49	5B	PH_2 MD PWB (N.C)
P673	54	6A	MK_DRV MD PWB (N.C)
P673	54	6B	MK_EPG 2 MD PWB (N.C)
P673	54	6C	MK_EPG 1 MD PWB (N.C)
P/J674_D	54	13A	MK_DRV MD PWB
P/J674_F1	80	12A	FSR/INV_1 MD PWB
P/J674_F2	80	12B	FSR/INV_2 MD PWB
P/J674_H1	49	12A	PH_1 MD PWB
P/J674_H2	49	12B	PH_2 MD PWB
P674	54	13B	MK_EPG 2 MD PWB (N.C)
P674	54	13C	MK_EPG 1 MD PWB (N.C)
P/J675_D	54	9A	MK_DRV MD PWB
P/J675_F1	80	8A	FSR/INV_1 MD PWB
P/J675_F2	80	8B	FSR/INV_2 MD PWB
P/J675_H1	49	8A	PH_1 MD PWB
P/J675_H2	49	8B	PH_2 MD PWB
P/J675_X2	54	9B	MK_EPG 2 MD PWB
P/J676_D	54	10A	MK_DRV MD PWB
P/J676_F1	80	9A	FSR/INV_1 MD PWB
P/J676_F2	80	9B	FSR/INV_2 MD PWB
P/J676_H1	49	10A	PH_1 MD PWB
P/J676_H2	49	10B	PH_2 MD PWB
P/J676_X2	54	10B	MK_EPG 2 MD PWB
P676	54	10C	MK_EPG 1 MD PWB (N.C)
P/J678_D	54	11A	MK_DRV MD PWB
P/J678_F1	80	10A	FSR/INV_1 MD PWB
P/J678_H1	49	9A	PH_1 MD PWB
P/J678_H2	49	9B	PH_2 MD PWB
P/J678_X1	54	11C	MK_EPG 1 MD PWB
P/J678_X2	54	11B	MK_EPG 2 MD PWB
P/J678_F2	80	10B	FSR/INV_2 MD PWB
P/J679_D	54	12A	MK_DRV MD PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J679_F1	80	11A	FSR/INV_1 MD PWB
P/J679_H1	49	11A	PH_1 MD PWB
P/J679_H2	49	11B	PH_2 MD PWB
P/J679_X1	54	12C	MK_EPG 1 MD PWB
P679	54	12B	MK_EPG 2 MD PWB (N.C)
P679	80	11B	FSR/INV_2 MD PWB (N.C)
P/J680	96	6	CONNECTOR
P/J680_D	54	14A	MK_DRV MD PWB
P/J680_F2	80	13B	FSR/INV_2 MD PWB
P/J680_H1	49	13A	PH_1 MD PWB
P/J680_X1	54	14C	MK_EPG 1 MD PWB
P/J680_X2	54	14B	MK_EPG 2 MD PWB
P680	49	13B	PH_2 MD PWB(N.C)
P680	80	13A	FSR/INV_1 MD PWB (N.C)
P/J681_D	54	8A	MK_DRV MD PWB
P/J681_F1	80	7A	FSR/INV_1 MD PWB
P681	80	7B	FSR/INV_2 MD PWB
P/J681_H1	49	7A	PH_1 MD PWB
P/J681_H2	49	7B	PH_2 MD PWB
P681	54	8B	MK_EPG 2 MD PWB (N.C)
P681	54	8C	MK_EPG 1 MD PWB (N.C)
P/J682_D	54	16A	MK_DRV MD PWB
P/J682_F1	80	16A	FSR/INV_1 MD PWB
P/J682_F2	80	16B	FSR/INV_2 MD PWB
P/J682_H1	49	16A	PH_1 MD PWB
P/J682_H2	49	16B	PH_2 MD PWB
P/J682_X1	54	16C	MK_EPG 1 MD PWB
P/J682_X2	54	16B	MK_EPG 2 MD PWB
P/J683_D	54	17A	MK_DRV MD PWB
P/J683_F1	80	15A	FSR/INV_1 MD PWB
P/J683_F2	80	15B	FSR/INV_2 MD PWB
P/J683_H1	49	15A	PH_1 MD PWB
P/J683_H2	49	15B	PH_2 MD PWB
P/J683_X1	54	17C	MK_EPG 1 MD PWB
P/J683_X2	54	17B	MK_EPG 2 MD PWB
P/J684_D	54	18A	MK_DRV MD PWB
P/J684_F1	80	17A	FSR/INV_1 MD PWB
P/J684_F2	80	17B	FSR/INV_2 MD PWB
P/J684_H1	49	17A	PH_1 MD PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J684_H2	49	17B	PH_2 MD PWB
P/J684_X1	54	18C	MK_EPG 1 MD PWB
P/J684_X2	54	18B	MK_EPG 2 MD PWB
P/J685_F1	80	18A	FSR/INV_1 MD PWB
P/J685_H1	49	18A	PH_1 MD PWB
P/J685_H2	49	18B	PH_2 MD PWB
P685	54	19C	MK_EPG 1 MD PWB (N.C)
P685	54	19B	MK_EPG 2 MD PWB (N.C)
P685	54	19A	MK_DRV MD PWB (N.C)
P685	80	18B	FSR/INV_2 MD PWB (N.C)
P/J686_H1	49	21A	PH_1 MD PWB
P/J686_H2	49	21B	PH_2 MD PWB
P/J686_X1	54	22C	MK_EPG 1 MD PWB
P/J686_X2	54	22B	MK_EPG 2 MD PWB
P686	54	22A	MK_DRV MD PWB (N.C)
P686	80	21A	FSR/INV_1 MD PWB (N.C)
P686	80	21B	FSR/INV_2 MD PWB (N.C)
P/J687_F1	80	14A	FSR/INV_1 MD PWB
P/J687_F2	80	14B	FSR/INV_2 MD PWB
P687	49	14A	PH_1 MD PWB
P/J687_H2	49	14B	PH_2 MD PWB
P687	54	15A	MK_DRV MD PWB (N.C)
P687	54	15B	MK_EPG 2 MD PWB (N.C)
P687	54	15C	MK_EPG 1 MD PWB (N.C)
P/J688_F1	80	20A	FSR/INV_1 MD PWB
P/J688_F2	80	20B	FSR/INV_2 MD PWB
P688	49	20A	PH_1 MD PWB (N.C)
P688	54	21A	MK_DRV MD PWB(N.C)
P/J688_H2	49	20B	PH_2 MD PWB
P/J688_X1	54	21C	MK_EPG 1 MD PWB
P/J688_X2	54	21B	MK_EPG 2 MD PWB
P/J689_D	54	20A	MK_DRIVE MD PWB
P/J689_F1	80	19A	FSR/INV_1 MD PWB
P/J689_F2	80	19B	FSR/INV_2 MD PWB
P/J689_H1	49	19A	PH_1 MD PWB
P/J689_H2	49	19B	PH_2 MD PWB
P/J689_X1	54	20C	MK_EPG 1 MD PWB
P/J689_X2	54	20B	MK_EPG 2 MD PWB
P/J690_F1	80	22A	FSR/INV_1 MD PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J690_F2	80	22B	FSR/INV_2 MD PWB
P/J690_H1	49	22A	PH_1 MD PWB
P690	54	24A	MK_DRV MD PWB (N.C)
P690	49	22B	PH_2 MD PWB (N.C)
P/J690_X1	54	24C	MK_EPG 1 MD PWB
P/J690_X2	54	24B	MK_EPG 2 MD PWB
P/J700	96	10	ILS CCD PWB
P/J7021	30	2B	ROS ASSEMBLY 1 (OP)
P/J7022	29	2A	ROS ASSEMBLY Y
P/J7023	29	2B	ROS ASSEMBLY M
P/J7024	29	2C	ROS ASSEMBLY C
P/J7025	29	2D	ROS ASSEMBLY K
P/J7026	30	2A	ROS ASSEMBLY 6 (OP)
P/J720	52	9	MK DRV ADC PWB
P721	52	8	MK DRV ADC PWB
P/J722	52	7	MK DRV ADC PWB
P/J723	52	14	MK DRV ADC PWB
P/J724	52	13	MK DRV ADC PWB
P/J725	52	12	MK DRV ADC PWB
P/J726	52	11	MK DRV ADC PWB
P727	52	10	MK DRV ADC PWB (N.C)
P/J730_D	53	9	CRUM PWB (DRUM)
P/J730_T	34	7	CRUM PWB (TONER)
P/J731_D	53	10	CRUM PWB (DRUM)
P/J731_T	34	8	CRUM PWB (TONER)
P/J732	53	7	MK EPG ADC PWB
P/J732_D	53	11	CRUM PWB (DRUM)
P/J732_T	34	9	CRUM PWB (TONER)
P/J733_D	53	12	CRUM PWB (DRUM)
P/J733_T	34	6	CRUM PWB (TONER)
P/J735_D1	38	16	DRUM SUB CRUM #1
P/J735_D2	38	3	DRUM SUB CRUM Y
P/J735_D3	38	7	DRUM SUB CRUM M
P/J735_D4	37	11	DRUM SUB CRUM C
P/J735_D5	37	6	DRUM SUB CRUM K
P/J735_D6	36	12	DRUM SUB CRUM #6
P/J735_T1	46	1A	TONER CARTRIDGE SUB CRUM PWB #1
P/J735_T2	46	1B	TONER CARTRIDGE SUB CRUM PWB Y
P/J735_T3	46	1C	TONER CARTRIDGE SUB CRUM PWB M
P/J735_T4	46	1D	TONER CARTRIDGE SUB CRUM PWB C

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J735_T5	46	1E	TONER CARTRIDGE SUB CRUM PWB K
P/J735_T6	46	1F	TONER CARTRIDGE SUB CRUM PWB #6
P/J736_D1	38	17	DRUM SUB CRUM Y
P/J736_D2	38	2	DRUM SUB CRUM #1
P/J736_D3	38	6	DRUM SUB CRUM M
P/J736_D4	37	2	DRUM SUB CRUM C
P/J736_D5	37	5	DRUM SUB CRUM K
P/J736_D6	36	2	DRUM SUB CRUM #6
P/J736_T1	46	8A	TONER CARTRIDGE SUB CRUM PWB #1
P/J736_T2	46	8B	TONER CARTRIDGE SUB CRUM PWB Y
P/J736_T3	46	8C	TONER CARTRIDGE SUB CRUM PWB M
P/J736_T4	46	8D	TONER CARTRIDGE SUB CRUM PWB C
P/J736_T5	46	8E	TONER CARTRIDGE SUB CRUM PWB K
P/J736_T6	46	8F	TONER CARTRIDGE SUB CRUM PWB #6
P/J737	53	8	MK EPG ADC PWB
P/J738	57	7	CONNECTOR (Tray 1) (Tray 2)
P/J740	81	25	FSR ADC PWB
P/J741	81	22	FSR ADC PWB
P/J742	81	24	FSR ADC PWB
P/J750	48	14	PH ADC PWB
P/J751	48	15	PH ADC PWB
P/J760	57	5	TRAY 1/2 LED PWB (Tray 1) (Tray 2)
PA/JA764 (#6)	88	1A	HALFTONE PWB #1/#6
PB/JB764(#1)	88	2A	HALFTONE PWB #1/#6
PA/JA764 (Y)	88	1B	HALFTONE PWB YM
PB/JB764(M)	88	2B	HALFTONE PWB YM
PA/JA764 (C)	88	1C	HALFTONE PWB CK
PB/JB764(K)	88	2C	HALFTONE PWB CK
P768 (#1,#6)	88	4A	HALFTONE PWB #1/#6
J7683	87	2	IOT MAIN PWB
P768 (Y,M)	88	4B	HALFTONE PWB YM
J7681	87	4	IOT MAIN PWB
P768 (C,K)	88	4C	HALFTONE PWB CK
J7682	87	5	IOT MAIN PWB
P/J770	83	27	CONNECTOR
P/J771	2	4	CONNECTOR
P/J772	2	5	CONNECTOR
P/J773	11	6	CONNECTOR
P/J774	11	5	CONNECTOR
P/J775	11	4	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J776	13	3	CONNECTOR
P/J776M	43	8	CONNECTOR
P/J777	15	3	CONNECTOR
P/J777M	43	16	CONNECTOR
P/J778	14	8	CONNECTOR
P/J779	14	9	CONNECTOR
P/J7792	14	7	CONNECTOR
P/J780	1	9	CONNECTOR
P/J781	1	10	CONNECTOR
P/J782	12	3	CONNECTOR
P/J783	12	4	CONNECTOR
P/J784	6	4	CONNECTOR
P/J785	5	3	CONNECTOR
P/J786	7	4	CONNECTOR
P/J787	7	3	CONNECTOR
P/J788	7	6	CONNECTOR
P/J789	7	5	CONNECTOR
P/J790	7	16	CONNECTOR
P790A	7	2	CONNECTOR
J790F	7	2	CONNECTOR
P/J792	7	1	CONNECTOR
P/J793	8	3	CONNECTOR
P/J794	8	2	CONNECTOR
DP795	43	2	CONNECTOR (P795A/P795B)
DJ795	7	7	CONNECTOR (J795A/J795B)
DP796	43	1	CONNECTOR (P796A/P796B)
DJ796	7	8	CONNECTOR (J796A/J796B)
DP797	43	3	CONNECTOR (P797A/P797B/P797C/P797D)
DJ797	7	9	CONNECTOR (J797A/J797B/J797C/J797D)
DP798	43	4	CONNECTOR (P798A/P798B)
DJ798	7	10	CONNECTOR (J798A/J798B)
DP799	43	5	CONNECTOR (P799A/P799B/P799C/P799D)
DJ799	7	11	CONNECTOR (J799A/J799B/J799C/J799D)
P/J800_1	9	5	CONNECTOR
P/J800_2	9	7	CONNECTOR
P/J800_3	10	1	CONNECTOR
J801	94	4	CONNECTOR (801A/B)(OCT)
P/J803	94	5	OCT OFFSET MOTOR (OCT)
DP803L	18	4	CONNECTOR (P803LA/P803LB)

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
DJ803L	39	16	CONNECTOR (J803LA/J803LB)
DP803R	19	14	CONNECTOR (P803RA/J803RB)
DJ803R	39	6	CONNECTOR (J803RA/J803RB)
P/J804	94	1	CONNECTOR (OCT)
DP804L	18	6	CONNECTOR (P804LA/P804LB)
DJ804L	39	18	CONNECTOR (J804LA/J804LB)
DP804R	19	16	CONNECTOR (P804RA/P804RB)
DJ804R	39	8	CONNECTOR (J804RA/J804RB)
P/J805	94	6	REAR POSITION SENSOR (OCT)
DP805L	18	5	CONNECTOR (P805LA/N,C)
DJ805L	39	17	CONNECTOR (J805LA/N.C)
DP805R	19	15	CONNECTOR (P805RA/P805RB)
DJ805R	39	7	CONNECTOR (J805RA/J805RB)
P/J806	19	13	CONNECTOR
P/J806P	19	17	CONNECTOR
P/J806	94	3	FRONT POSITION SENSOR (OCT)
P/J807	94	2	OCT FULL STACK SENSOR (OCT)
P/J807S	19	12	CONNECTOR
P/J808	16	4	CONNECTOR
P/J808R	19	5	CONNECTOR
P/J809	16	12	CONNECTOR
P/J810L	39	11	CONNECTOR
P/J810R	39	1	CONNECTOR
P/J811L	39	14	CONNECTOR
P/J811R	39	4	CONNECTOR
P/J812L	39	13	CONNECTOR
P/J812R	39	3	CONNECTOR
P/J813L	39	12	CONNECTOR
P/J813R	39	2	CONNECTOR
P/J814L	39	15	CONNECTOR
P/J814R	39	5	CONNECTOR
P/J815L	39	19	CONNECTOR
P/J815R	39	9	CONNECTOR
P/J816	66	8	CONNECTOR
P/J817	66	6	CONNECTOR
P/J817M	72	10	CONNECTOR
P/J818	67	8	CONNECTOR
P/J819	67	9	CONNECTOR
P/J820	67	7	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J821	67	6	CONNECTOR
P/J822	70	13	CONNECTOR
P/J823	70	10	CONNECTOR
P/J824	70	9	CONNECTOR
P/J825	70	17	CONNECTOR
P/J826	70	4	CONNECTOR
P/J827	68	3	CONNECTOR
P/J828	68	4	CONNECTOR
P/J829	68	5	OUT ENV SENSOR
P/J830	59	11	CONNECTOR
P/J831	59	12	CONNECTOR
P/J832_1	71	17	CONNECTOR
P/J832_2	71	14	CONNECTOR
P/J834	71	19	CONNECTOR
P/J835	65	4	CONNECTOR
P/J835R	65	6	CONNECTOR
P/J836	65	3	CONNECTOR
P/J836M	65	5	CONNECTOR
P/J837	72	5	CONNECTOR
P/J838	72	4	CONNECTOR
P/J839	69	11	CONNECTOR
P/J839R	69	8	CONNECTOR
P/J840	69	10	CONNECTOR
P/J840M	69	9	CONNECTOR
J842	70	15	CONNECTOR (N.C)
J843	70	14	CONNECTOR (N.C)
DP844	65	12	CONNECTOR (P844A/P844B)
DJ844	72	6	CONNECTOR (J844A/J844B)
DP845	65	11	CONNECTOR (P845A/P845B)
DJ845	72	7	CONNECTOR (J845A/J845B)
DP846	65	10	CONNECTOR (P846A/P846B)
DJ846	72	8	CONNECTOR (J846A/J846B)
DP/DJ8471M	33	2	CONNECTOR
DP/DJ8471S	33	1	CONNECTOR
DJ8472S	33	3	CONNECTOR (P847S/J8472S)
DP/DJ8473M	32	2	CONNECTOR
DP/DJ8473S	32	1	CONNECTOR
DP/DJ8474M	32	5	CONNECTOR
DP/DJ8474S	32	4	CONNECTOR
DP/DJ8475M	32	8	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
DP/DJ8475S	32	7	CONNECTOR
DP/DJ8476M	32	10	CONNECTOR
DP/DJ8476S	32	9	CONNECTOR
DP847M	33	4	CONNECTOR (P847M/J8472M)
DJ8472M	33	4	CONNECTOR (P847M/J8472M)
DP847S	33	3	CONNECTOR (P847S/J8472S)
DP/DJ8481	27	9	CONNECTOR
DP/DJ848	25	9	CONNECTOR
DP/DJ8483	25	9	CONNECTOR
DP/DJ8484	25	9	CONNECTOR
DP/DJ8485	25	9	CONNECTOR
DP/DJ8486	27	9	CONNECTOR
P/J8491	38	15	CONNECTOR
P/J849	38	10	CONNECTOR
P/J8493	37	13	CONNECTOR
P/J8494	37	9	CONNECTOR
P/J8495	36	14	CONNECTOR
P/J8496	36	10	CONNECTOR
P/J8501	38	14	CONNECTOR
P/J8502	38	5	CONNECTOR
P/J8503	37	14	CONNECTOR
P/J8504	37	4	CONNECTOR
P/J8505	36	15	CONNECTOR
P/J8506	36	6	CONNECTOR
P/J851_1	74	13	CONNECTOR
P/J851_2	74	11	CONNECTOR
P853	73	7	CONNECTOR (P853/J853)
J853	43	19	CONNECTOR (P853/J853)
P/J853M	39	22	CONNECTOR
DP/DJ8541	27	6	CONNECTOR
DP/DJ8543	25	6	CONNECTOR
DP/DJ8544	25	6	CONNECTOR
DP/DJ8545	25	6	CONNECTOR
DP/DJ8546	27	6	CONNECTOR
P/J8551	33	8	CONNECTOR
J8552	33	6	CONNECTOR (P855/ J8552)
P/J8553	32	19	CONNECTOR
P/J8554	32	17	CONNECTOR
P/J8555	32	15	CONNECTOR
P/J8556	32	13	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
DP/DJ854	25	6	CONNECTOR
P855	33	6	CONNECTOR (P855/ J8552)
P/J857	34	12	CONNECTOR
P/J858	72	3	CONNECTOR
P/J859	74	15	FUSING LOWER FAN
P/J860	91	8	CONNECTOR
J861	91	7	CONNECTOR (P861/ J861)
P861	44	7	CONNECTOR (P861/ J861)
P/J862	83	25	CONNECTOR
P/J863	83	24	CONNECTOR
P/J864	83	22	CONNECTOR
P/J865	83	26	CONNECTOR
P/J866	83	23	CONNECTOR
P/J867	82	23	CONNECTOR
P/J868	82	22	CONNECTOR
P/J869	31	16	CONNECTOR
P/J870	31	6	CONNECTOR
P/J871	31	14	CONNECTOR
P/J872	31	15	CONNECTOR
P/J873	31	7	CONNECTOR
P/J874	31	8	CONNECTOR
P/J875	31	13	CONNECTOR
P/J877	31	10	CONNECTOR
P/J878	31	9	CONNECTOR
P/J879	100	2	CONNECTOR
P/J880	31	11	CONNECTOR
P/J881	31	12	CONNECTOR
DP883	61	12	CONNECTOR (P883A/P883B)
DJ883	74	4	CONNECTOR (J883A/J883B)
DP884	61	13	CONNECTOR (P884A/P884B)
DJ884	74	2	CONNECTOR (J884A/J884B)
DP885	61	14	CONNECTOR (P885A/P885B)
DJ885	74	1	CONNECTOR (J885A/J885B)
DP886	61	4	CONNECTOR (P886A/P886B)
DJ886	73	5	CONNECTOR (J886A/J886B)
DP887	61	5	CONNECTOR (P887A/P887B)
DJ887	73	4	CONNECTOR (J887A/J887B)
DP888	61	6	CONNECTOR (P888A/P888B)
DJ888	73	3	CONNECTOR (J888A/J888B)

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J889	73	13	CONNECTOR
P/J890	74	5	CONNECTOR
P/J891	73	15	CONNECTOR
P/J892	73	10	CONNECTOR
P/J893	73	9	CONNECTOR
P/J894	61	18	MAIN FUSING LAMP(E/ROLL)
P/J895	60	6	MAIN FUSING LAMP(E/ROLL)
P/J896	61	19	SUB FUSING LAMP(E/ROLL)
P/J897	60	7	SUB FUSING LAMP(E/ROLL)
P/J898	61	17	CONNECTOR
P/J899	60	15	SUB FUSING LAMP(I/ROLL)
P/J900	61	3	SUB FUSING LAMP(I/ROLL)
P/J901	60	13	MAIN FUSING LAMP(I/ROLL)
P/J902	61	2	MAIN FUSING LAMP(I/ROLL)
P/J903	60	14	CONNECTOR
P/J904	60	12	H/R MAIN LAMP 1
P/J905	61	7	H/R MAIN LAMP 1
P/J906	60	16	CONNECTOR
P/J907	61	20	CONNECTOR
P/J908	60	5	CONNECTOR
P/J909	63	12	CONNECTOR
P/J909M	63	11	CONNECTOR
P/J910	62	1	CONNECTOR
P/J910S	62	4	CONNECTOR
P/J911	61	15	CONNECTOR
P/J912	82	18	CONNECTOR
P/J912H1	89	11	CONNECTOR
P/J912H6	89	12	CONNECTOR
P/J913	82	17	CONNECTOR
P/J914	82	16	CONNECTOR
P/J915	82	5	CONNECTOR
P/J916	82	12	CONNECTOR
P/J917	82	15	CONNECTOR
P/J918	82	11	CONNECTOR
P/J919	82	13	CONNECTOR
P/J920	76	11	CONNECTOR
J921	45	14	CONNECTOR (P921/J921)
P921	74	19	CONNECTOR (P921/J921)
P/J922	82	8	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J923	82	7	CONNECTOR
P/J925	36	5	CONNECTOR
P/J926	40	12	CONNECTOR
P/J927	36	4	CONNECTOR
P/J928	47	4	CONNECTOR
P/J929	34	5	CONNECTOR
P/J930	32	6	CONNECTOR (L Side)
P/J931	32	3	CONNECTOR (R Side)
P/J932	76	26	CONNECTOR
P/J933	76	27	CONNECTOR
P937	75	3	CONNECTOR (N.C)
P938	73	6	CONNECTOR (P938/J938)
J938	43	20	CONNECTOR (P938/J938)
P/J945	32	11	CONNECTOR
P/J946	78	1	CONNECTOR
P/J949	47	2	CONNECTOR
P/J951	20	13	CONNECTOR
P/J953L	44	4	CONNECTOR (Tray 1)
P/J953R	45	4	CONNECTOR (Tray 2)
P/J954L	44	3	CONNECTOR (Tray 1)
P/J954R	45	3	CONNECTOR (Tray 2)
P/J955L	44	2	CONNECTOR (Tray 1)
P/J955R	45	2	CONNECTOR (Tray 2)
P/J956L	44	1	CONNECTOR (Tray 1)
P/J956R	45	1	CONNECTOR (Tray 2)
P/J957L	44	10	CONNECTOR (Tray 1)
P/J957R	45	10	CONNECTOR (Tray 2)
P/J959	78	22	CONNECTOR
P/J961	78	16	CONNECTOR
P/J961M	78	15	CONNECTOR
P/J962	78	14	CONNECTOR
P/J963L	55	4	CONNECTOR (Tray 1)
P/J963R	55	4	CONNECTOR (Tray 2)
P/J964L	78	23	CONNECTOR
P/J964R	78	18	CONNECTOR
P/J965	78	19	CONNECTOR
P/J9652	78	17	CONNECTOR
P/J966	78	20	CONNECTOR
P/J967	78	21	CONNECTOR
P/J968	43	9	CONNECTOR

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J969	74	3	CONNECTOR
DJ970	40	10	CONNECTOR (J970)
P/J970R	40	11	CONNECTOR
P/J971	44	9	CONNECTOR
P/J972	45	9	CONNECTOR (Tray 2)
P/J973	71	6	CONNECTOR
P/J974	78	5	CONNECTOR
P/J975	78	7	CONNECTOR
P/J976	78	10	CONNECTOR
DJ978	40	9	CONNECTOR (J978)
DJ980	75	6	CONNECTOR (N.C)
P/J981	75	7	CONNECTOR
P/J982	56	8	CONNECTOR (Tray 1) (Tray 2)
P/J984	84	10	CONNECTOR
P/J985	73	14	CONNECTOR
P/J986	73	8	CONNECTOR
P/J987	72	9	CONNECTOR
P/J990	31	3	CONNECTOR
P/J992	82	24	CONNECTOR
P/J993	82	3	CONNECTOR
P/J1000	79	9	DST 2 PWB
P/J1000_3	85	12	DST 3 PWB
P/J1000_4	85	19	DST 4 PWB
P/J1001	79	8	DST 2 PWB
P/J1001_3	85	10	DST 3 PWB
P/J1001_4	85	20	DST 4 PWB
P/J1002	79	7	DST 2 PWB
P/J1002_3	85	9	DST 3 PWB
P/J1003	79	6	DST 2 PWB
P/J1003_3	85	8	DST 3 PWB
P/J1003_4	85	18	DST 4 PWB
P/J1004	79	5	DST 2 PWB
P/J1004_3	85	7	DST 3 PWB
P/J1004_4	85	17	DST 4 PWB
P/J1005	79	4	DST 2 PWB
P/J1005_3	85	6	DST 3 PWB
P/J1005_4	85	16	DST 4 PWB
P/J1006	79	3	DST 2 PWB
P/J1007	79	16	DST 2 PWB
P/J1007_3	85	15	DST 3 PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J1007_4	85	21	DST 4 PWB
P/J1008	79	17	DST 2 PWB
P/J1008_3	85	14	DST 3 PWB
P/J1009	79	18	DST 2 PWB
P/J1009_3	85	13	DST 3 PWB
P/J1009_4	85	22	DST 4 PWB
P/J1010	79	19	DST 2 PWB
P/J1010_3	85	5	DST 3 PWB
P/J1010_4	85	23	DST 4 PWB
P/J1011	79	20	DST 2 PWB
P/J1012	79	21	DST 2 PWB
P/J1012_3	85	2	DST 3 PWB
P/J1013	79	22	DST 2 PWB
P/J1013_3	85	3	DST 3 PWB
P/J1013_4	85	24	DST 4 PWB
P/J1014	79	23	DST 2 PWB
P/J1014_3	85	4	DST 3 PWB
P/J1014_4	85	25	DST 4 PWB
P/J1015	79	1	DST 2 PWB
P/J1016	79	2	DST 2 PWB
P/J1100	83	4	DST 1 PWB
P/J1101	83	3	DST 1 PWB
P/J1102	83	2	DST 1 PWB
P/J1103	83	1	DST 1 PWB
P/J1104	83	21	DST 1 PWB
P/J1105	83	19	DST 1 PWB
P/J1106	83	20	DST 1 PWB
P/J1107	83	6	DST 1 PWB
P/J1108	83	7	DST 1 PWB
P/J1109	83	5	DST 1 PWB
P/J1110	83	8	DST 1 PWB
P/J1111	83	9	DST 1 PWB
P/J1112	83	11	DST 1 PWB
P/J1113	83	10	DST 1 PWB
P/J1114	83	12	DST 1 PWB
P/J1115	83	13	DST 1 PWB
P/J1116	83	14	DST 1 PWB
P/J1117	83	15	DST 1 PWB
P/J1118	83	16	DST 1 PWB

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
P/J1120	83	17	DST 1 PWB
P/J1121	83	18	DST 1 PWB
P/J1200	84	16	LED PWB SUPPLY
P/J1211	84	14	LED PWB SUPPLY
P/J2001	77	1	NOISE FILTER PWB (NF FILTER 1)
P/J2002	77	16	NOISE FILTER PWB (NF FILTER 2)
P/J2003	77	13	NOISE FILTER PWB (NF FILTER 3)
P/J2004	77	17	NOISE FILTER PWB (NF FILTER 1)
P/J2005	77	15	NOISE FILTER PWB (NF FILTER 2)
P/J2006	77	14	NOISE FILTER PWB (NF FILTER 3)
P/J5500	84	15	LED PWB SUPPLY
P/J5511	84	13	LED PWB SUPPLY
AC Inlet	93	2	PC_UI
ATX CONN1	92	1	Mother Board (PC_UI)
ATX CONN2	92	5	Mother Board (PC_UI)
AUDIO1	92	17	Mother Board (PC_UI)
BATTERY2	92	18	Mother Board (PC_UI)
COM2	92	12	Mother Board (PC_UI)
COM2	93	7	Mother Board (PC_UI)
COM3	93	6	Mother Board (PC_UI)
COM4	92	15	Mother Board (PC_UI)
CPU FAN1	92	2	Mother Board (PC_UI)
DP1	93	14	Mother Board (PC_UI)
DVI-D	93	3	Mother Board (PC_UI)
FAN1	92	6	Mother Board (PC_UI)
FS1	64	8	THERMISTOR (EXTERNAL HEAT ROLL)
FS2	64	7	THERMISTOR (EXTERNAL HEAT ROLL)
FS3	64	6	THERMISTOR (EXTERNAL HEAT ROLL)
FS4	64	5	THERMISTOR (EXTERNAL HEAT ROLL)
FS5	64	4	THERMISTOR (INTERNAL HEAT ROLL)
FS6	64	3	THERMISTOR (INTERNAL HEAT ROLL)
FS7	64	2	THERMISTOR (INTERNAL HEAT ROLL)
FS8	64	1	THERMISTOR (INTERNAL HEAT ROLL)
FS9	64	9	THERMISTOR (HEAT ROLL)
FS10	64	10	THERMISTOR (HEAT ROLL)
FS11	64	11	THERMISTOR (HEAT ROLL)
FS12	64	12	THERMISTOR (HEAT ROLL)
FS23	43	13	BGM INTERLOCK SWITCH 1
FS24	43	12	BGM INTERLOCK SWITCH 1

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
FS25	43	11	BGM INTERLOCK SWITCH 2
FS26	43	10	BGM INTERLOCK SWITCH 2
GP101	92	19	Mother Board (PC_UI)
HDMI1	93	15	Mother Board (PC_UI)
IOT	93	5	Mother Board (Connect to IOT)
JP1	92	21	Mother Board (PC_UI)
JP1	93	17	Front Boad (PC_UI)
JP2	92	20	Mother Board (PC_UI)
JR1	93	16	Front Boad (PC_UI)
Key Board	93	11	Mother Boad (PC_UI)
L	77	19	AC POWER TERMINAL (Black2)
LAN	93	4	Mother Board
LFC1	92	11	Mother Board (PC_UI)
LINE IN	93	8	Mother Board (PC_UI)
LINE OUT	93	9	Mother Board (PC_UI)
LINE OUT	93	18	Front Boad (PC_UI)
MIC IN	93	10	Mother Board (PC_UI)
MIC IN	93	19	Front Boad (PC_UI)
Mouse	93	12	Mother Board (PC_UI)
N	77	20	AC POWER TERMINAL (Black1)
PCIE1	92	14	Mother Board (PC_UI)
PCIE2	92	16	Mother Board (PC_UI)
SAT3	92	13	Mother Board (PC_UI)
SATA1	92	8	Mother Board (PC_UI)
SATA2	92	7	Mother Board (PC_UI)
SATA3	92	9	Mother Board (PC_UI)
SATA4	92	10	Mother Board (PC_UI)
Serial	93	1	Mother Board (PC_UI)
SO-DIMM1	92	3	Mother Board (PC_UI)
SO-DIMM2	92	4	Mother Board (PC_UI)
SJ37	62	8	Shorting Jack
SJ38	62	2	Shorting Jack
SJ39	62	3	Shorting Jack
SJ40	7	13	Shorting Jack
SJ41	7	12	Shorting Jack
SJ42	7	14	Shorting Jack
SJ43	7	15	Shorting Jack
SJ44	70	7	Shorting Jack
SJ45G	17	2	Shorting Jack
SJ45V	17	6	Shorting Jack

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
SJ47G	17	5	Shorting Jack
SJ47V	17	3	Shorting Jack
SJ49	69	6	Shorting Jack
SJ50	63	20	Shorting Jack
SJ51	63	21	Shorting Jack
SJ52	63	18	Shorting Jack
SJ53	63	19	Shorting Jack
SJ54	78	2	Shorting Jack
SJ55	78	3	Shorting Jack
SJ57	78	4	Shorting Jack
SJ58	78	8	Shorting Jack
SJ59	73	11	Shorting Jack
SJ62	25	10	Shorting Jack
SJ63	25	7	Shorting Jack
SJ100	84	12	Shorting Jack
SJ101	82	2	Shorting Jack
SJ102	82	25	Shorting Jack
SJ103	82	1	Shorting Jack
SJ104	47	1	Shorting Jack
SJ105	50	2	Shorting Jack
SJ106	50	3	Shorting Jack
SJ107	31	1	Shorting Jack
SJ108	34	1	Shorting Jack
SJ109	40	5	Shorting Jack
SJ110	40	4	Shorting Jack
SJ111	40	6	Shorting Jack
SJ112	40	8	Shorting Jack
SJ113	40	14	Shorting Jack
SJ114	40	15	Shorting Jack
SJ115	40	2	Shorting Jack
SJ116	40	1	Shorting Jack
SJ117	35	5	Shorting Jack
SJ118	35	6	Shorting Jack
SJ119	31	5	Shorting Jack
SJ120	34	2	Shorting Jack
SJ121	34	3	Shorting Jack
SJ122	34	4	Shorting Jack
SJ123	78	6	Shorting Jack
SJ124	47	3	Shorting Jack
SJ125	78	12	Shorting Jack

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
SJ126	78	13	Shorting Jack
SJ127	47	5	Shorting Jack
SJ128	47	6	Shorting Jack
SJ129	50	4	Shorting Jack
SJ130	40	7	Shorting Jack
SJ131	43	22	Shorting Jack
SJ132	78	9	Shorting Jack
SJ133	78	11	Shorting Jack
SJ134	40	3	Shorting Jack
SJ135	50	1	Shorting Jack
SJ139	40	13	Shorting Jack
SJ140	43	14	Shorting Jack
SJ141	31	4	Shorting Jack
SJ142	31	2	Shorting Jack
SJ152	90	13	Shorting Jack
SJ154	82	14	Shorting Jack
SJ160	35	2	Shorting Jack
SJ161	35	1	Shorting Jack
SJ162	35	4	Shorting Jack
SJ501	85	27	Shorting Jack
SJ502	85	26	Shorting Jack
SJ503	82	26	Shorting Jack
SJ505	85	1	Shorting Jack
SJ506	85	11	Shorting Jack
SJ509	89	13	Shorting Jack
SJ510	89	14	Shorting Jack
SJ621	27	10	Shorting Jack
SJ623	25	10	Shorting Jack
SJ624	25	10	Shorting Jack
SJ625	25	10	Shorting Jack
SJ626	27	10	Shorting Jack
SJ631	27	7	Shorting Jack
SJ633	25	7	Shorting Jack
SJ634	25	7	Shorting Jack
SJ635	25	7	Shorting Jack
SJ636	27	7	Shorting Jack
SJ802	94	7	Shorting Jack
T1	77	21	TERMINAL BLOCK 2P
T2	77	22	TERMINAL BLOCK 2P

Table 1 Plug/Jack Location List

P/J No.	FigureNo.	Item	Plug/Jack Location List
T3	77	21	TERMINAL BLOCK 2P
T4	77	22	TERMINAL BLOCK 2P
T5	77	23	TERMINAL BLOCK 4P
T6	77	25	TERMINAL BLOCK 4P
T7	77	23	TERMINAL BLOCK 4P
T8	77	25	TERMINAL BLOCK 4P
T10A	26	2	TERMINAL
T10A	28	2	TERMINAL
T10B	26	3	TERMINAL
T10B	28	3	TERMINAL
T14	61	22	WEB CRU
T15	60	3	WEB CRU
T16	60	2	WEB CRU
T41	77	24	TERMINAL BLOCK 4P
T42	77	28	TERMINAL BLOCK 4P
T43	77	29	TERMINAL BLOCK 4P
T44	77	30	TERMINAL BLOCK 4P
T45	77	26	TERMINAL BLOCK 4P
T46	77	27	TERMINAL BLOCK 4P
USB1	92	22	Mother Board (PC_UI)
USB2	92	23	Mother Board (PC_UI)
USB	93	13	Mother Board (PC_UI)
USB	93	20	Front Boad (PC_UI)

7.1.3 Plug/Jack Positions

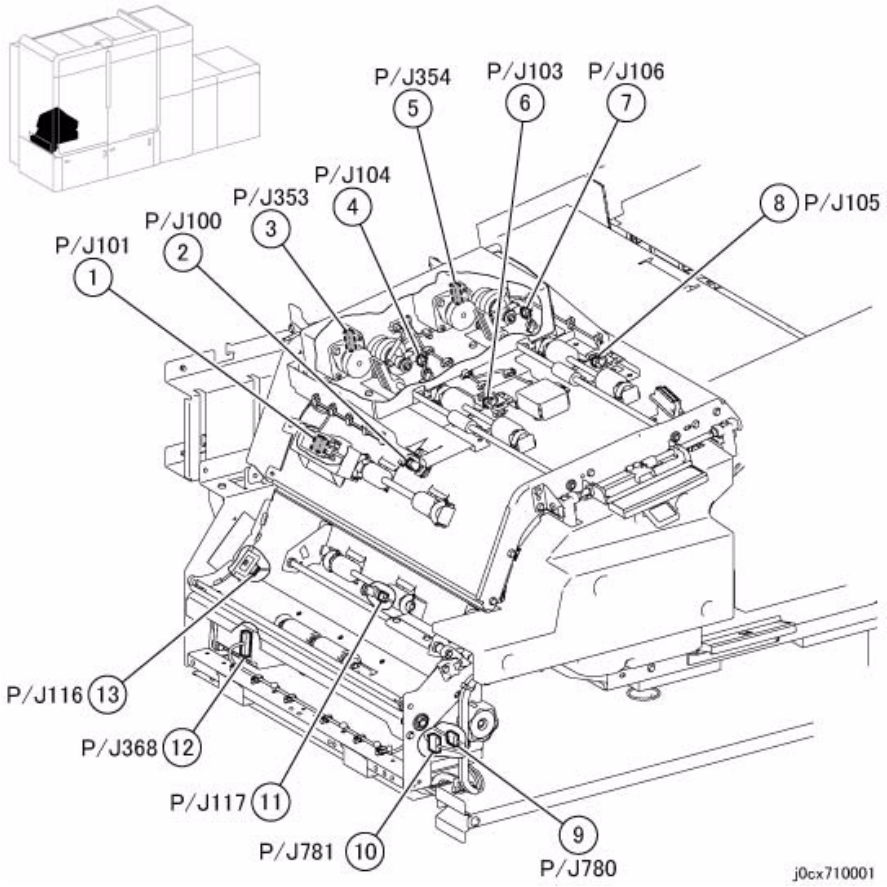


Figure 1 Pre Regi Upper Chute Assembly / I-Transport (j0cx710001)

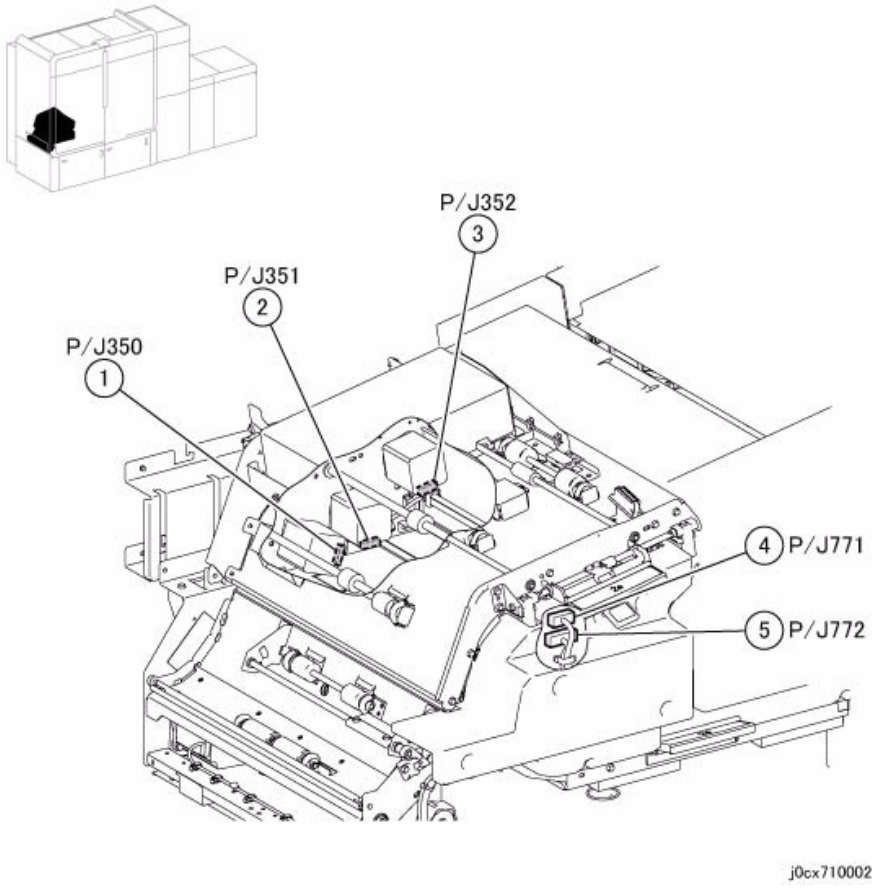


Figure 2 Pre Regi Lower Chute Assembly (j0cx710002)

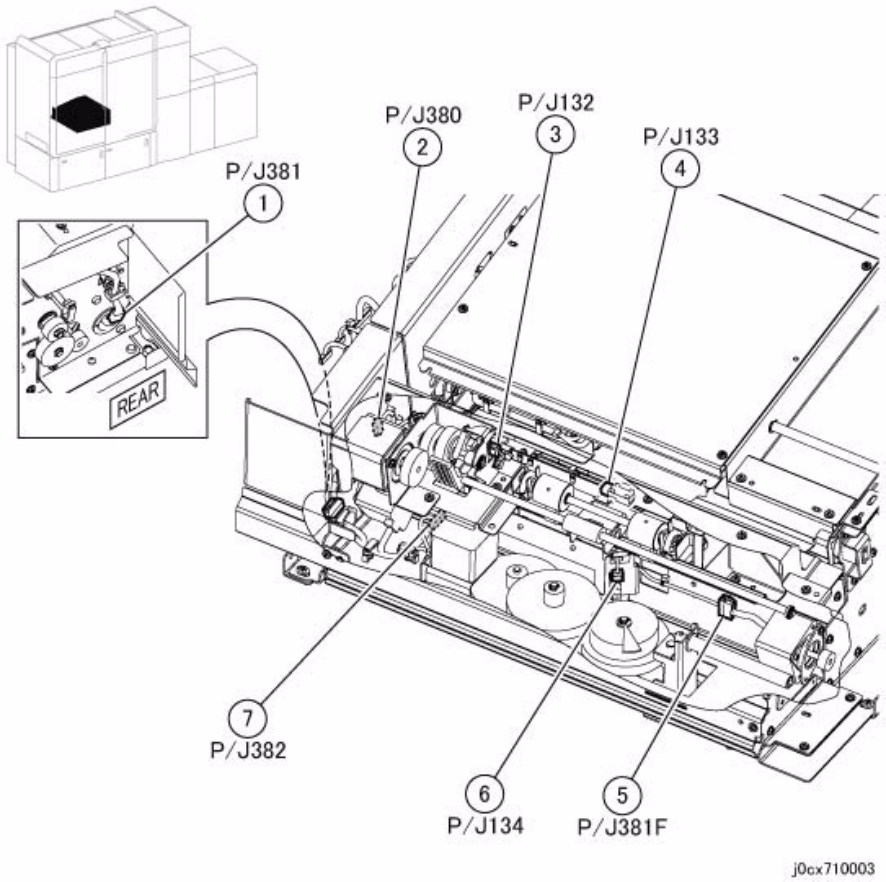


Figure 3 Pre Aligner Assembly (j0cx710003)

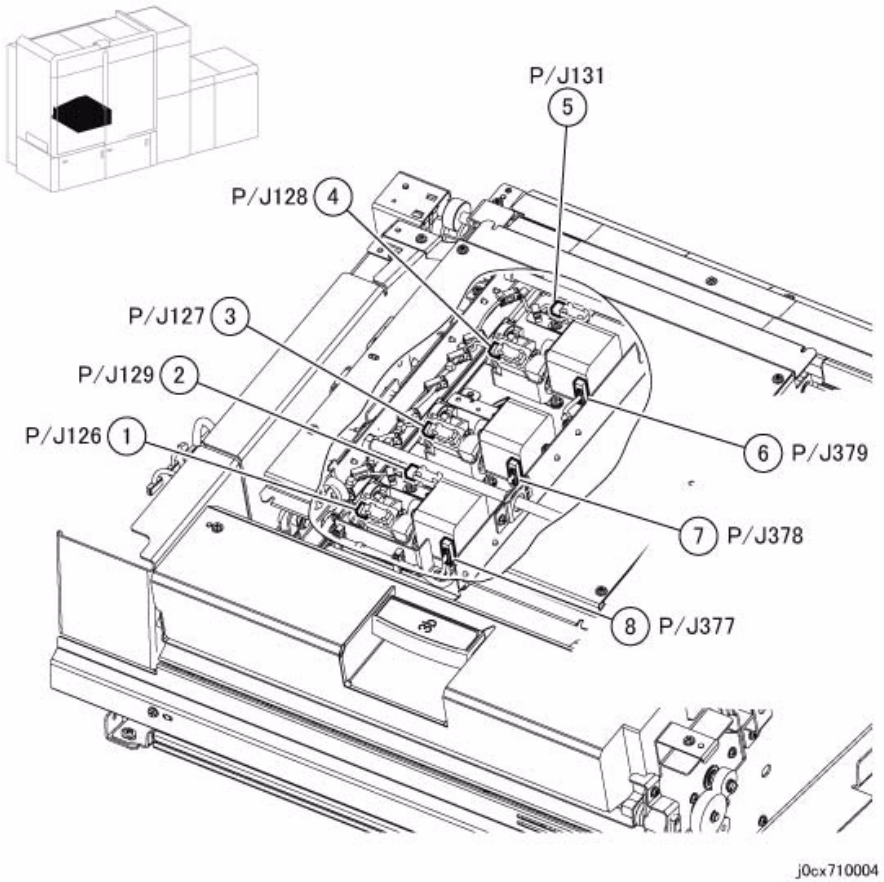


Figure 4 Aligner Assmbly_1 (j0cx710004)

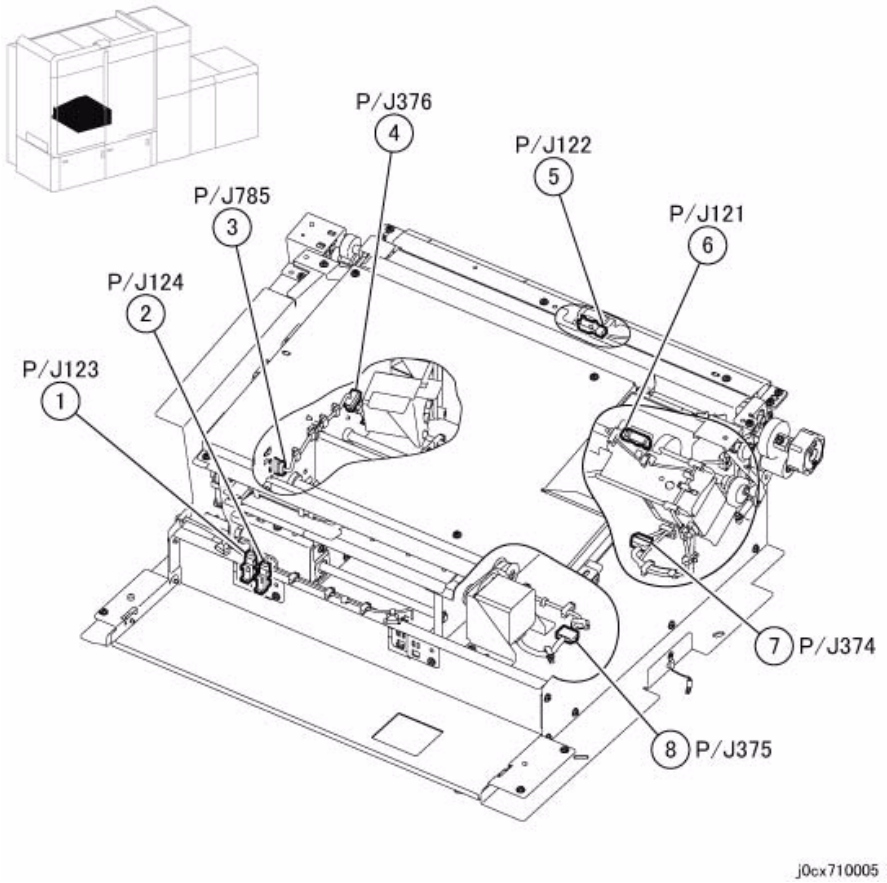


Figure 5 Aligner Assmbly_2 (j0cx710005)

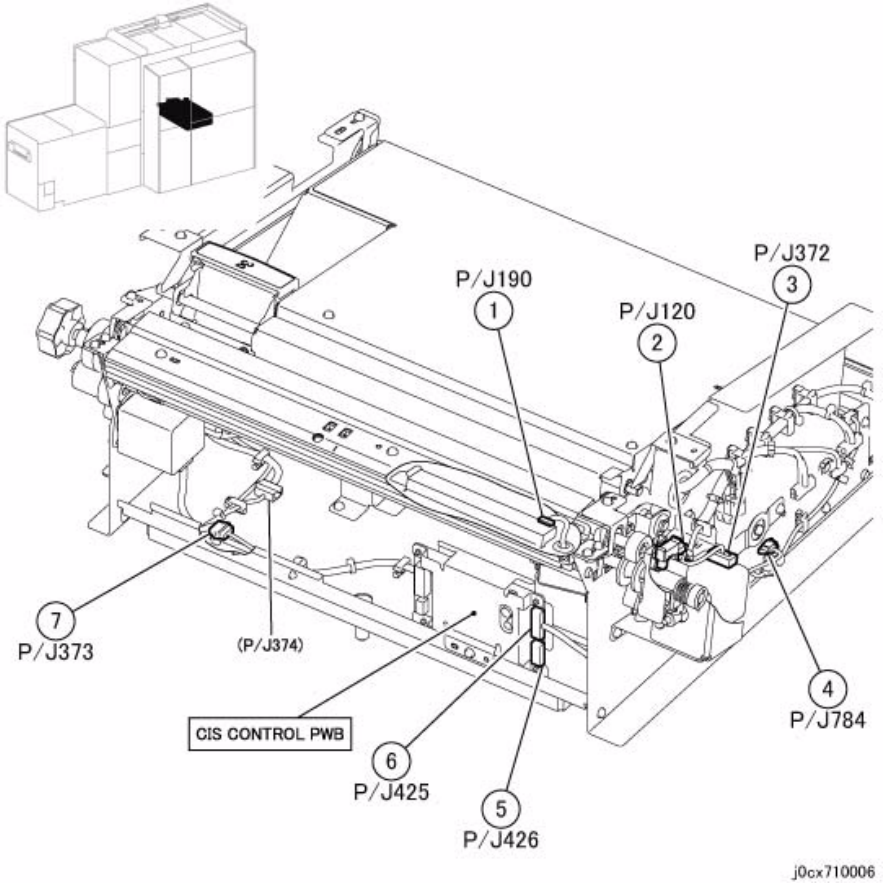


Figure 6 Aligner Assmbly_3 (j0cx710006)

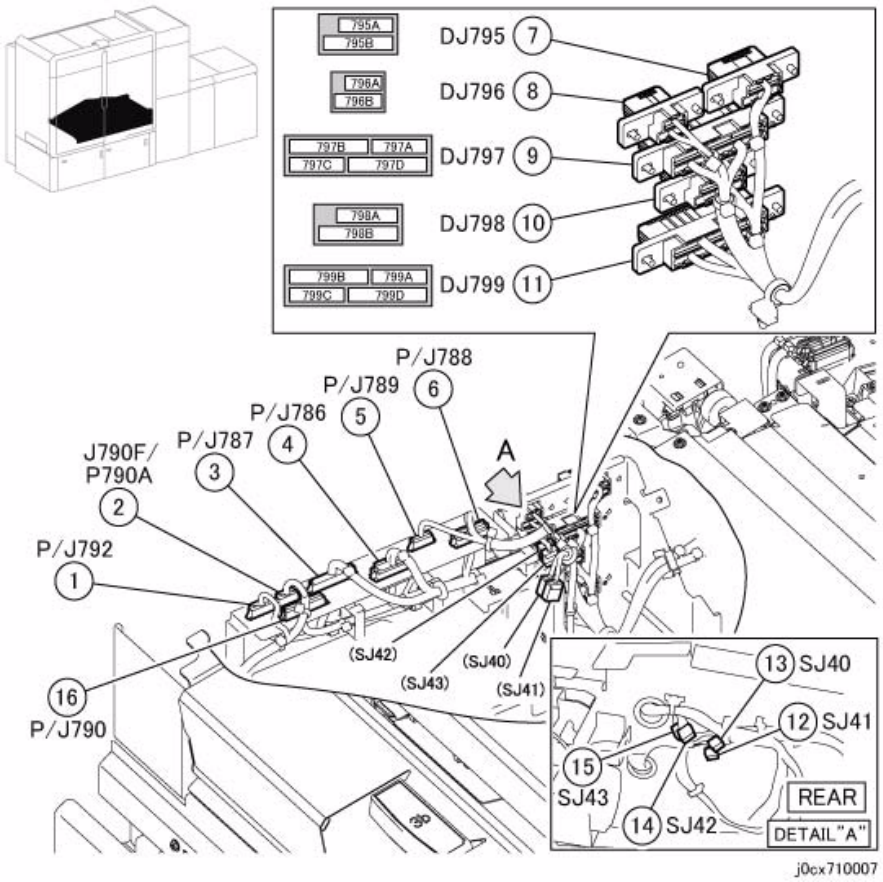


Figure 7 Drawer Frame Assembly (j0cx710007)

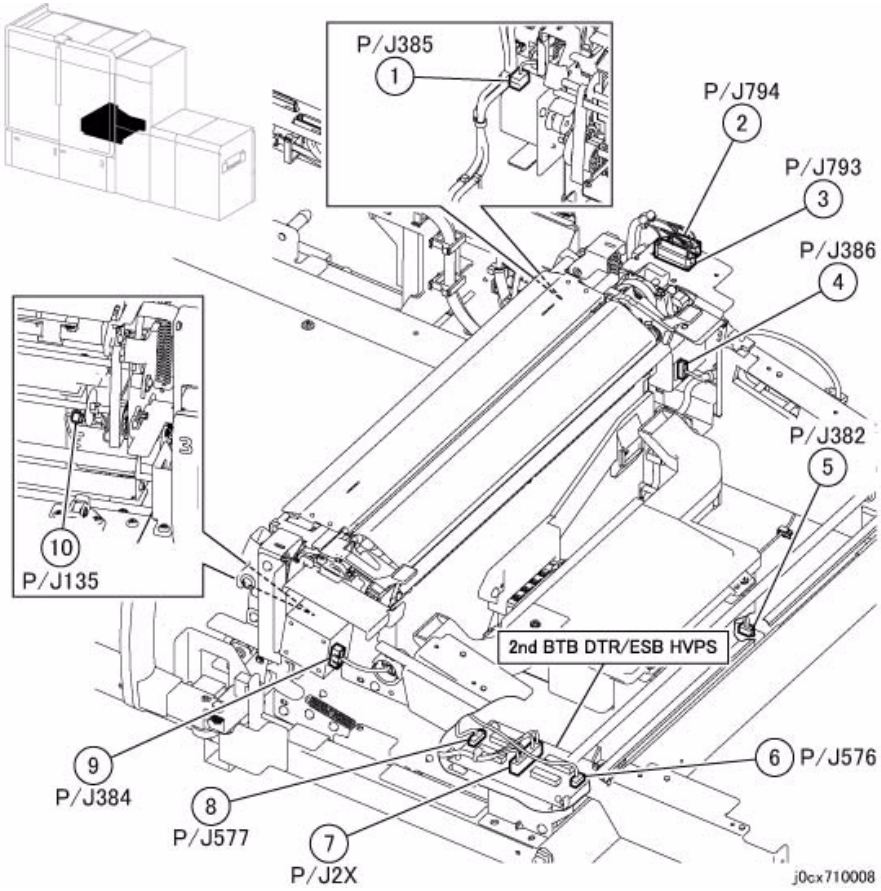


Figure 8 BTB Assembly (j0cx710008)

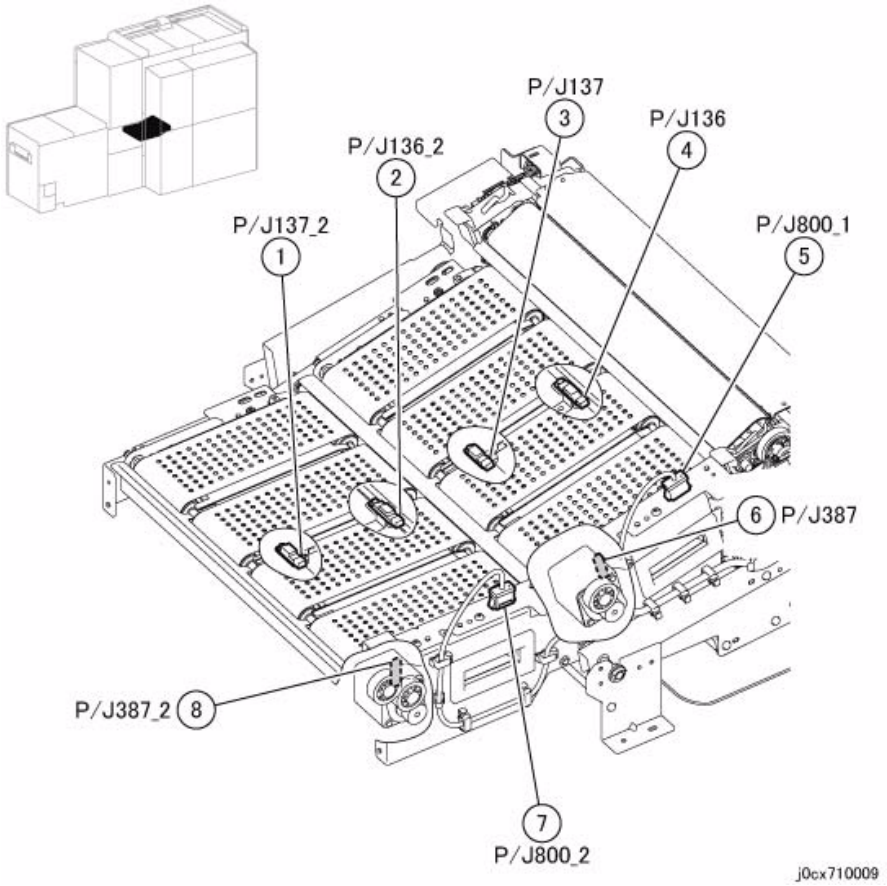


Figure 9 V-Transport 1/2 Assembly (j0cx710009)

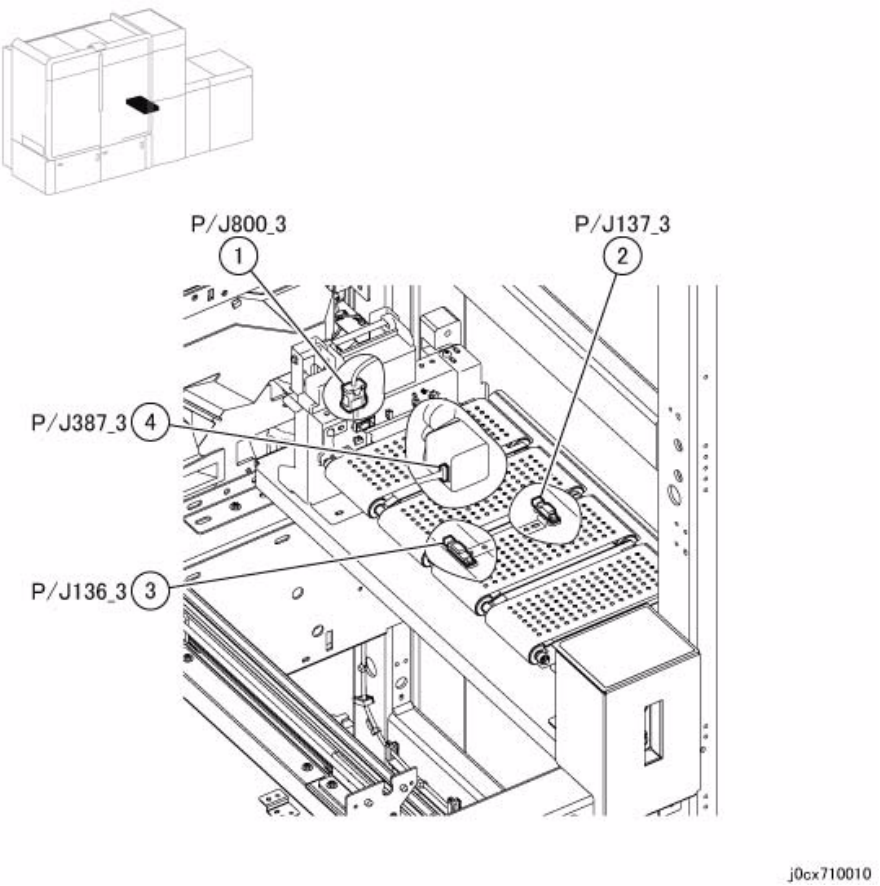


Figure 10 V-Transport 3 Assembly (j0cx710010)

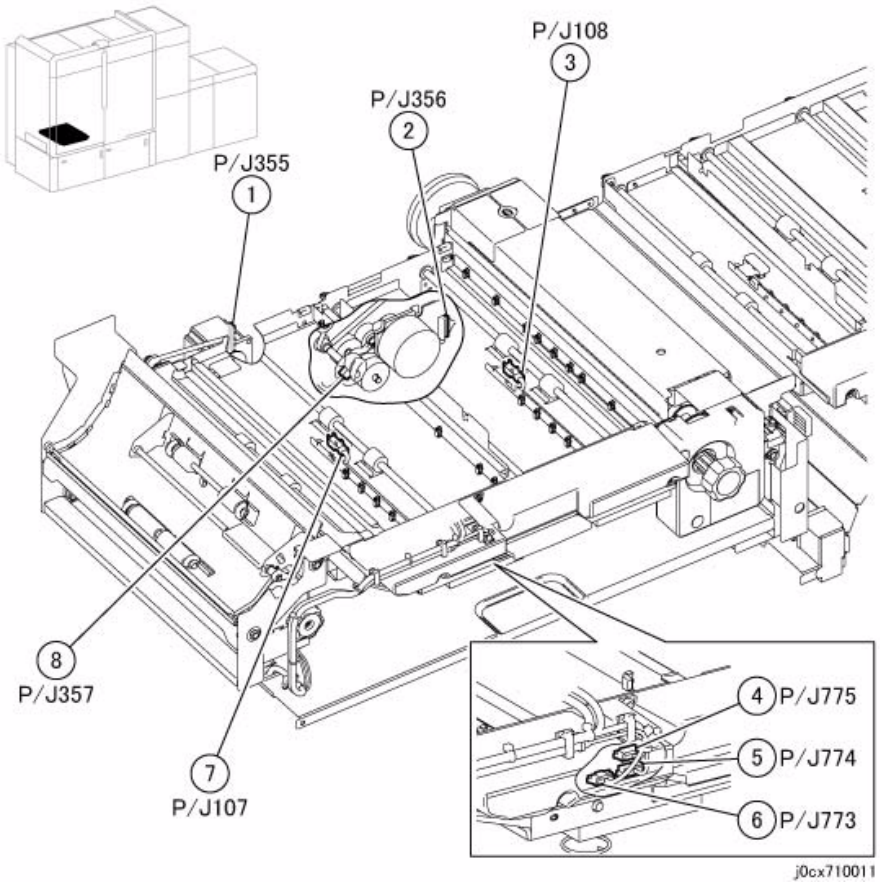


Figure 11 H1-Transport Assembly (j0cx710011)

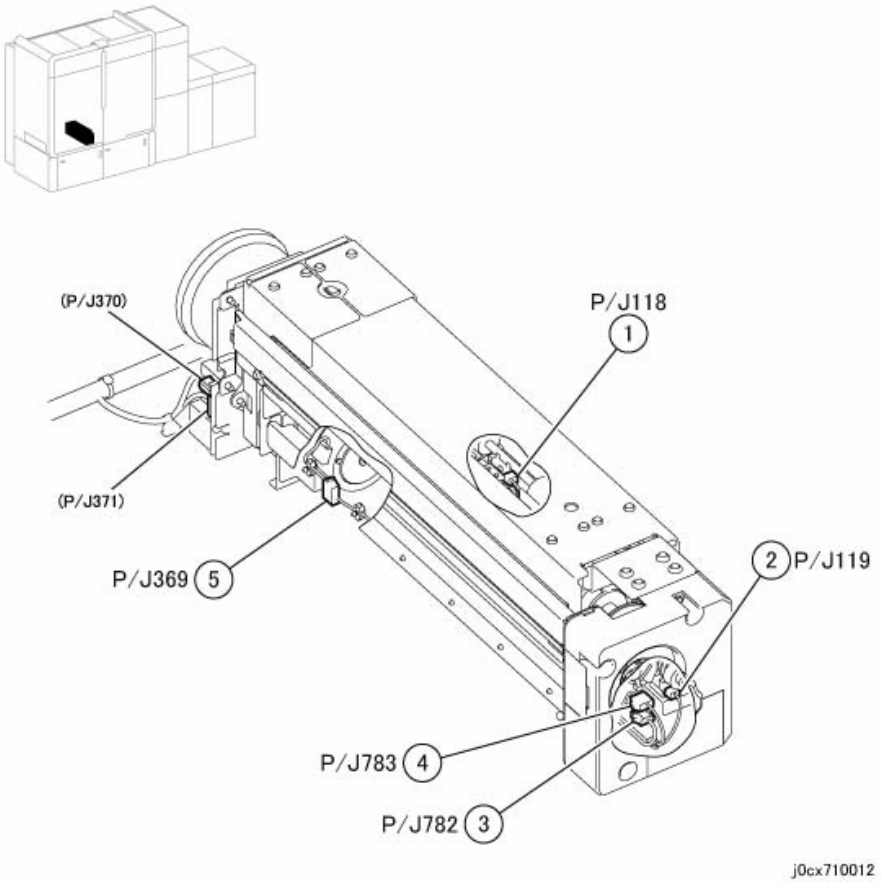


Figure 12 Baritori Roll Assembly (j0cx710012)

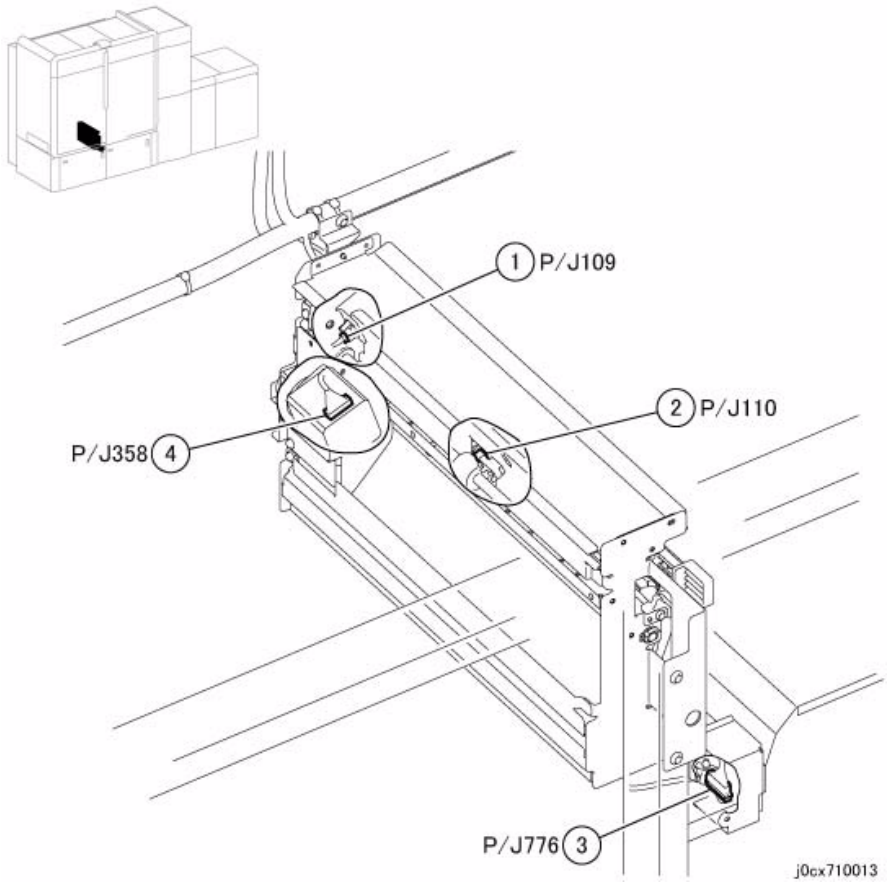


Figure 13 J1-Transport Assembly (j0cx710013)

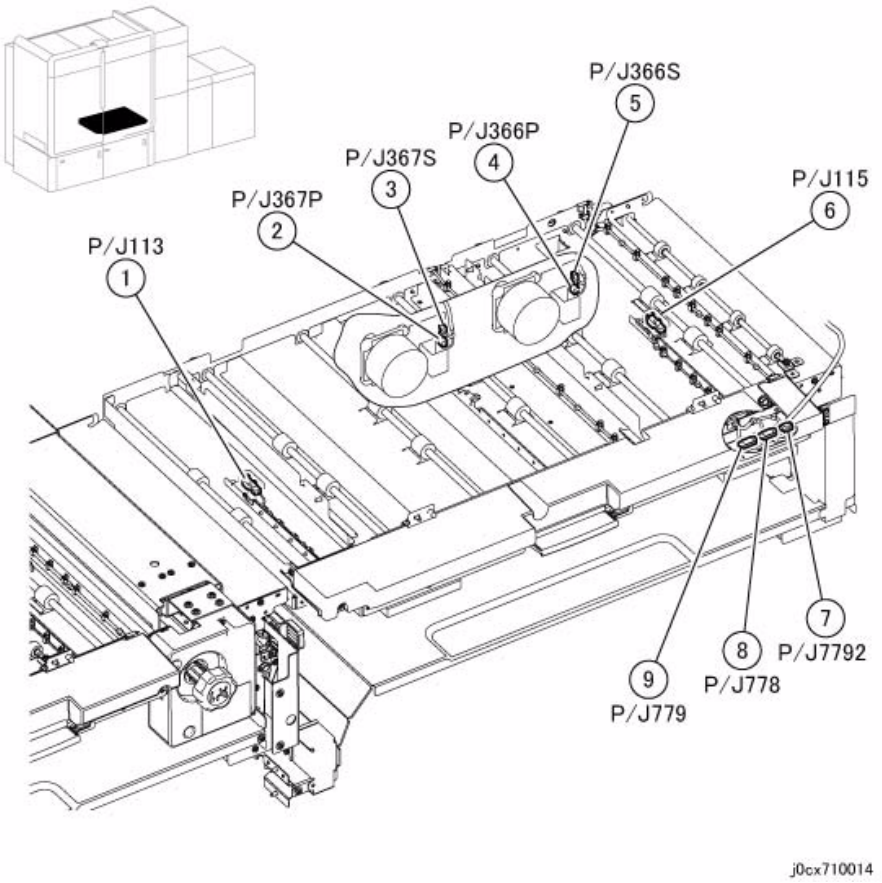


Figure 14 H2-Transport Assembly (j0cx710014)

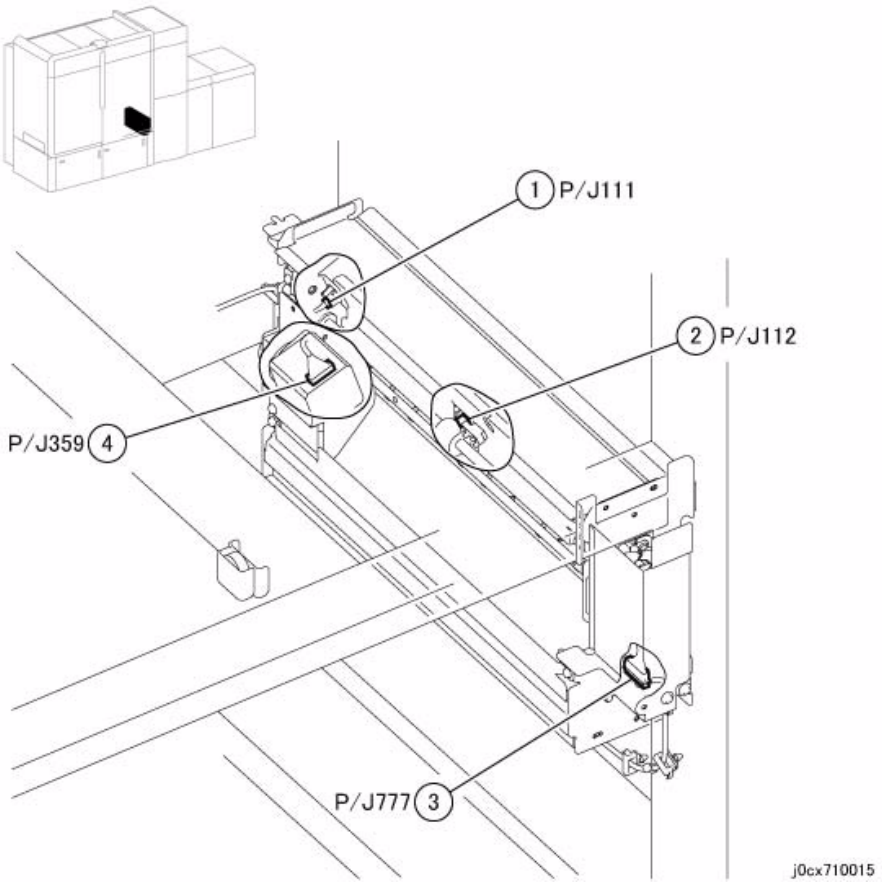


Figure 15 J2-Transport Assembly (j0cx710015)

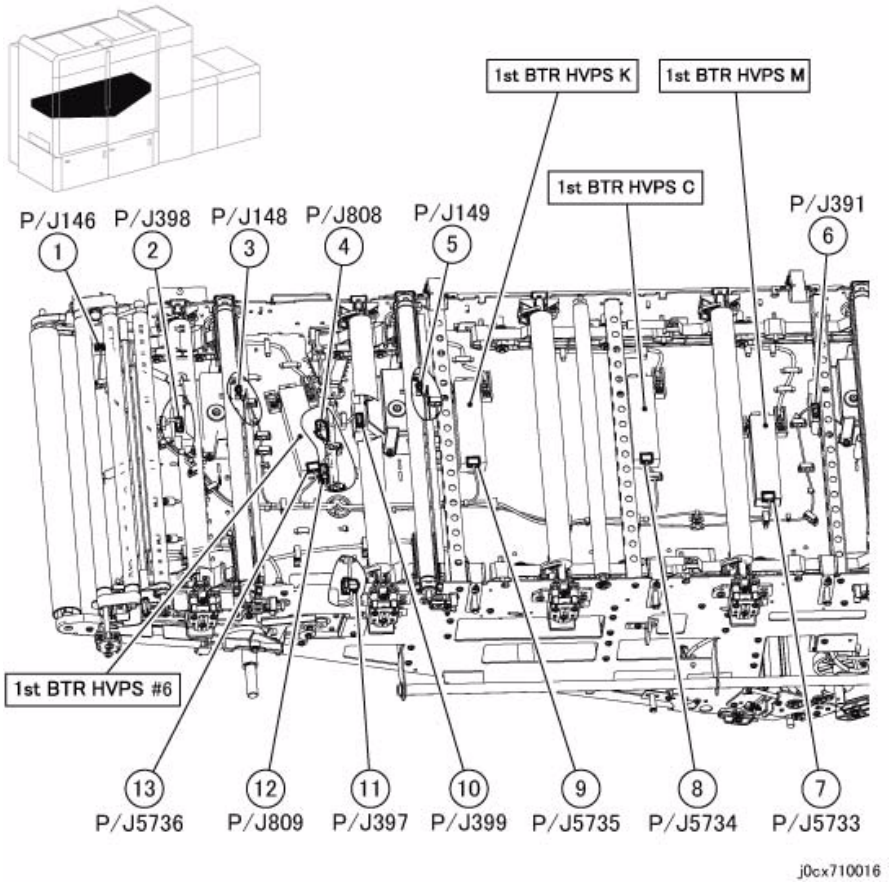


Figure 16 IBT Belt Assembly_1 (j0cx710016)

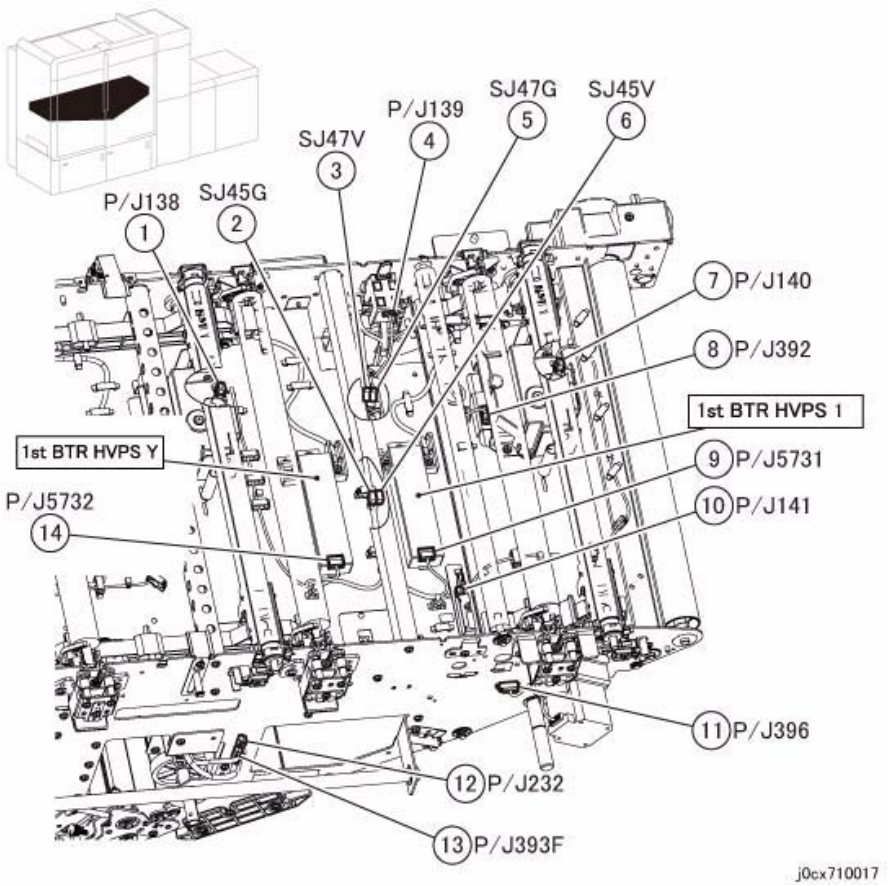


Figure 17 IBT Belt Assembly_2 (j0cx710017)

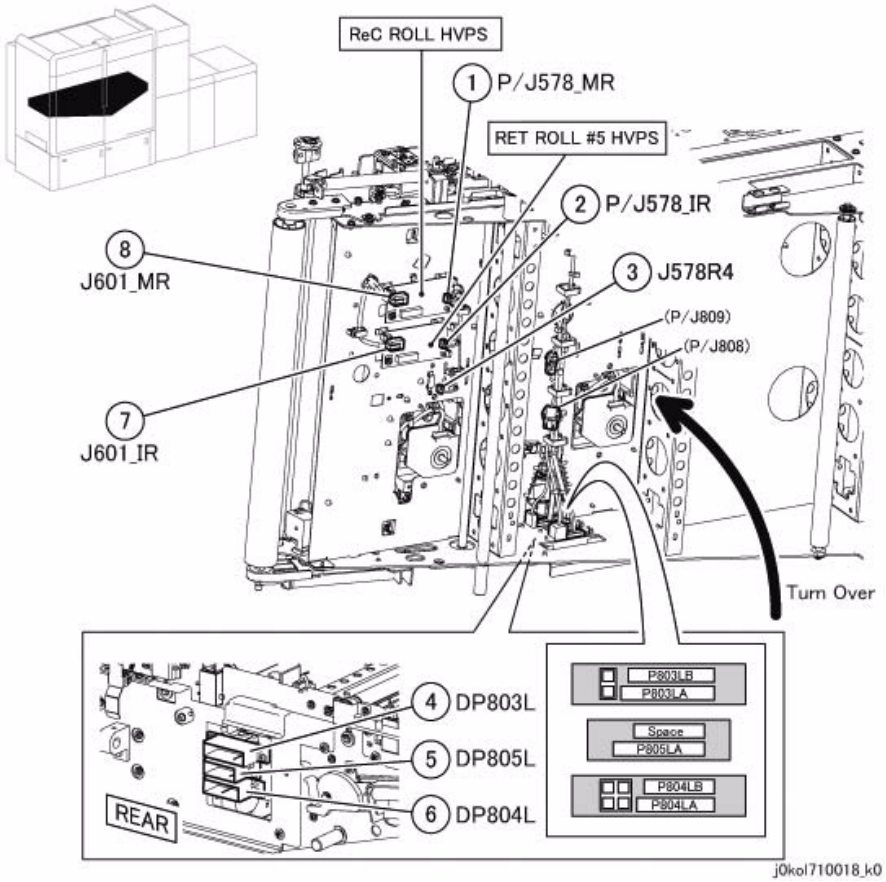


Figure 18 IBT Belt Assembly_3 (j0kol710018_k0)

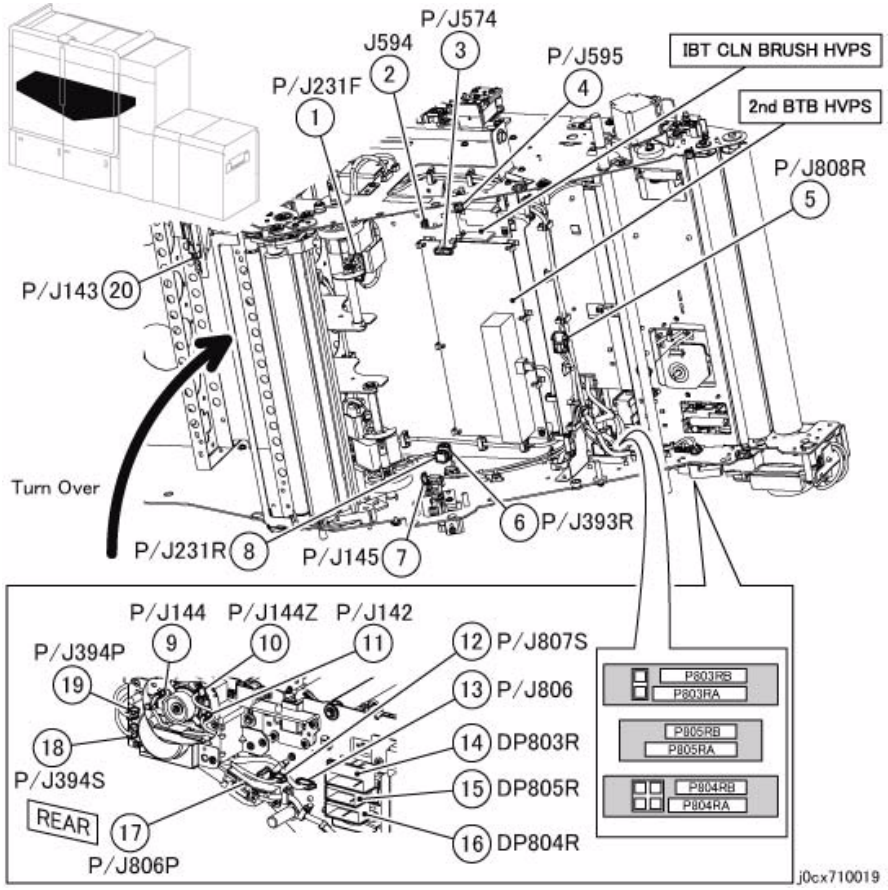


Figure 19 IBT Belt Assembly_4 (j0cx710019)

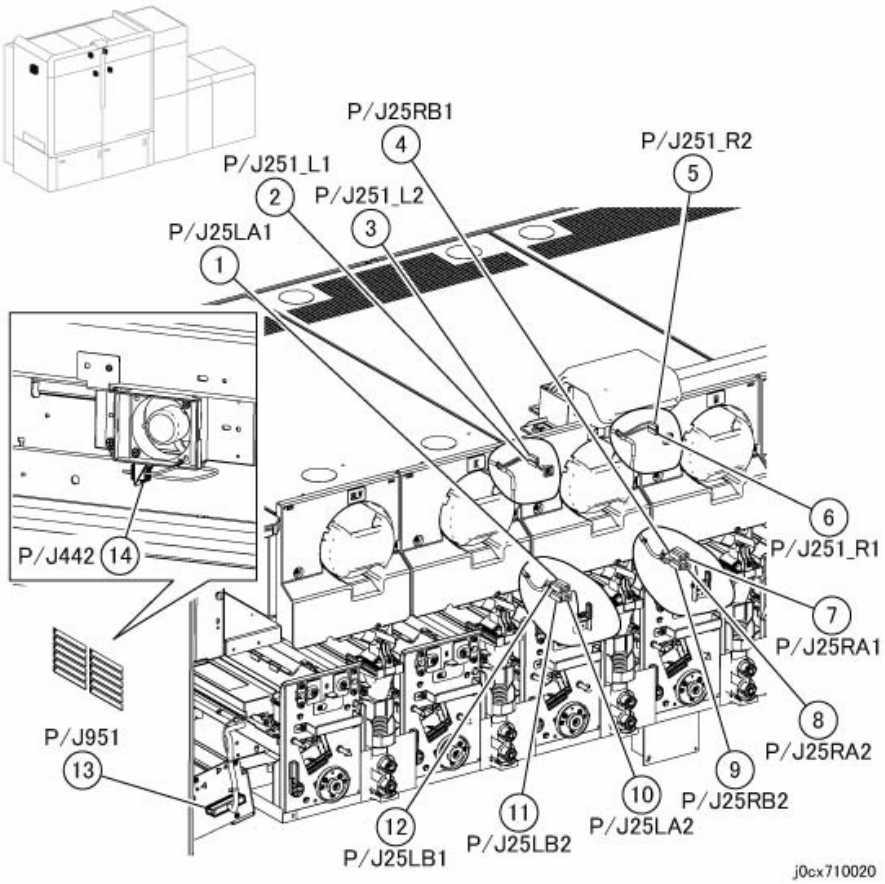


Figure 20 IOT-L FRONT View (j0cx710020)

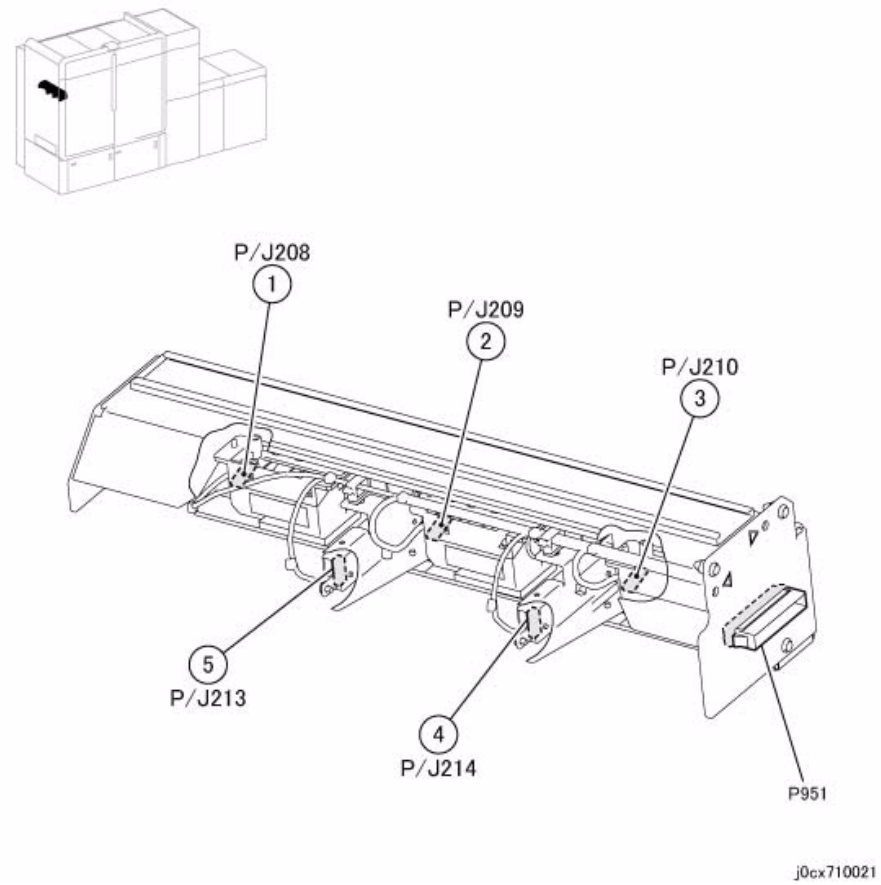


Figure 21 ReC Sensor Assembly (j0cx710021)

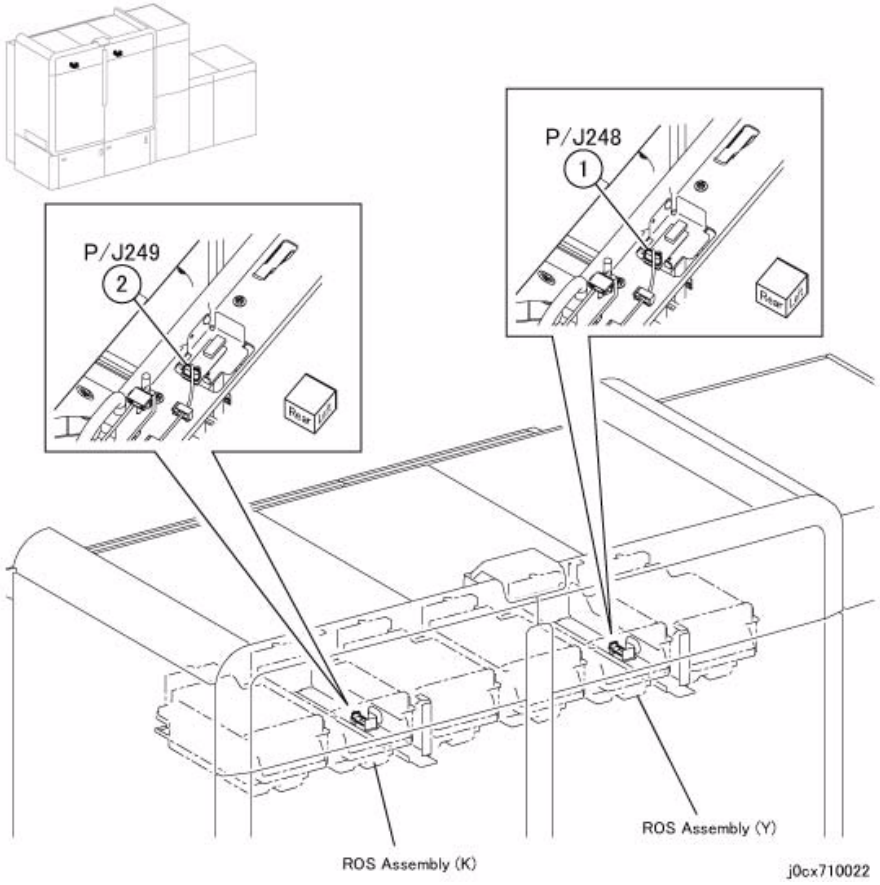


Figure 22 TEMP & Humidity Sensor 1/2 (j0cx710022)

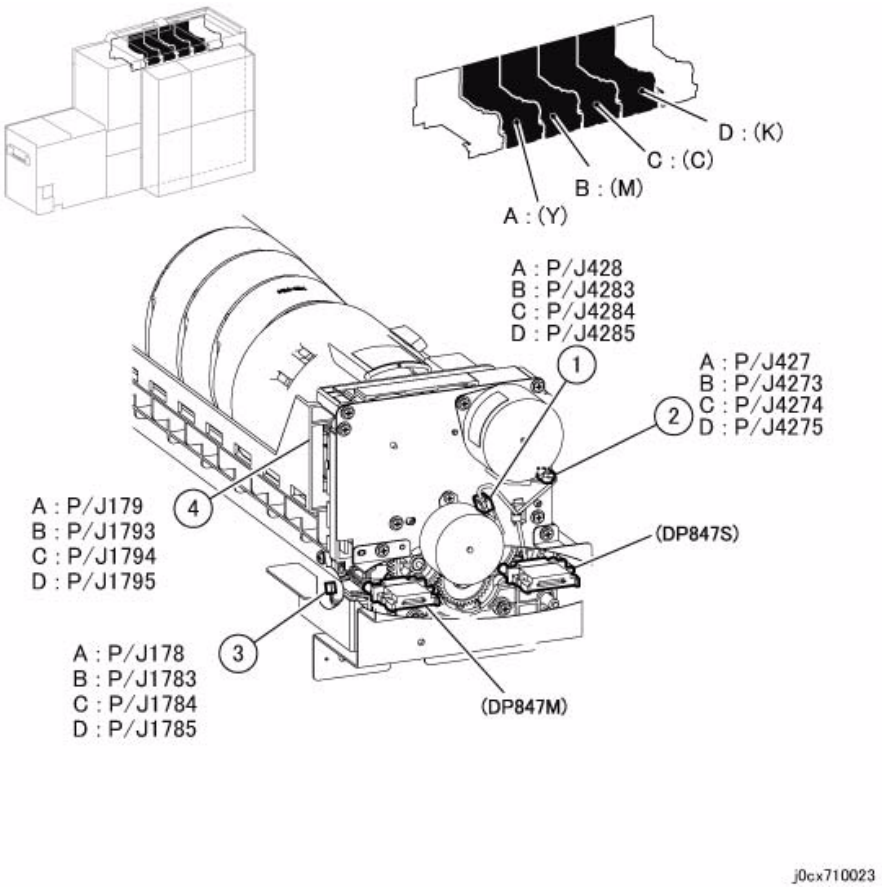


Figure 23 Toner Dispenser Assembly (j0cx710023)

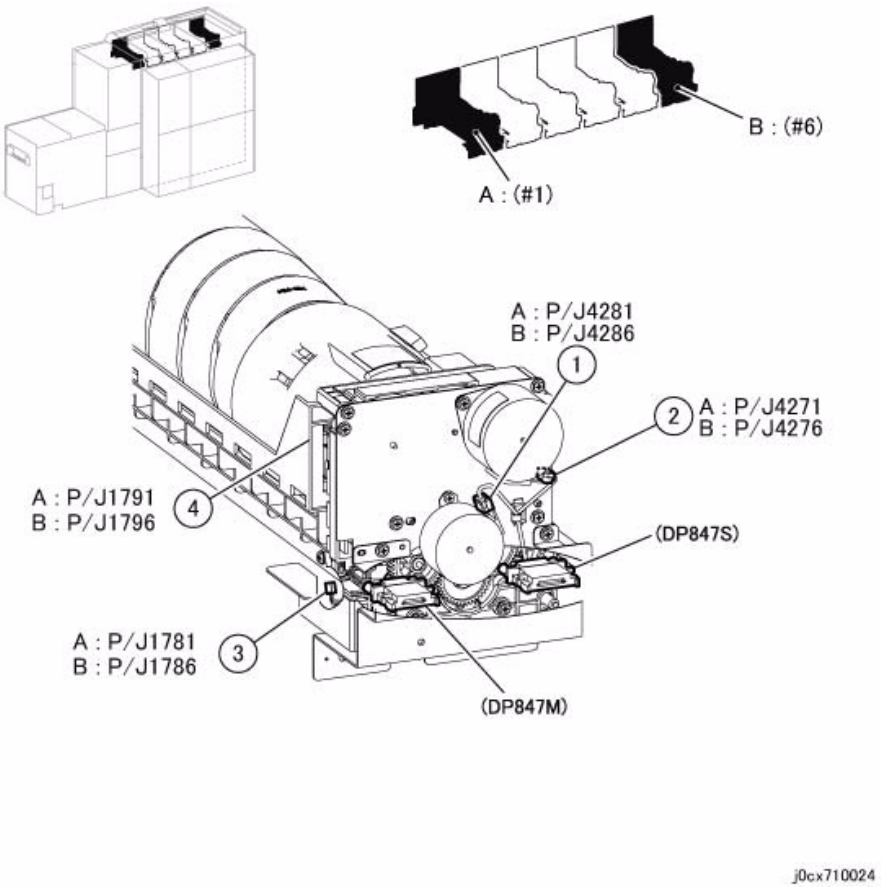


Figure 24 Toner Dispenser Assembly (O.P) (j0cx710024)

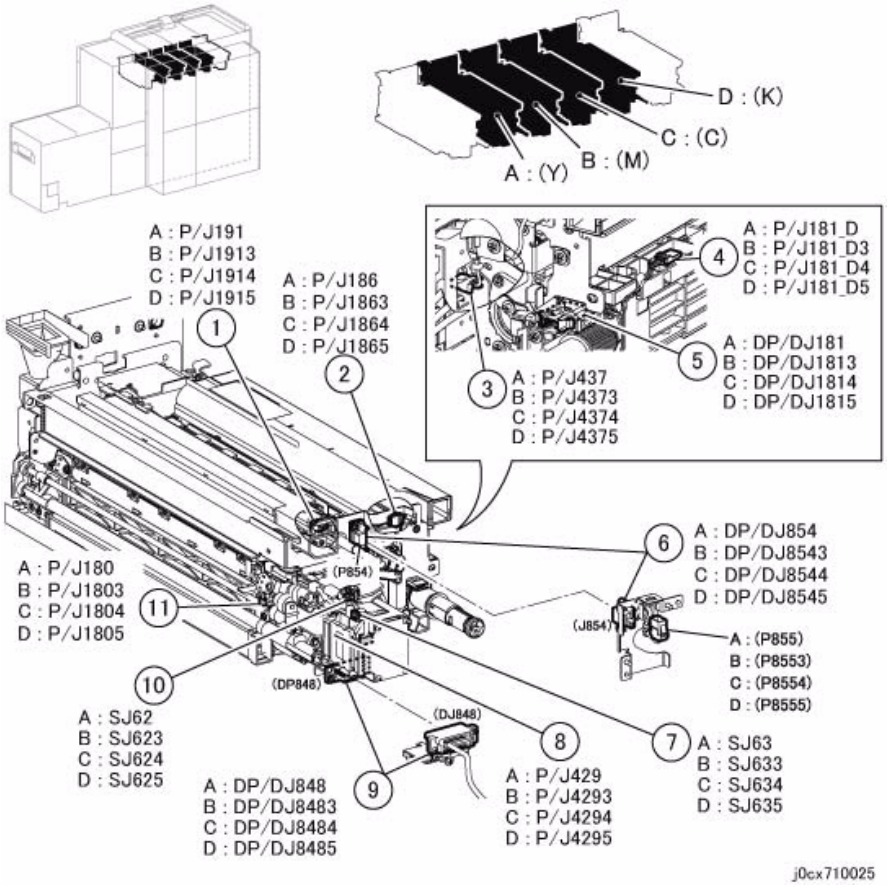


Figure 25 MM Assembly_1 (j0cx710025)

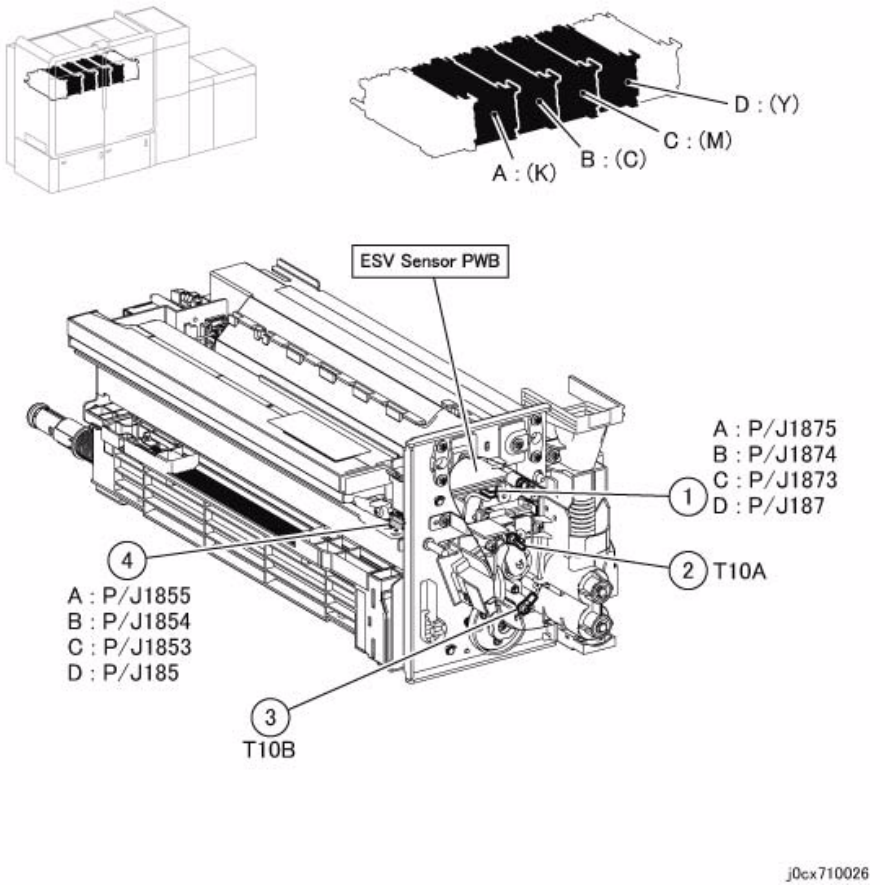


Figure 26 MM Assembly_2 (j0cx710026)

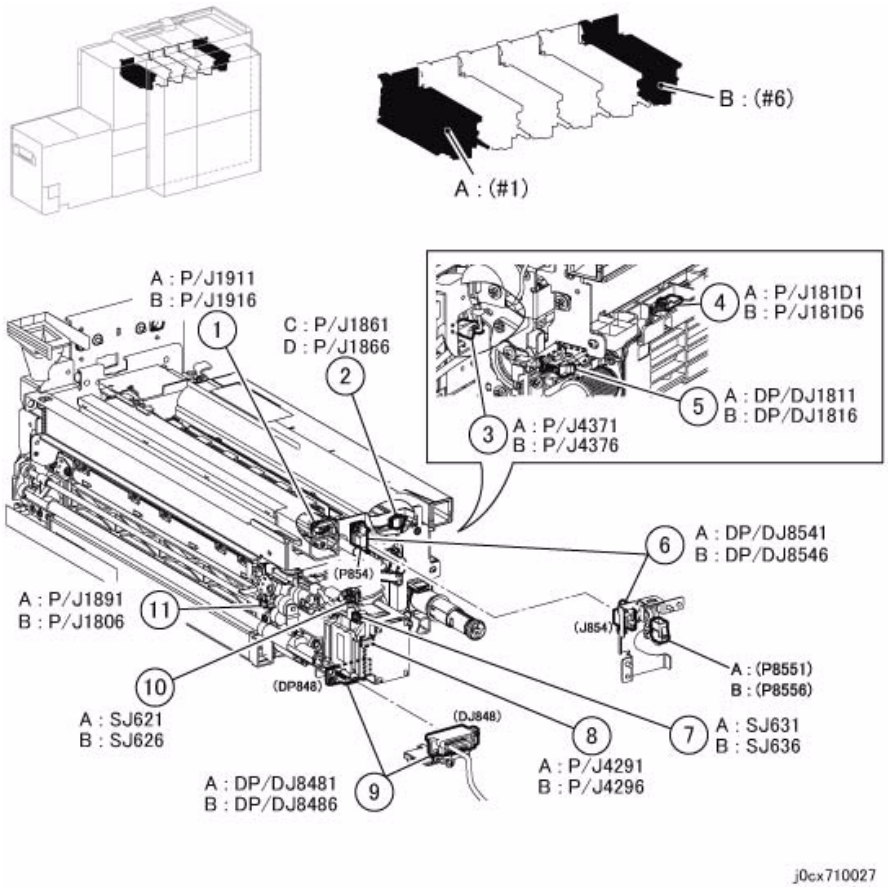


Figure 27 MM Assembly_3 (O.P) (j0cx710027)

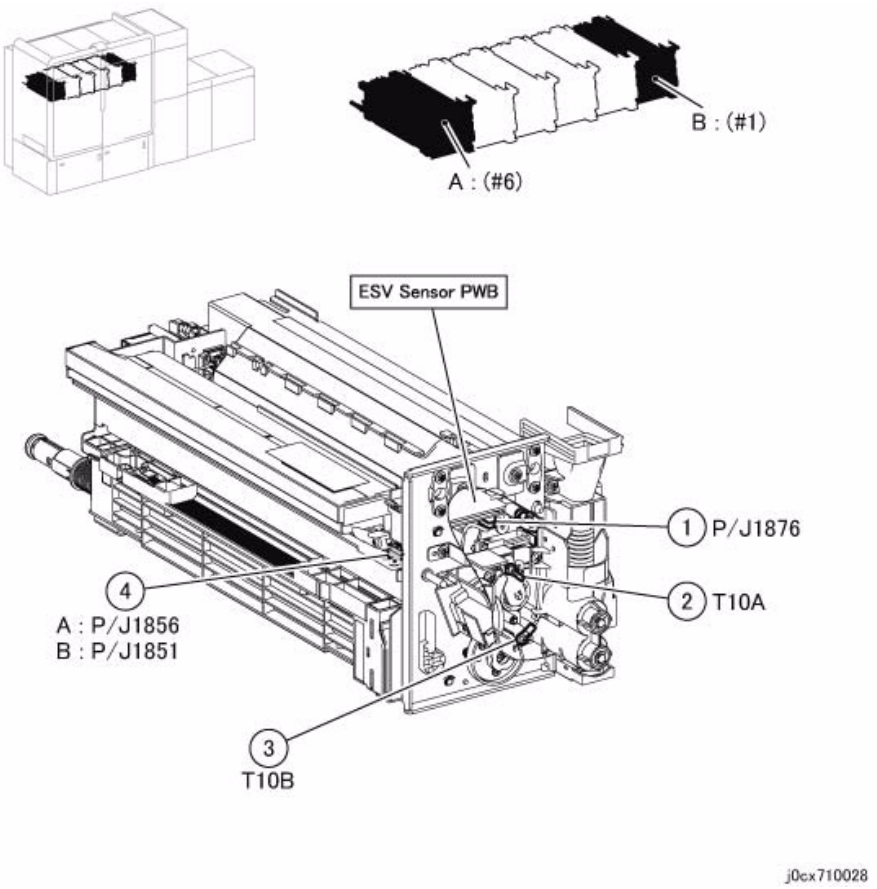


Figure 28 MM Assembly_4 (O.P) (j0cx710028)

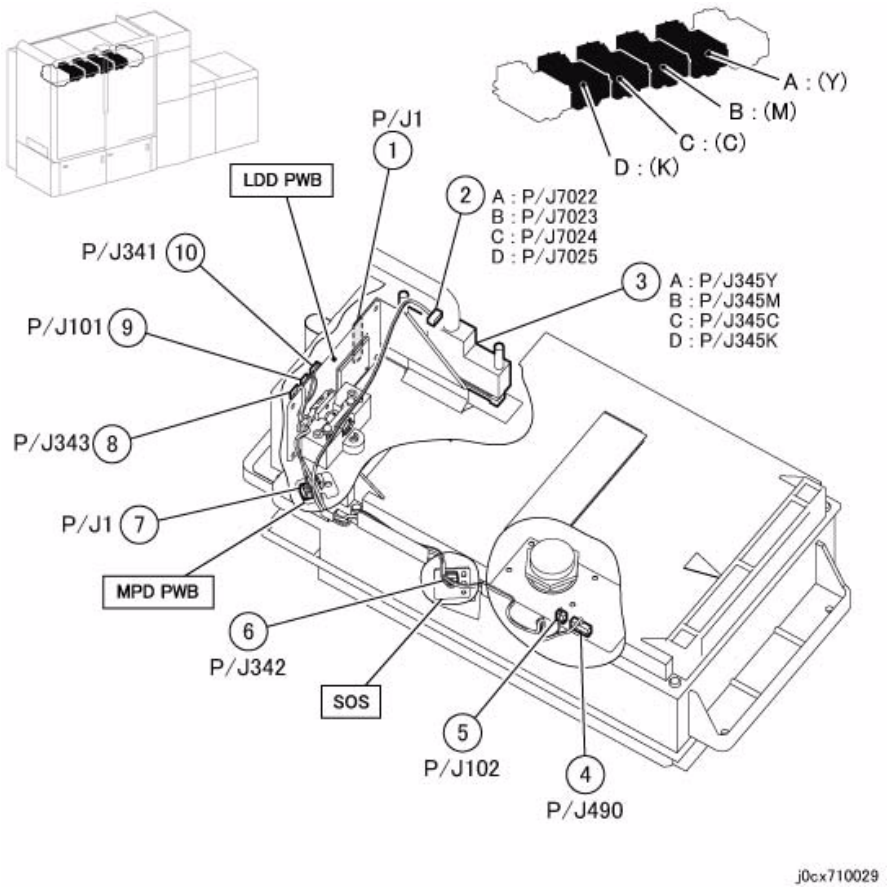


Figure 29 ROS Assembly_1 (j0cx710029)

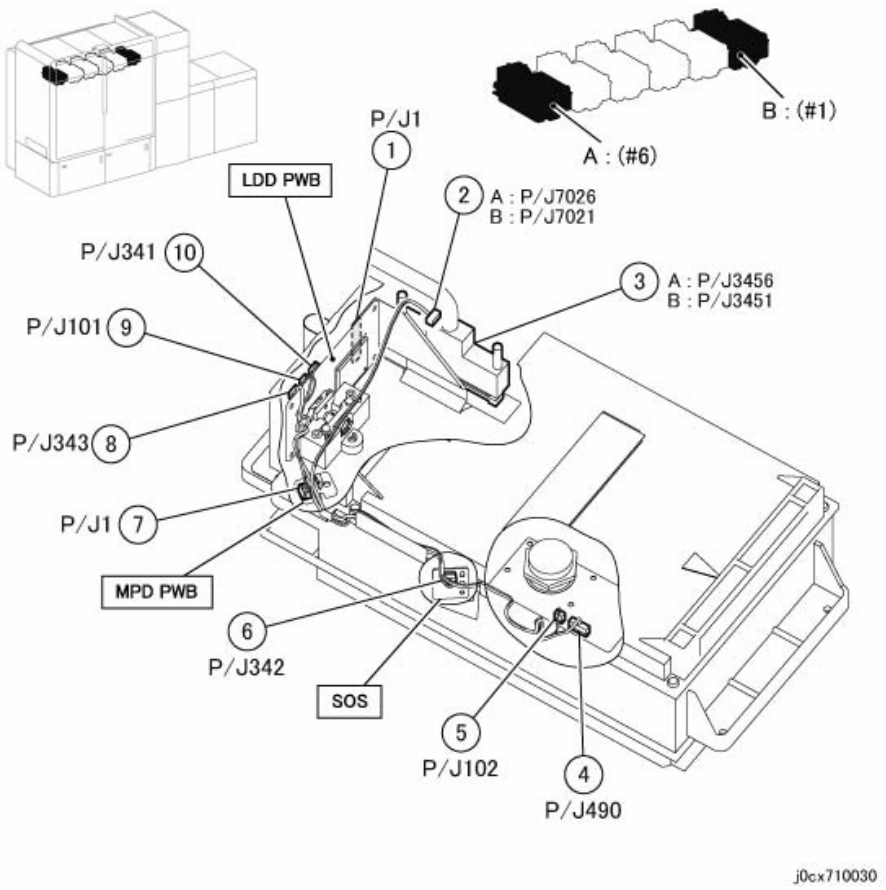


Figure 30 ROS Assembly_2 (O.P) (j0cx710030)

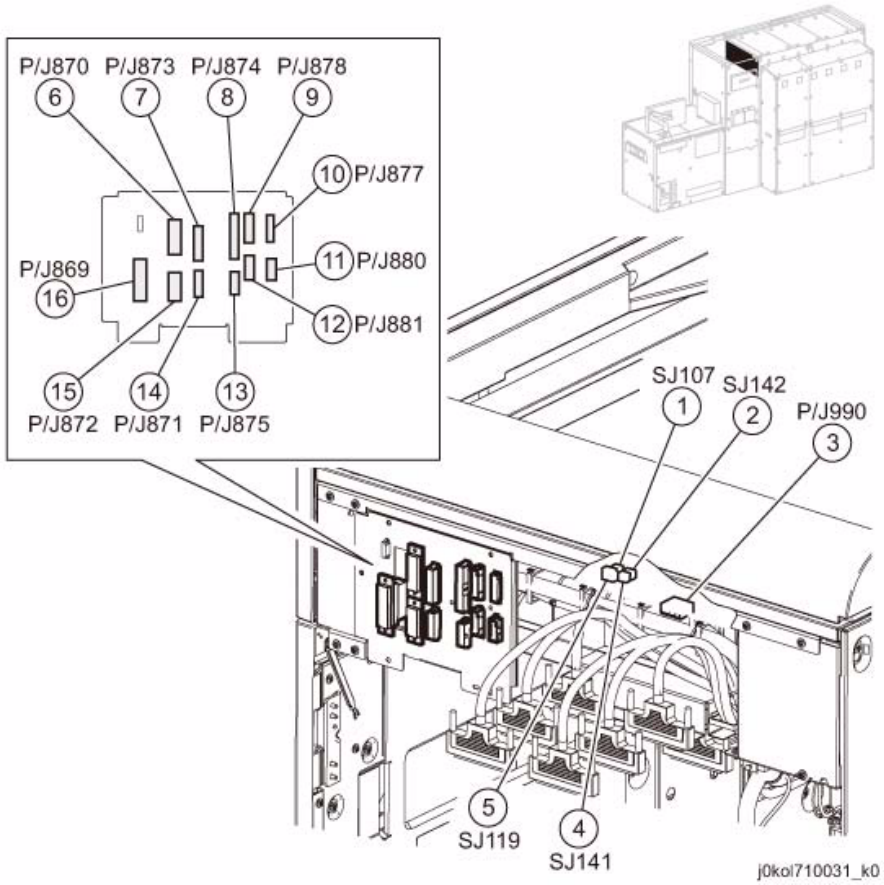


Figure 31 IOT-L Right View (j0kol710031_k0)

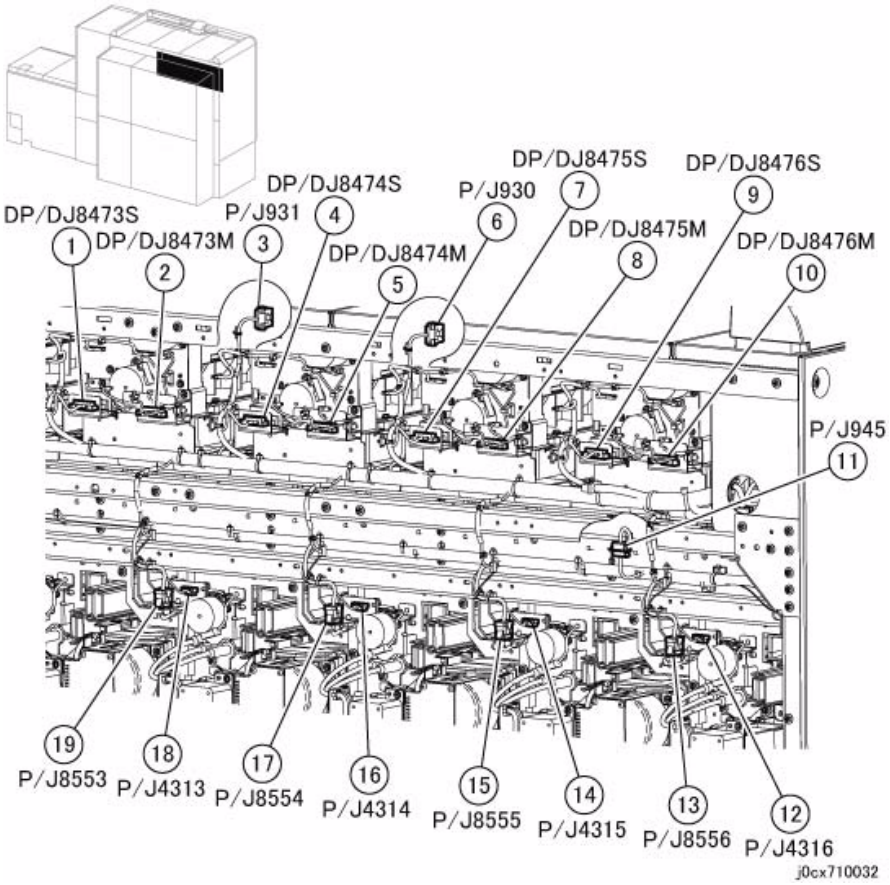


Figure 32 IOT-L REAR View_1 (j0cx710032)

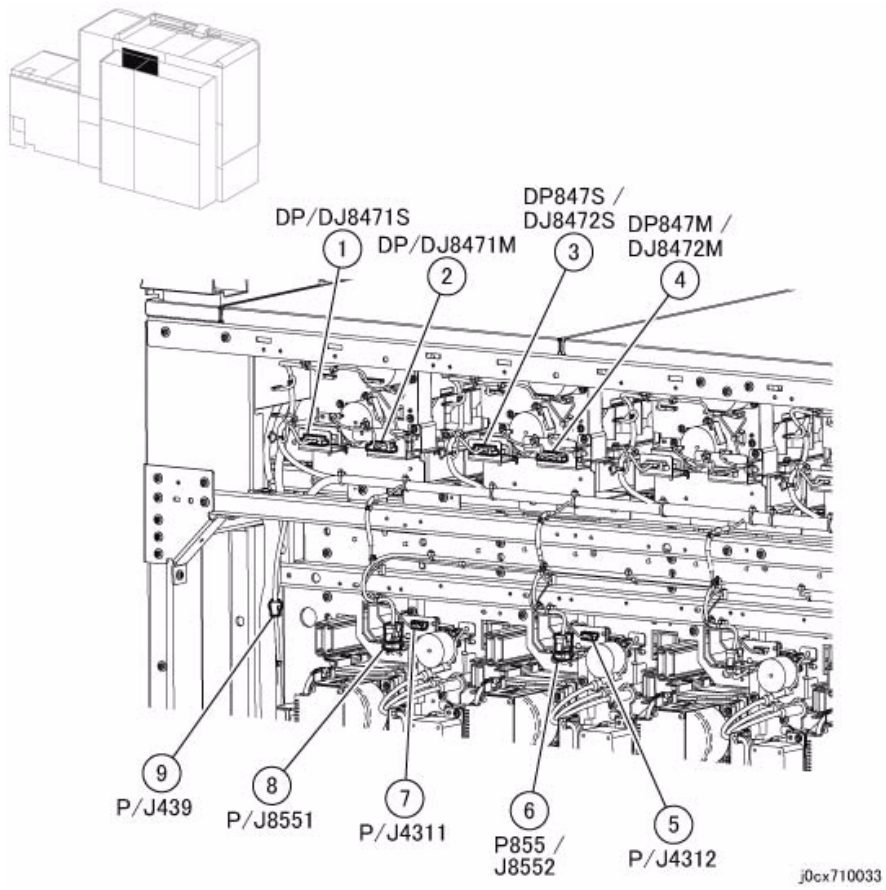


Figure 33 IOT-L REAR View_2 (j0cx710033)

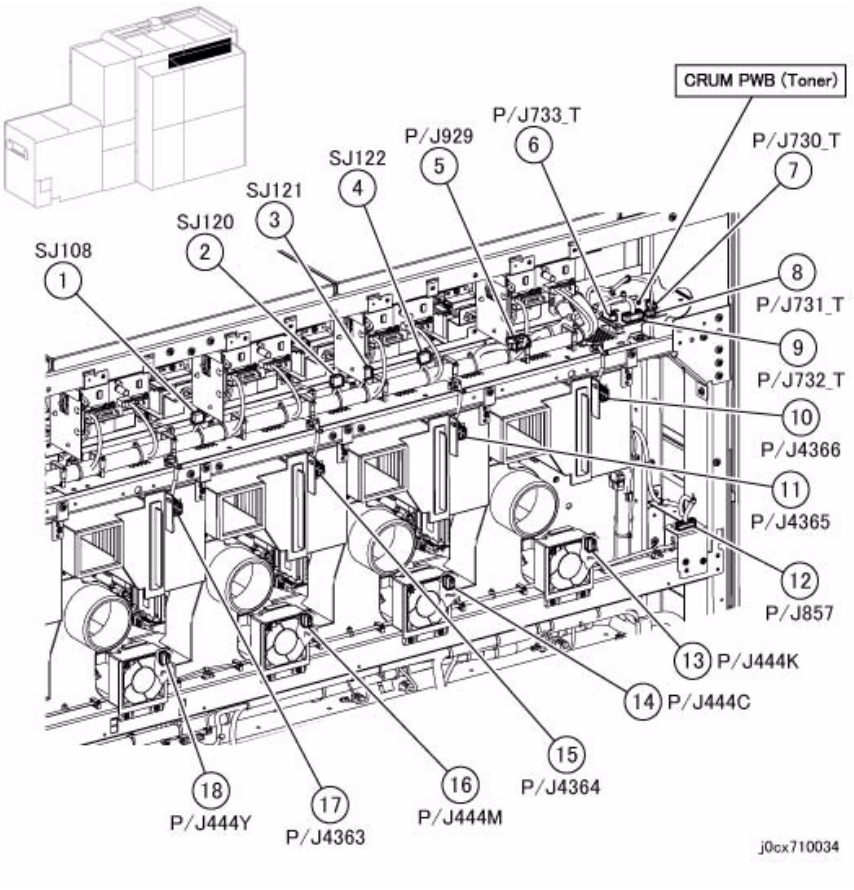


Figure 34 IOT-L REAR View_3 (j0cx710034)

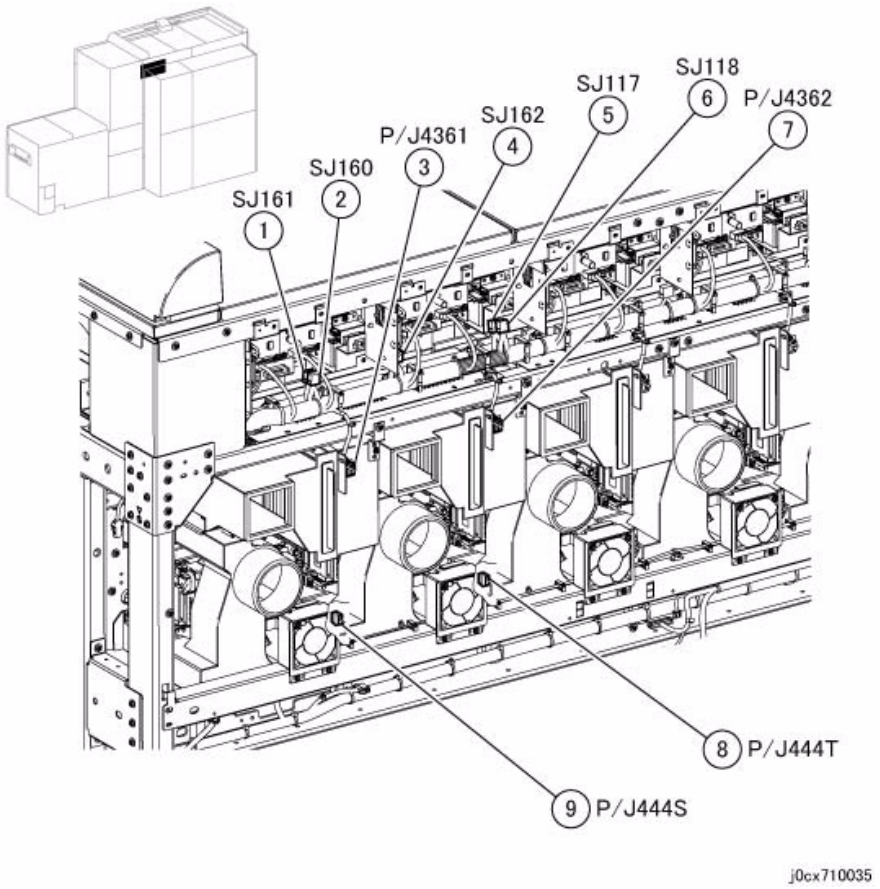


Figure 35 IOT-L REAR View_4 (j0cx710035)

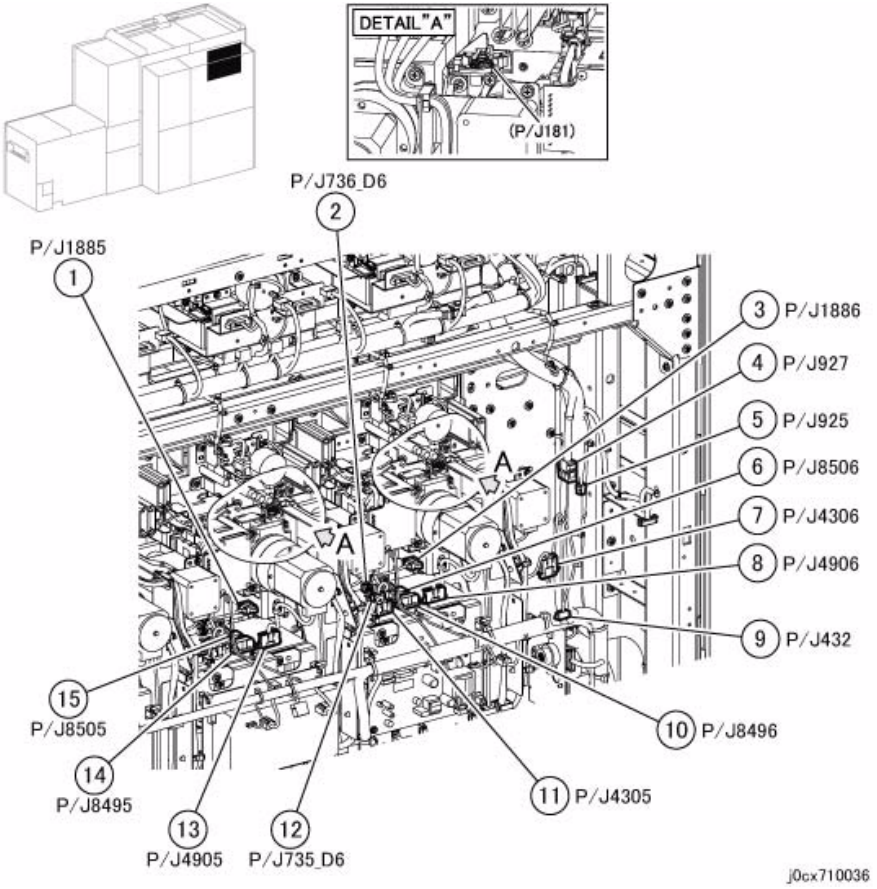


Figure 36 IOT-L REAR View_5 (j0cx710036)

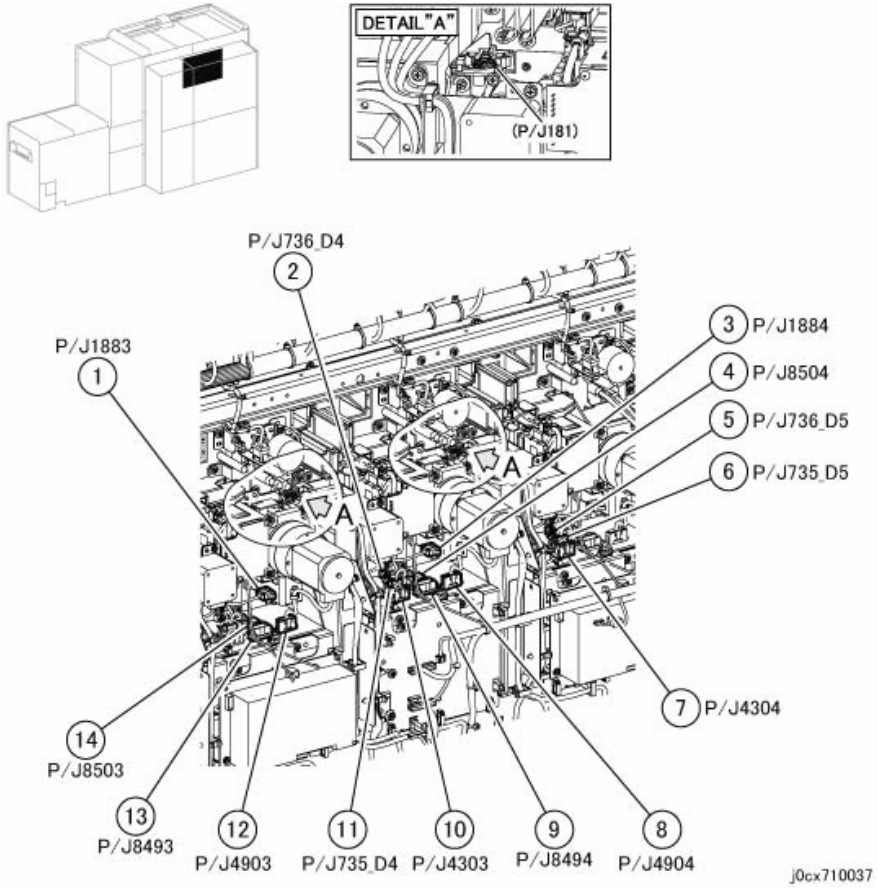


Figure 37 IOT-L REAR View_6 (j0cx710037)

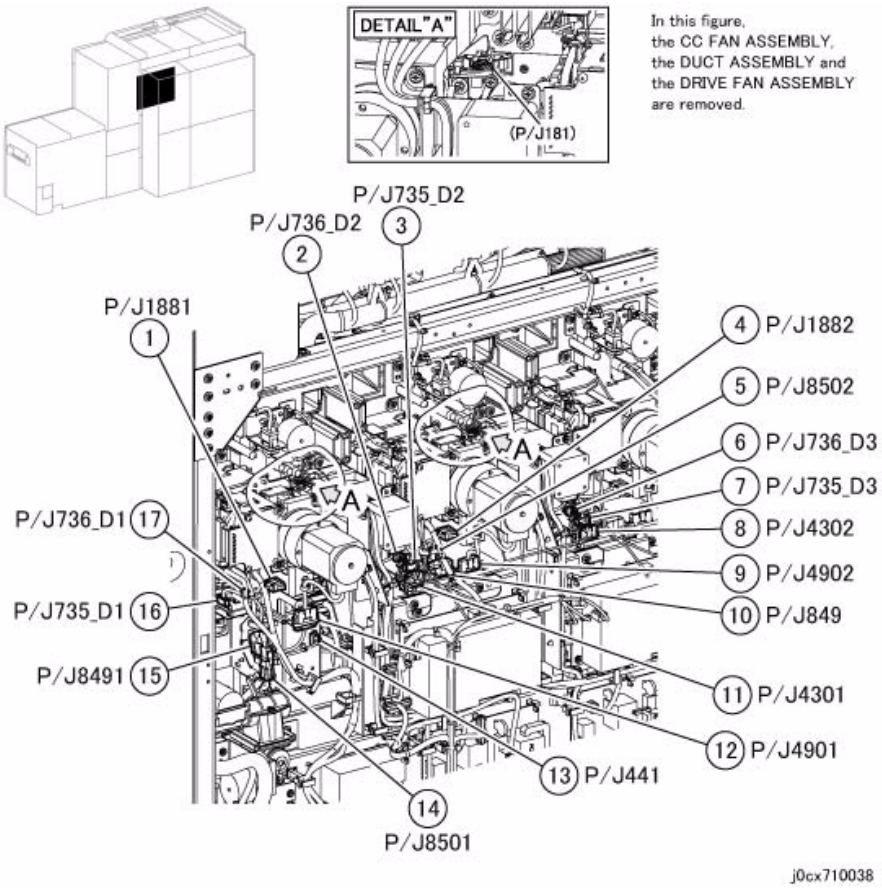


Figure 38 IOT-L REAR View_7 (j0cx710038)

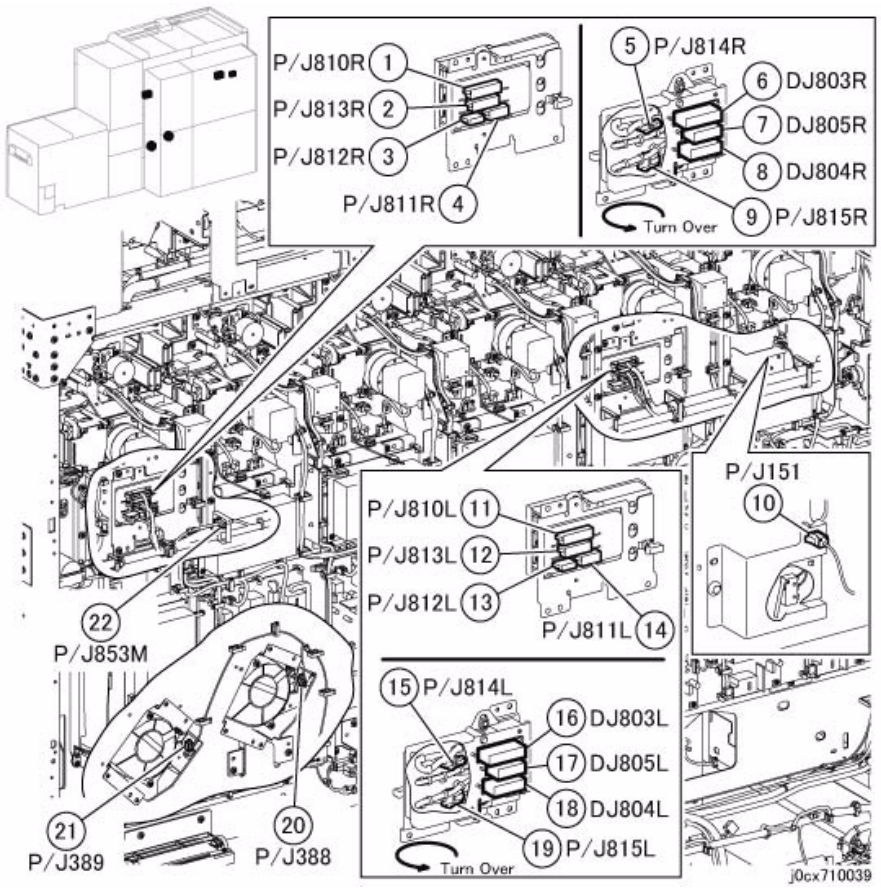


Figure 39 IOT-L REAR View_8 (j0cx710039)

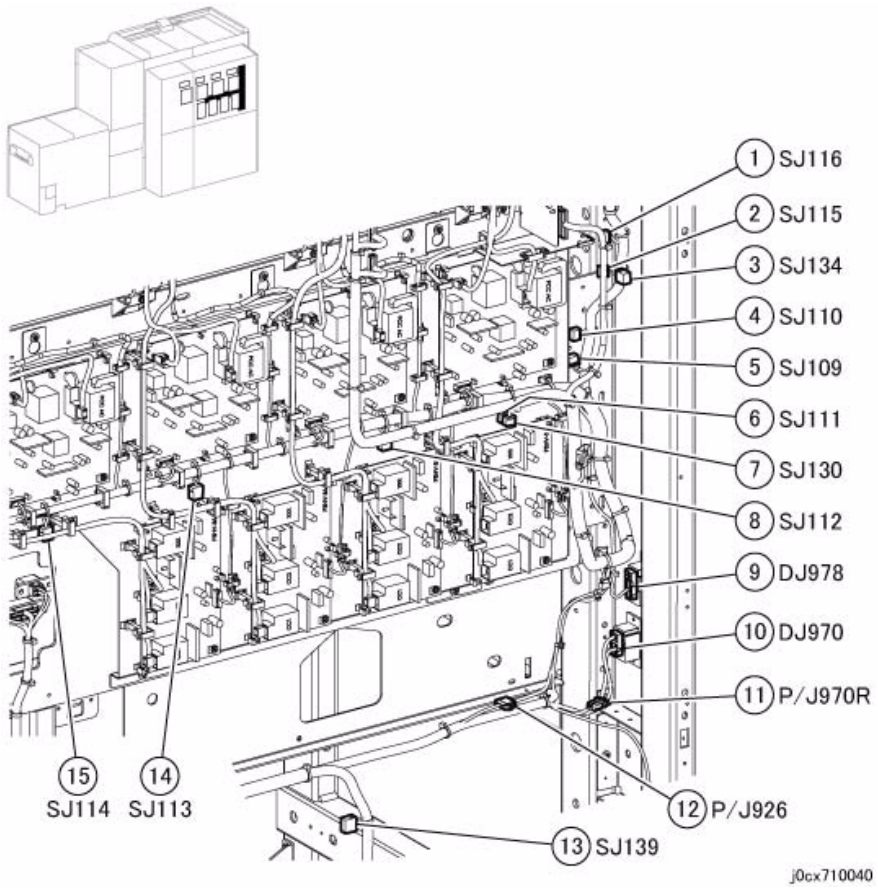


Figure 40 IOT-L REAR View_9 (j0cx710040)

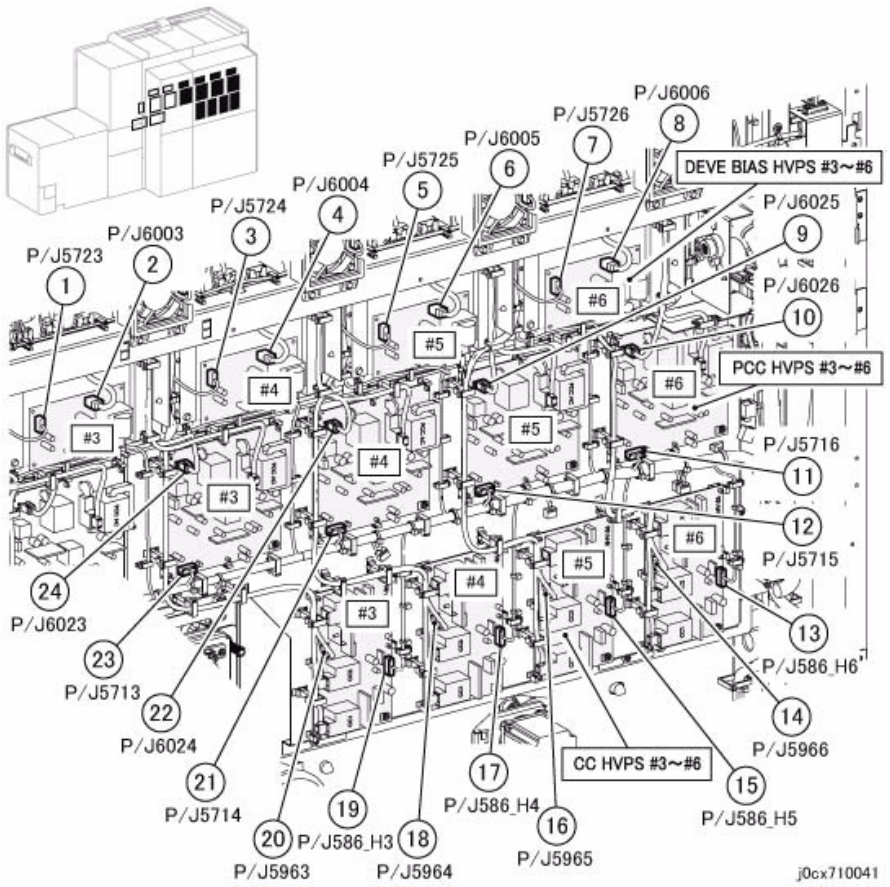


Figure 41 IOT-L REAR View_10 (j0cx710041)

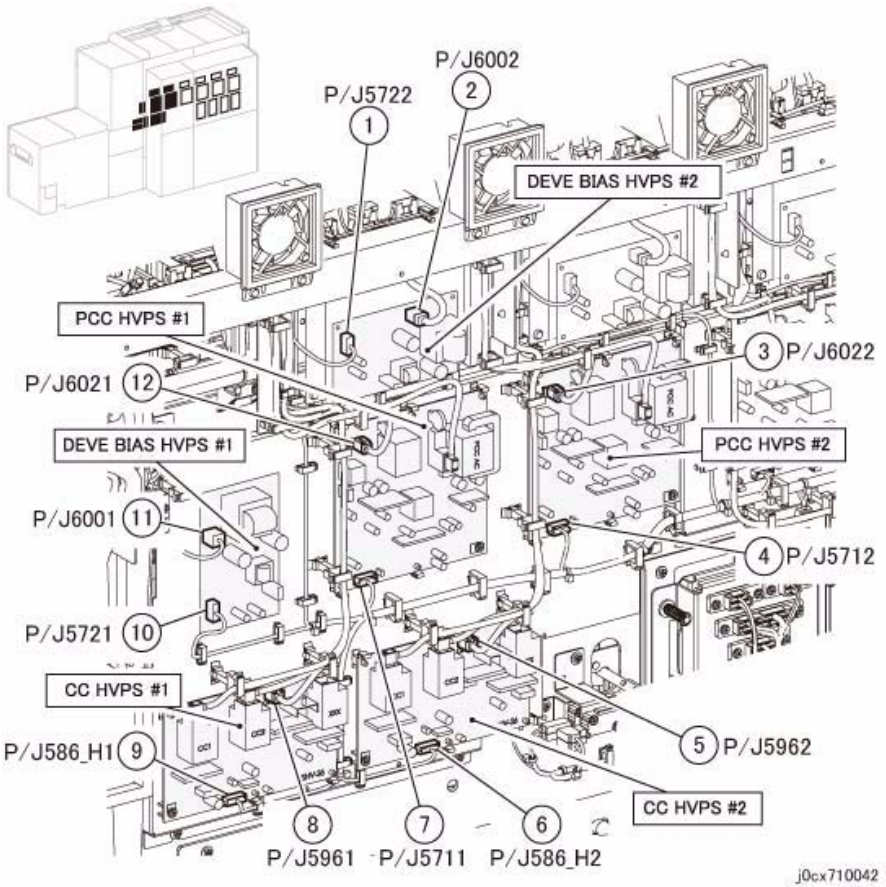


Figure 42 IOT-L REAR View_11 (j0cx710042)

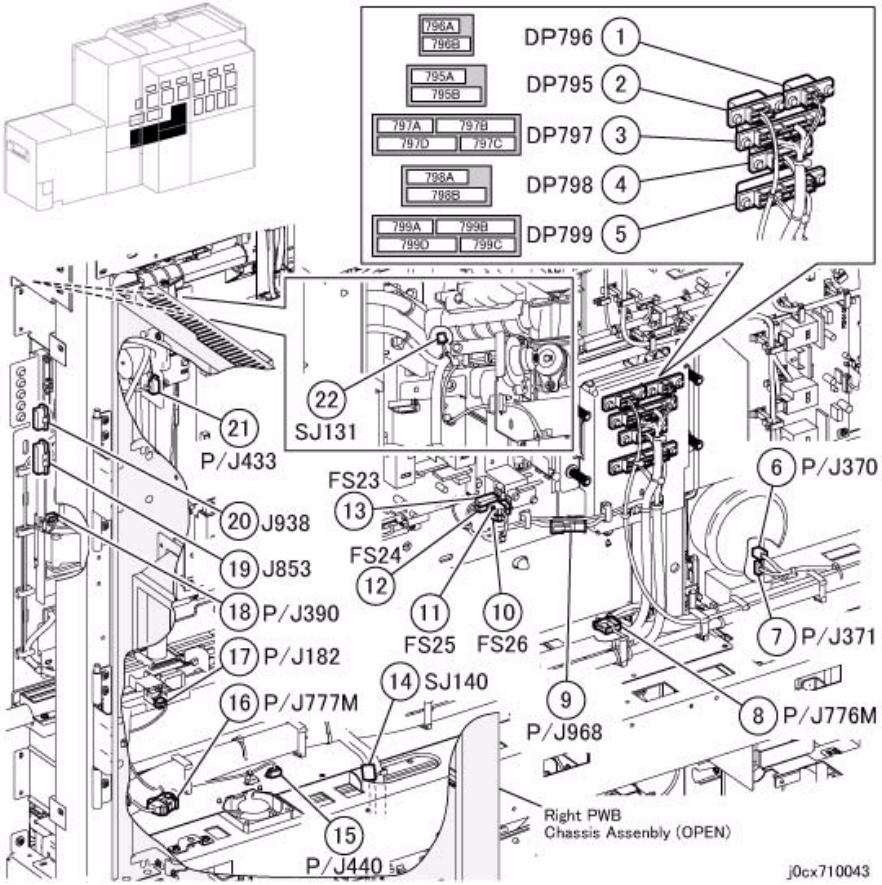


Figure 43 IOT-L REAR View_12 (j0cx710043)

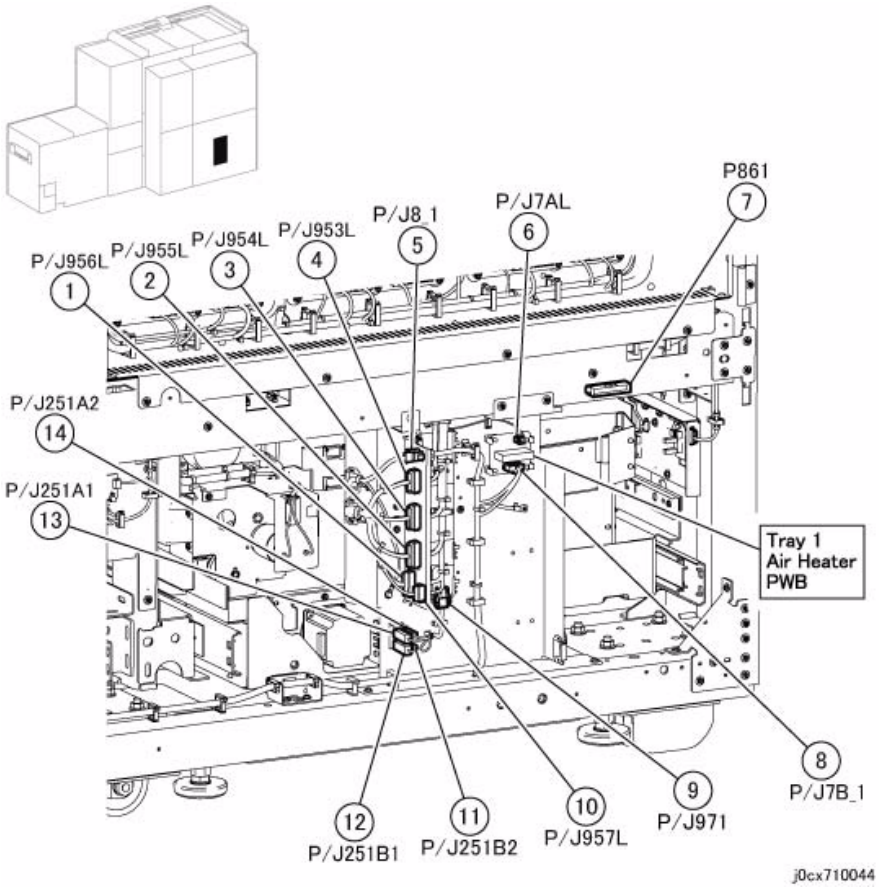


Figure 44 IOT-L REAR View_13 (j0cx710044)

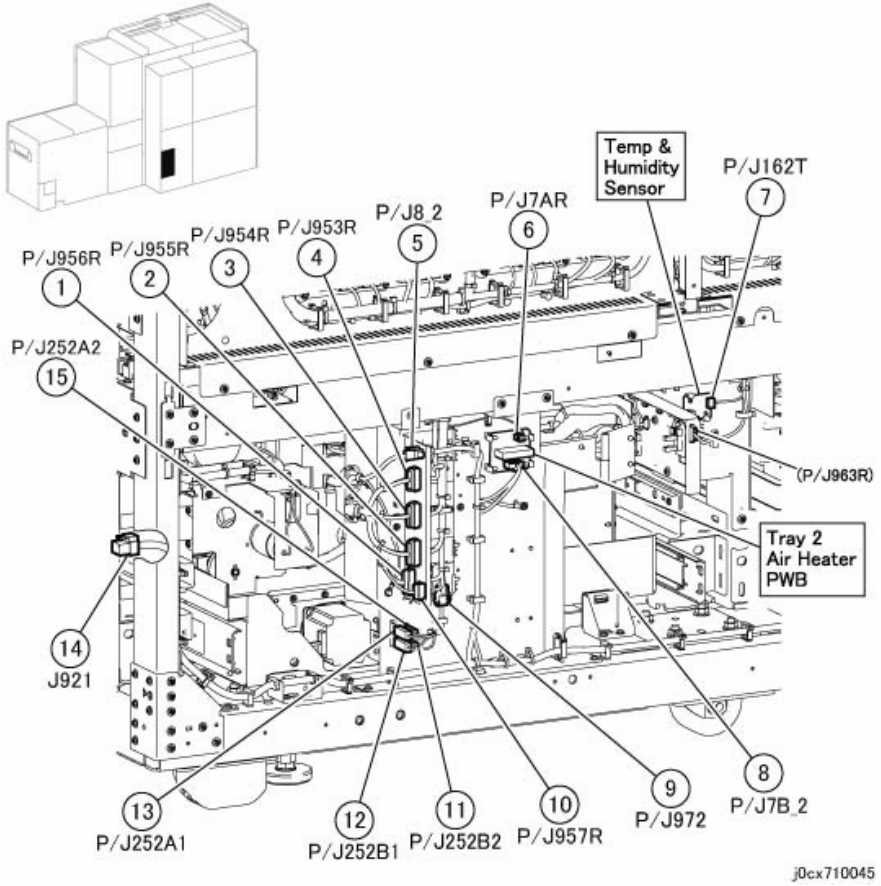


Figure 45 IOT-L REAR View_14 (j0cx710045)

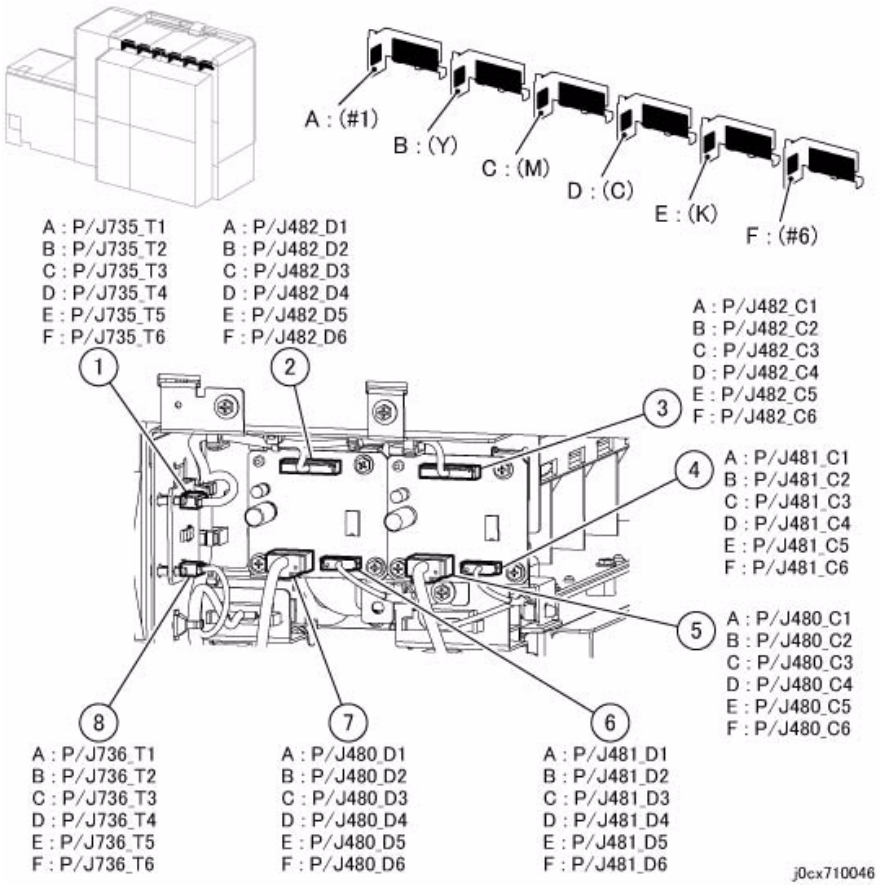


Figure 46 IOT-L REAR View_15 (j0cx710046)

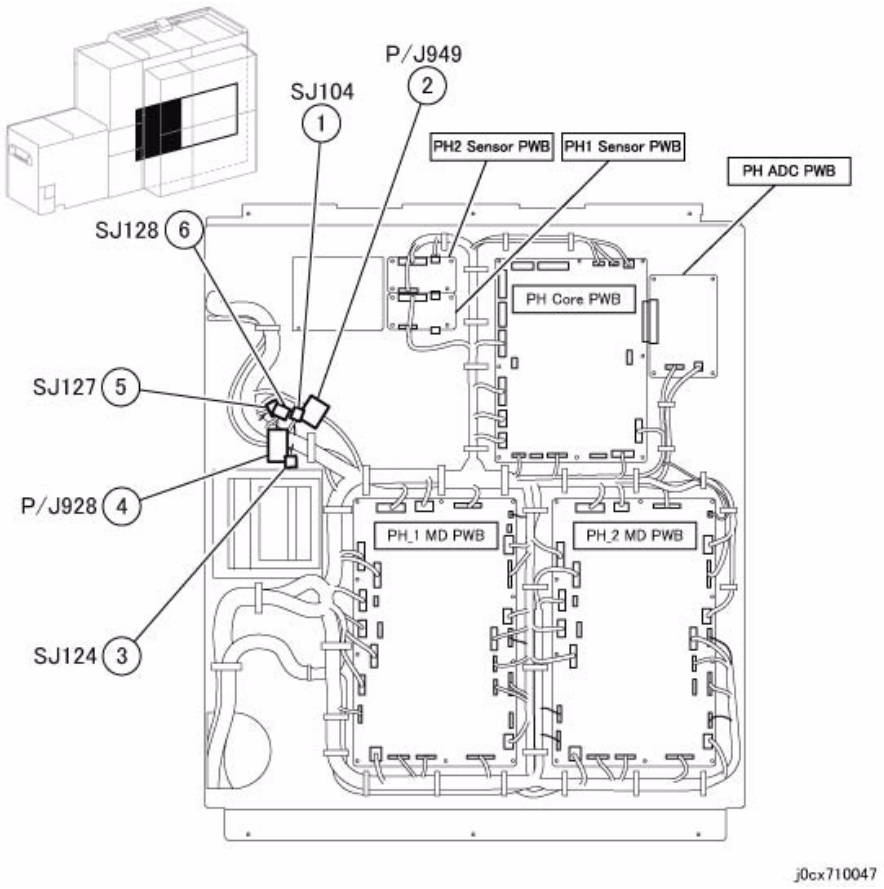


Figure 47 Right PWB Chassis Assembly_1 (j0cx710047)

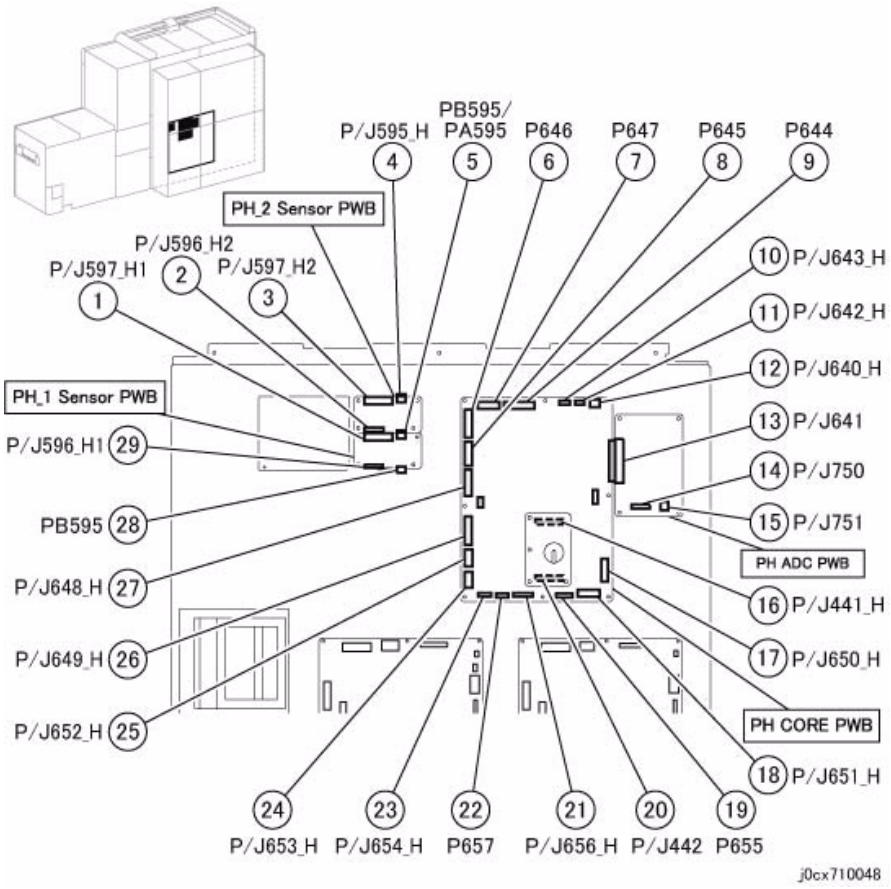


Figure 48 Right PWB Chassis Assembly_2 (j0cx710048)

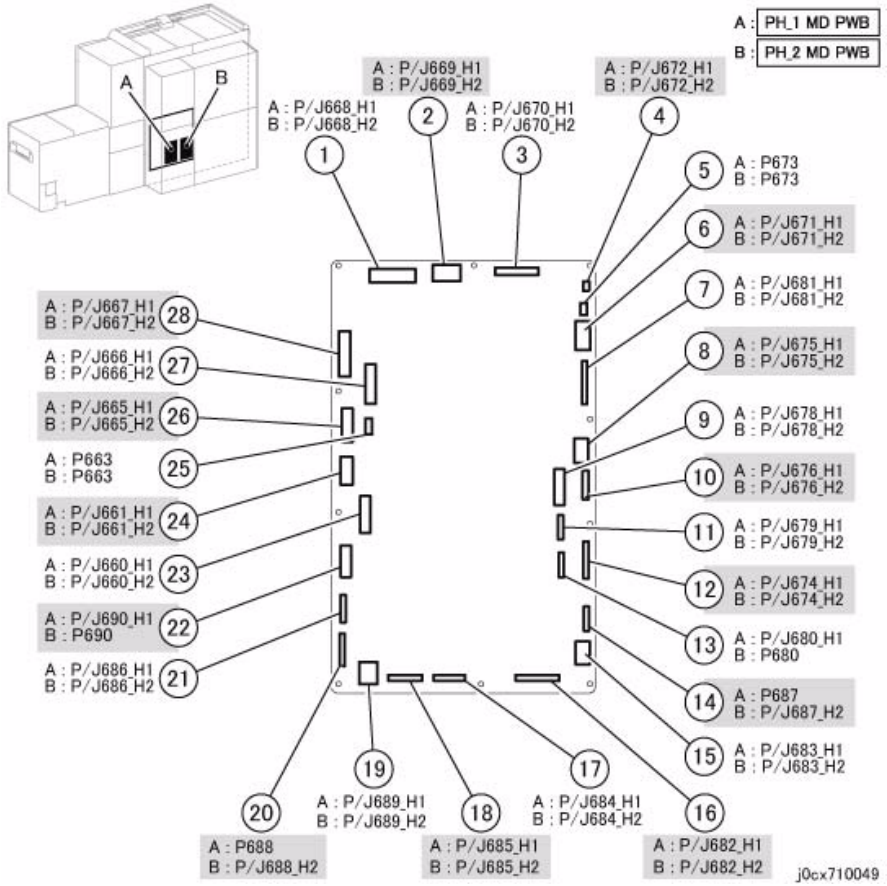


Figure 49 Right PWB Chassis Assembly_3 (j0cx710049)

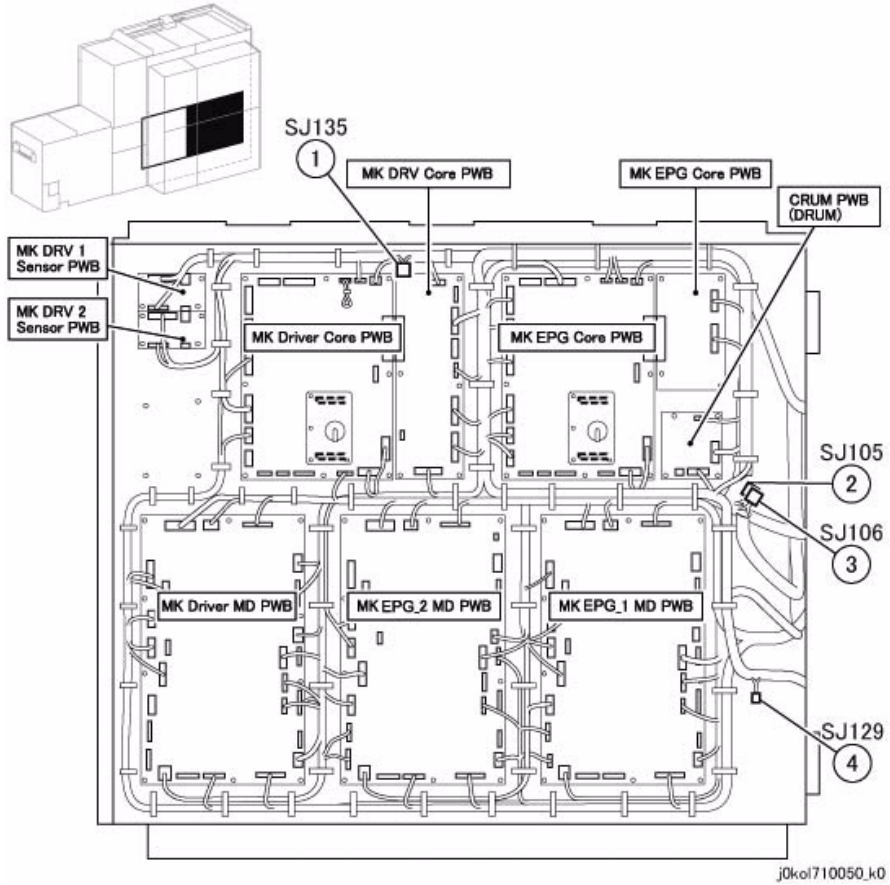


Figure 50 Left PWB Chassis Assembly_1 (j0kol710050_k0)

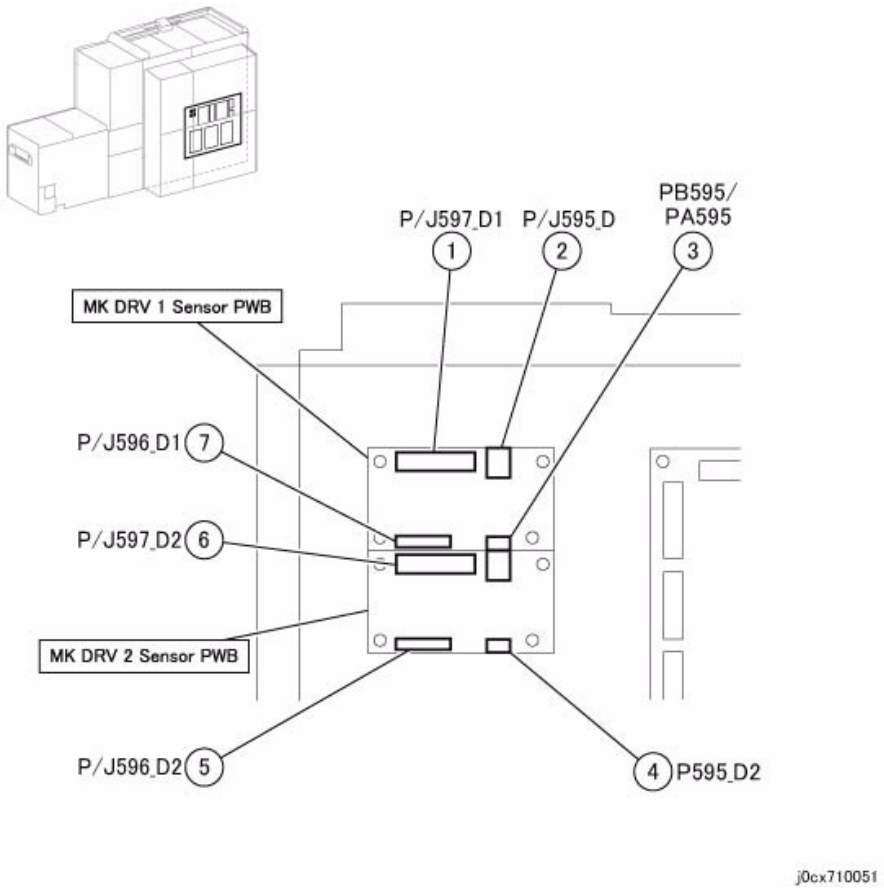


Figure 51 Left PWB Chassis Assembly_2 (j0cx710051)

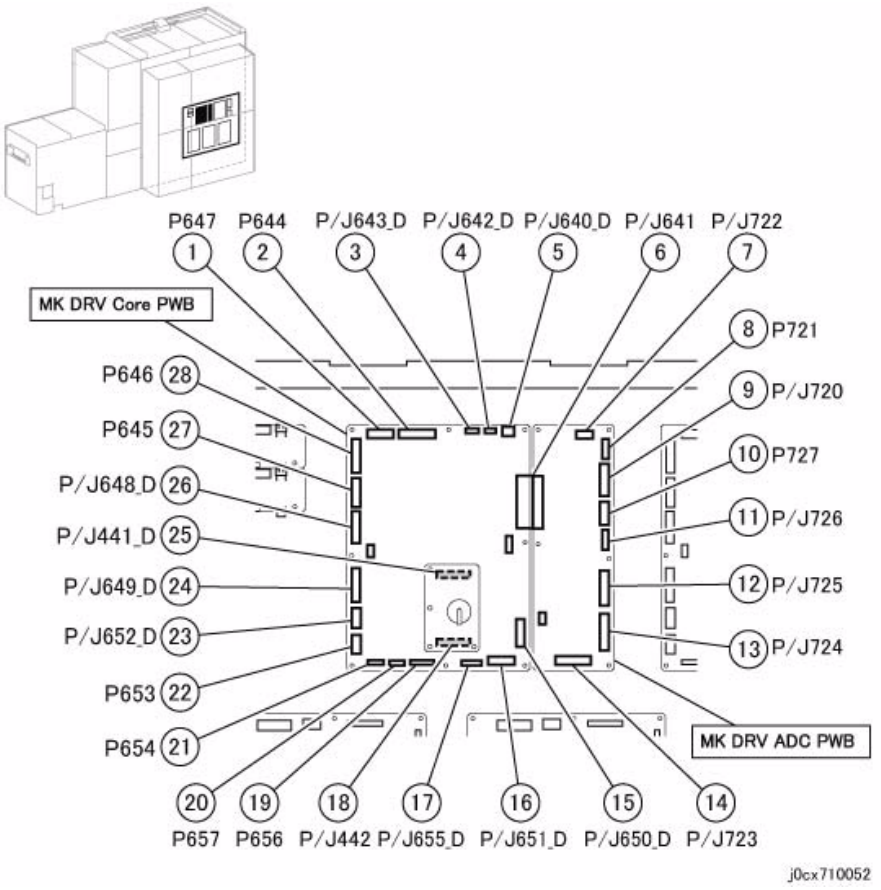


Figure 52 Left PWB Chassis Assembly_3 (j0cx710052)

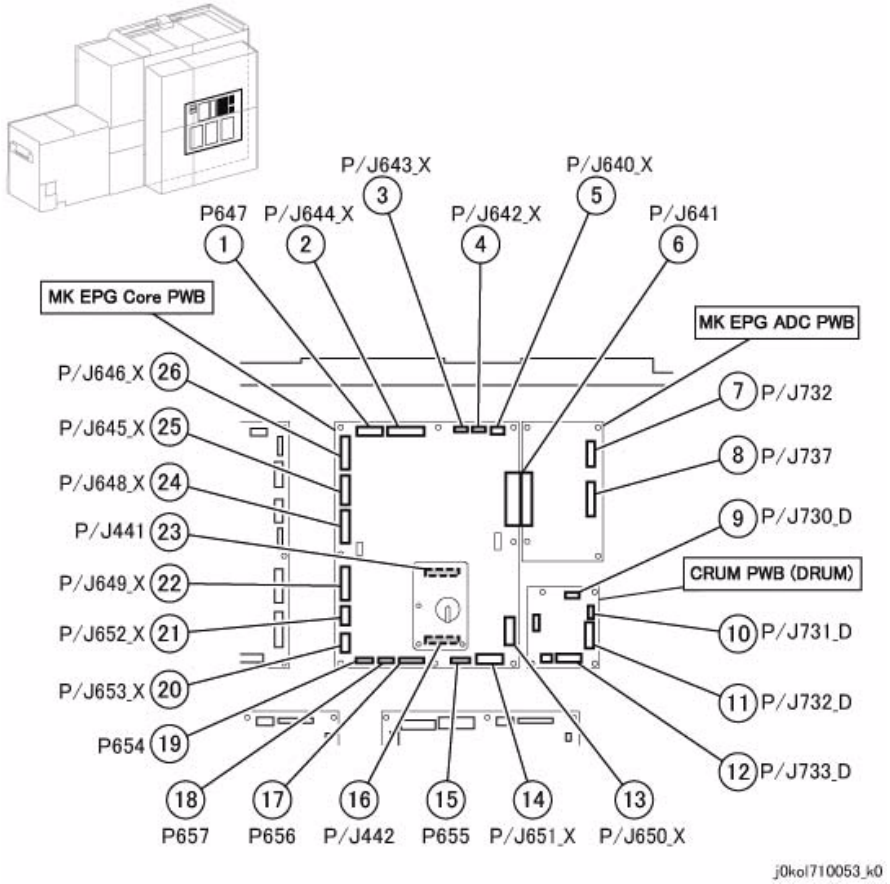


Figure 53 Left PWB Chassis Assembly_4 (j0kol710053_k0)

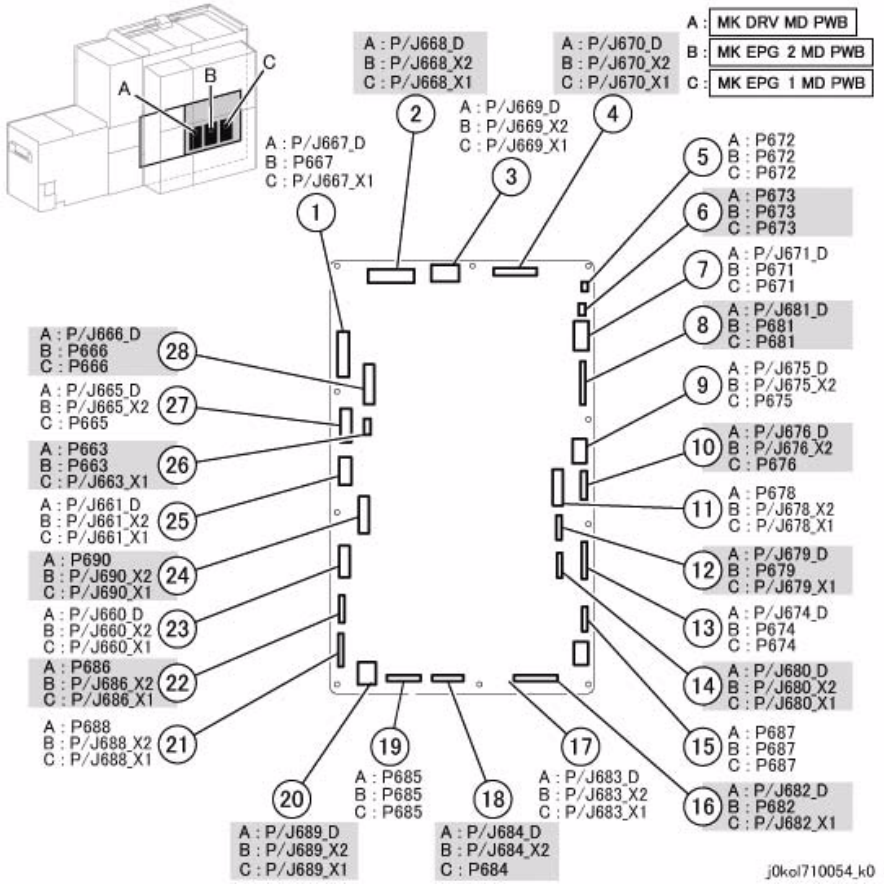


Figure 54 Left PWB Chassis Assembly_5 (j0kol710054_k0)

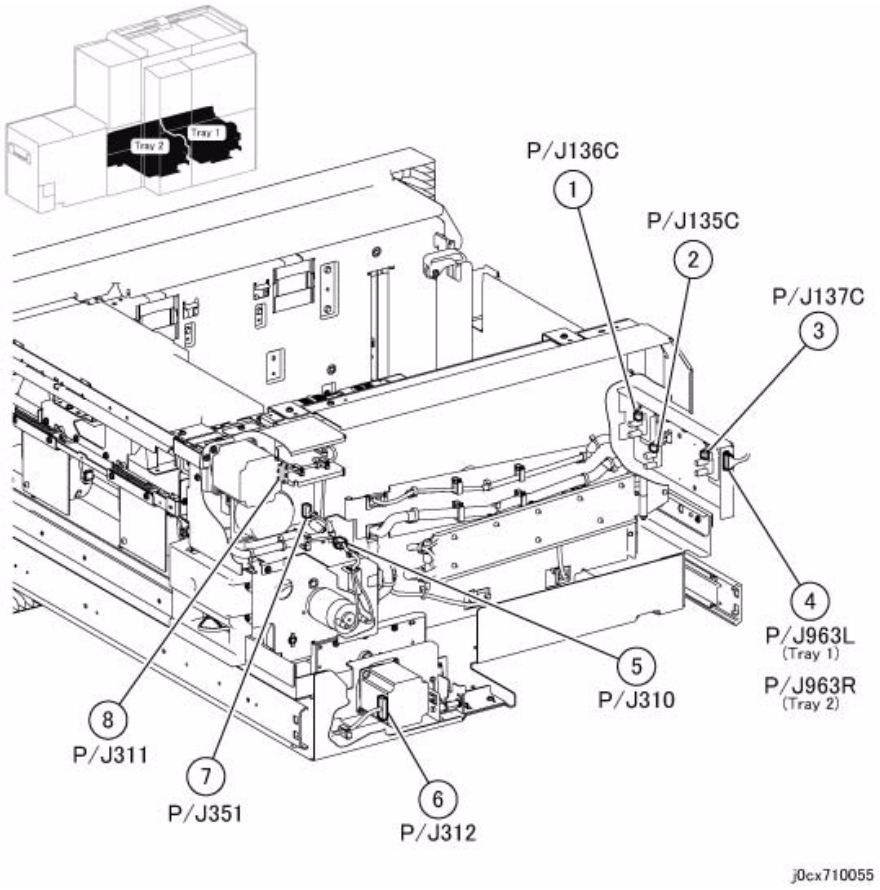


Figure 55 IOT Tray 1/2 Rear View (j0cx710055)

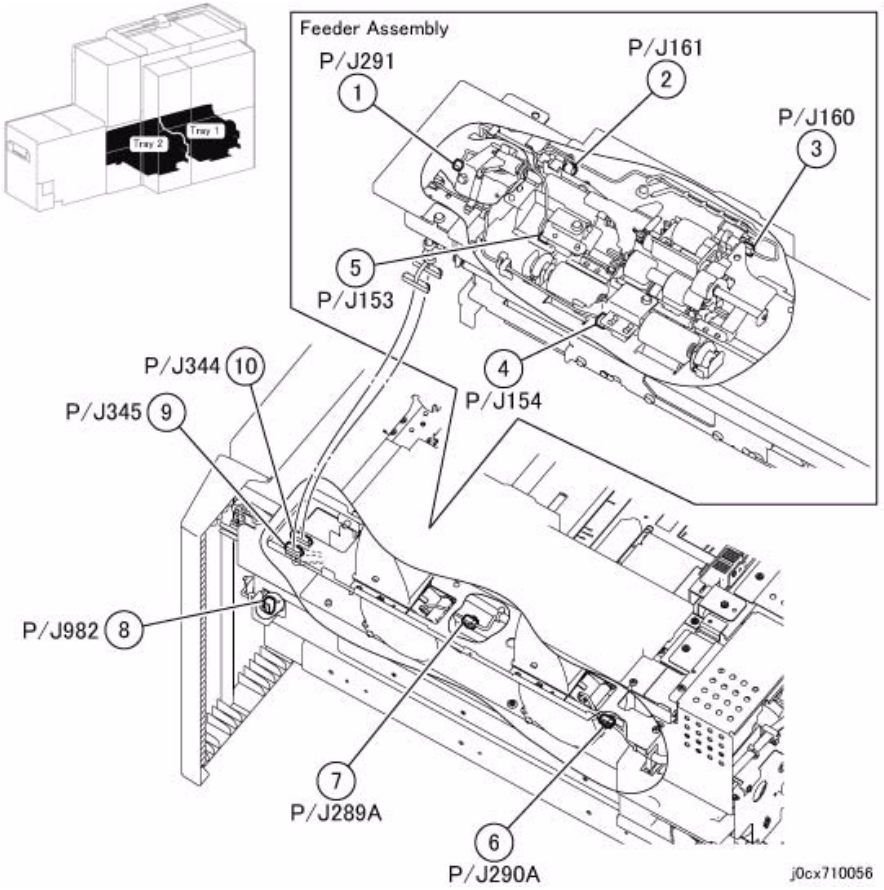


Figure 56 IOT Tray 1/2 Right View / Feeder Assembly (j0cx710056)

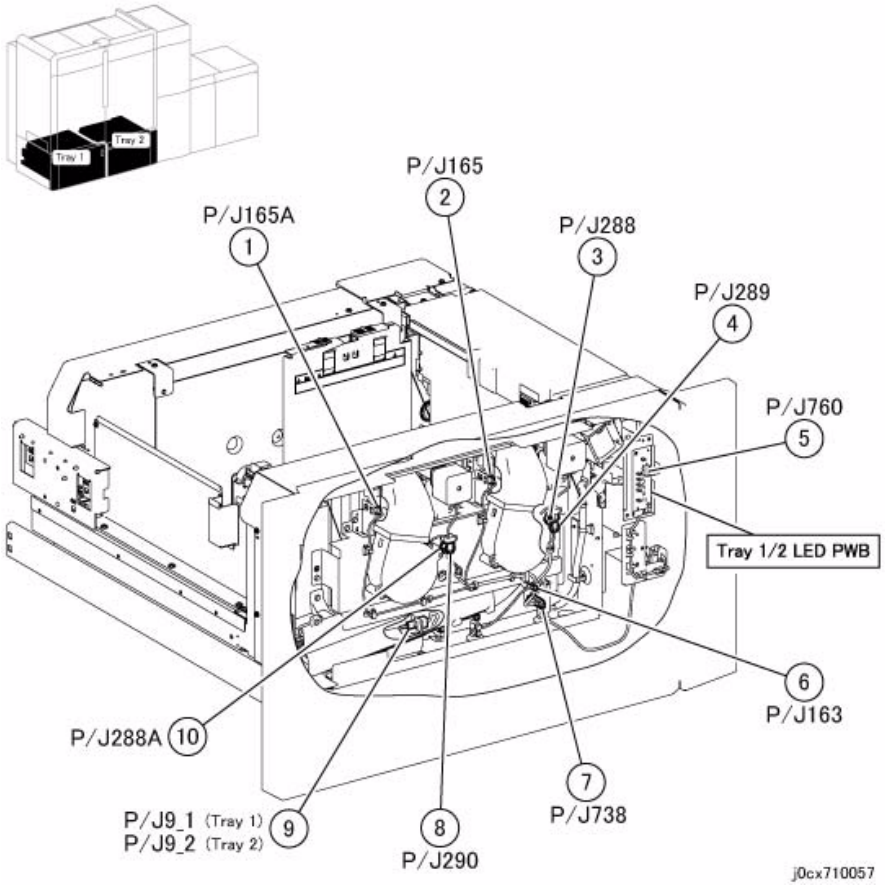


Figure 57 IOT Tray 1/2 Front View (j0cx710057)

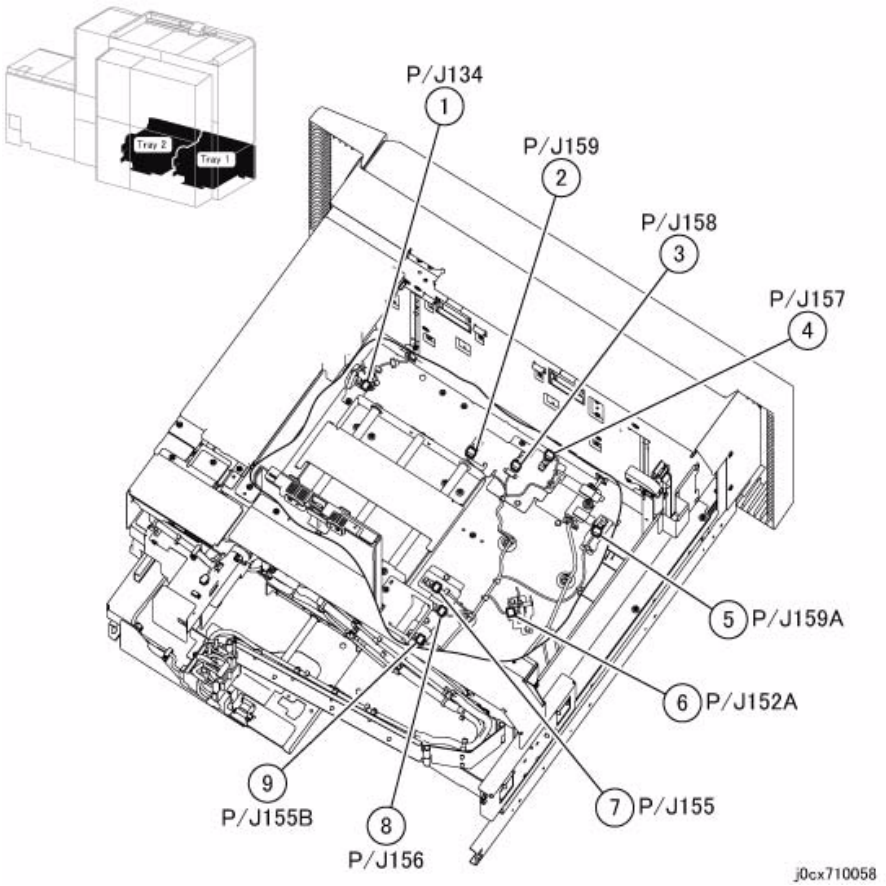


Figure 58 IOT Tray 1/2 Top View (j0cx710058)

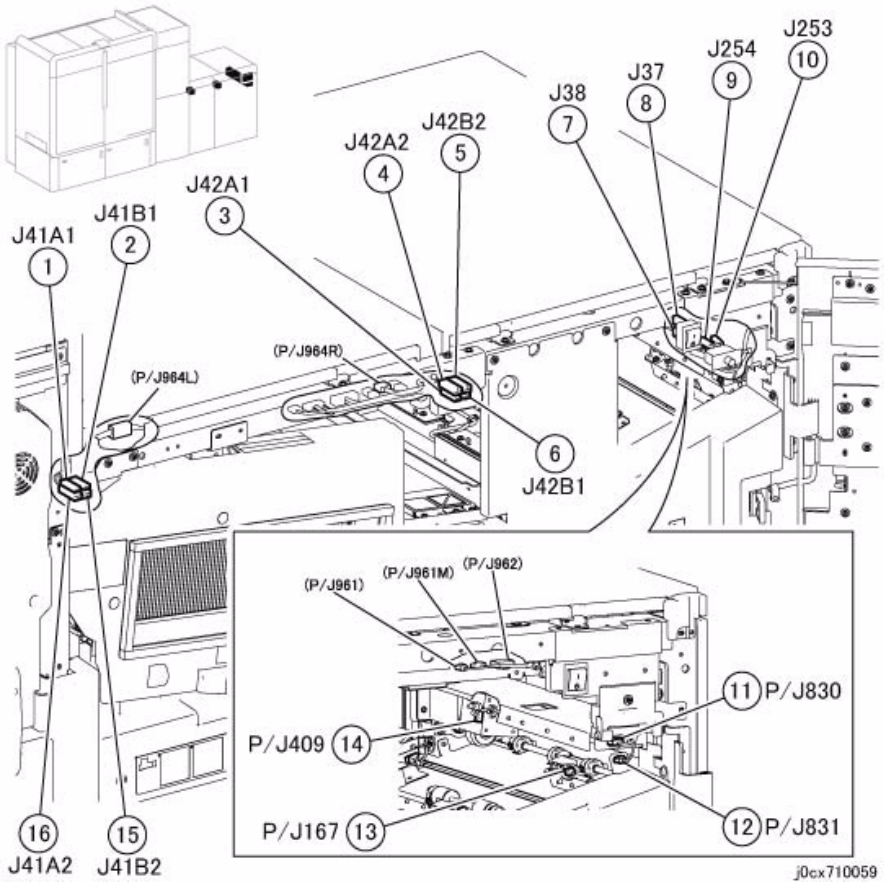


Figure 59 IOT-R Front View (j0cx710059)

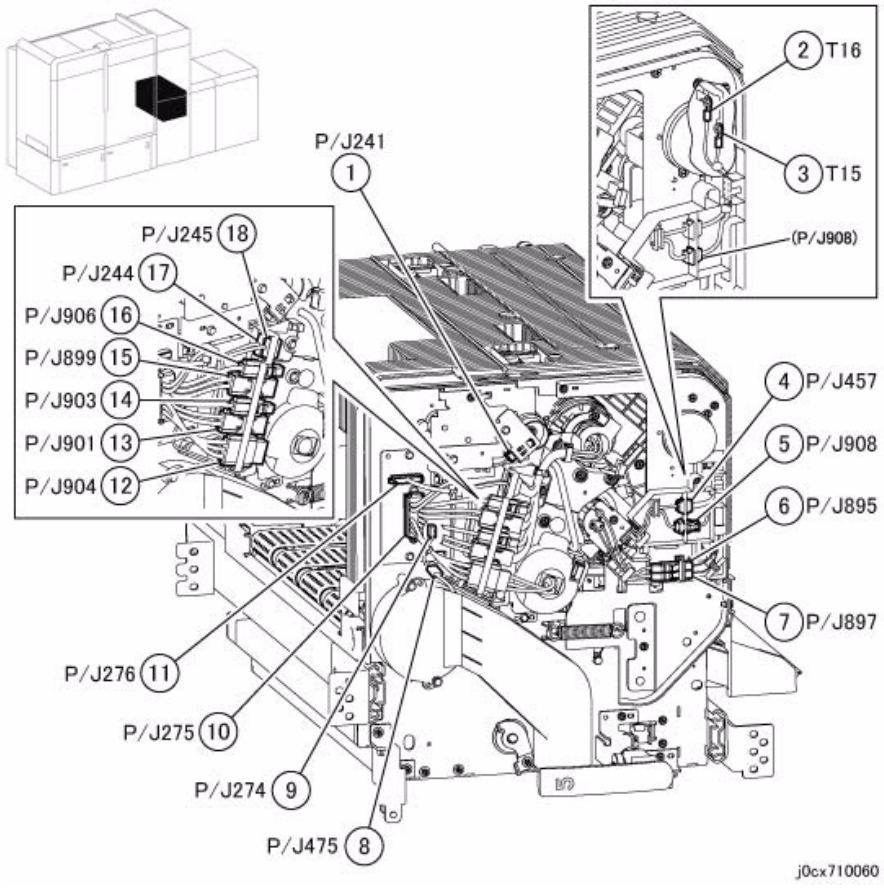


Figure 60 Fusing Assembly_1 (j0cx710060)

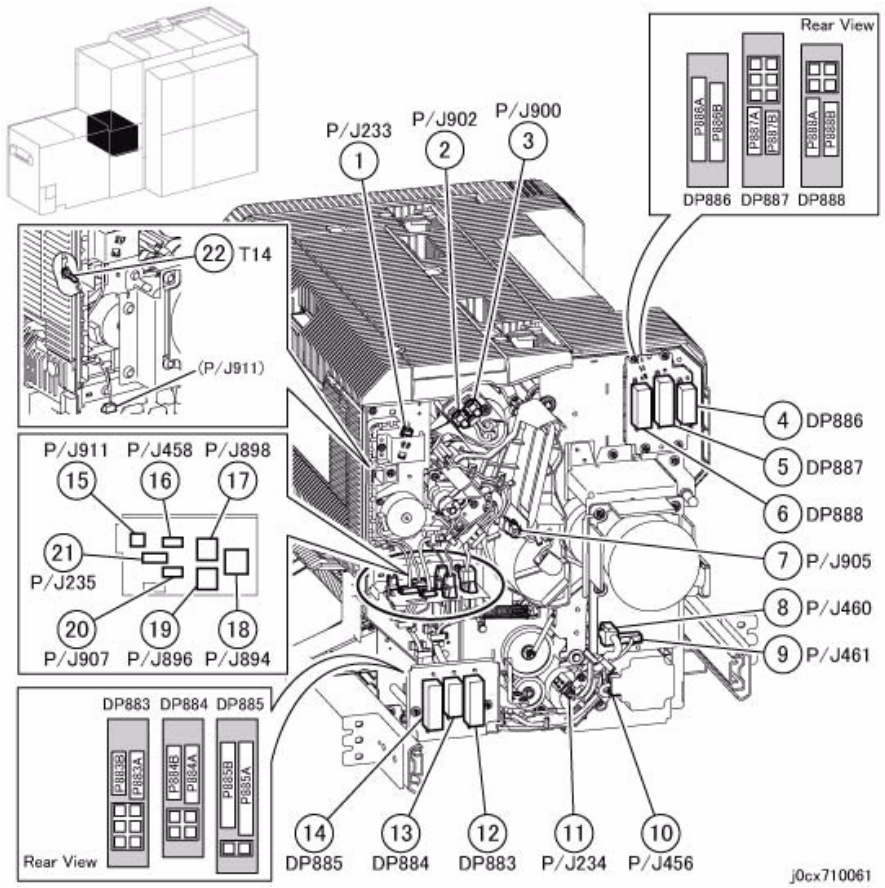


Figure 61 Fusing Assembly_2 (j0cx710061)

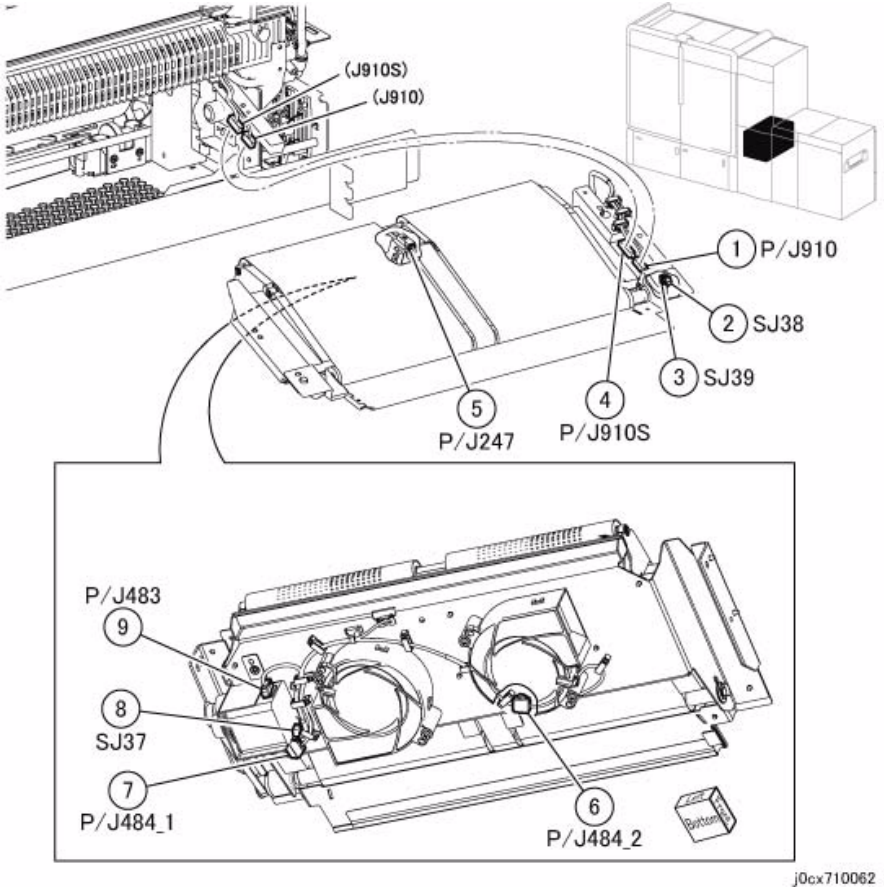


Figure 62 Fusing Assembly_3 (j0cx710062)

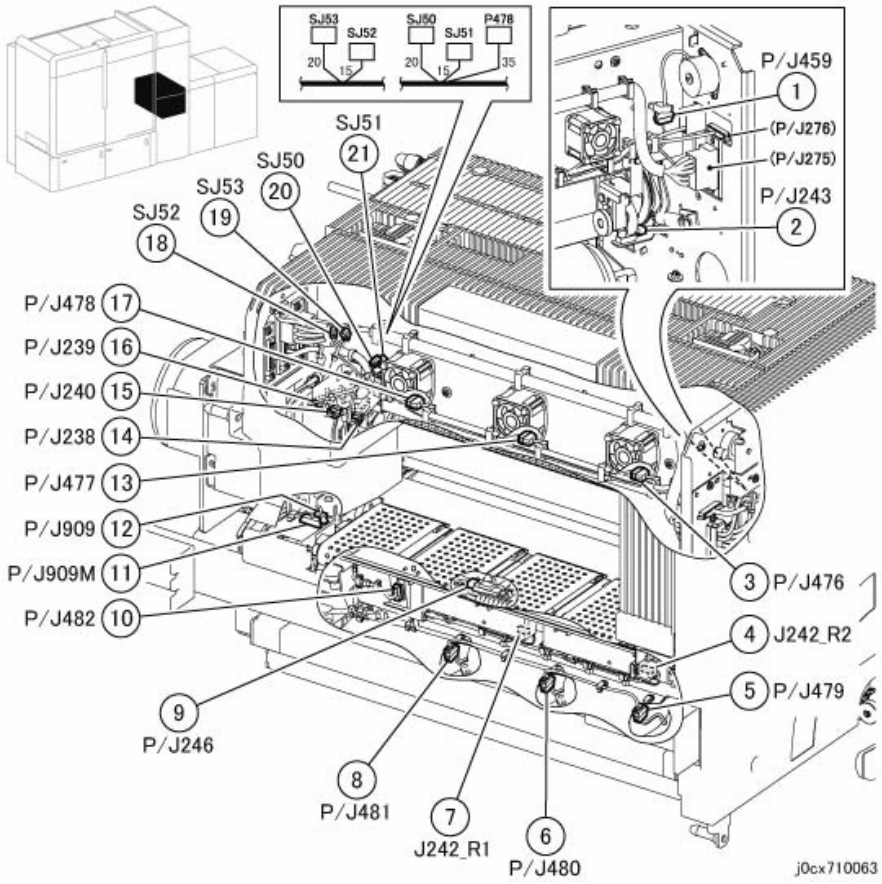


Figure 63 Fusing Assembly_4 (j0cx710063)

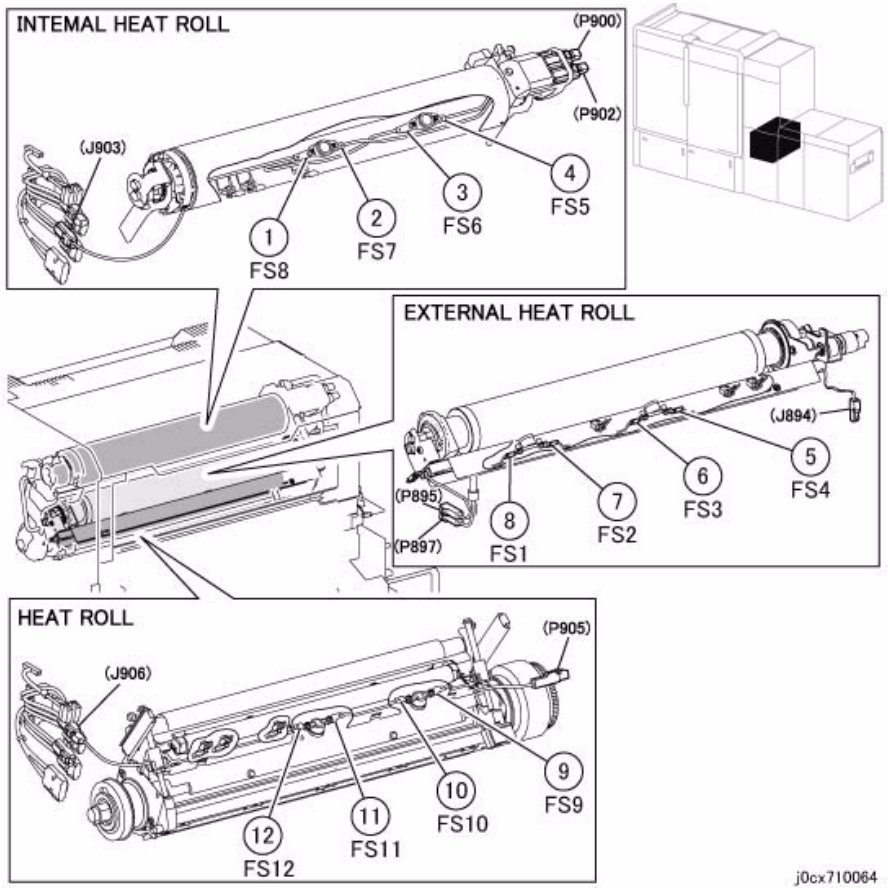


Figure 64 Fusing Assembly_5 (j0cx710064)

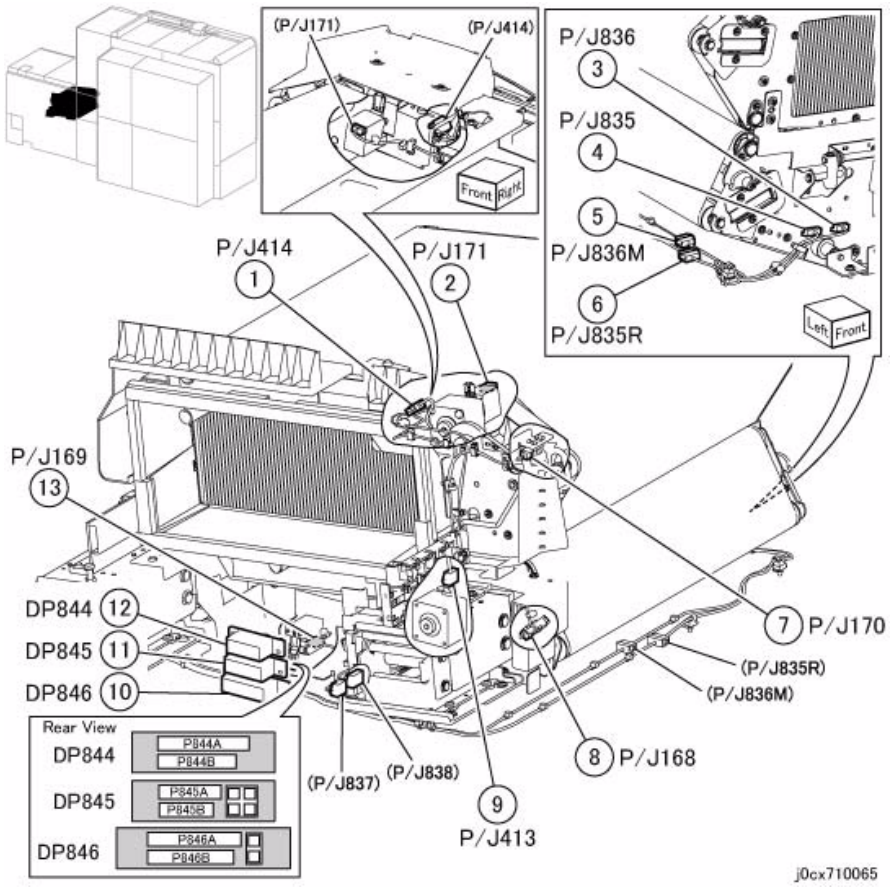


Figure 65 Fusing Cooling Assembly (j0cx710065)

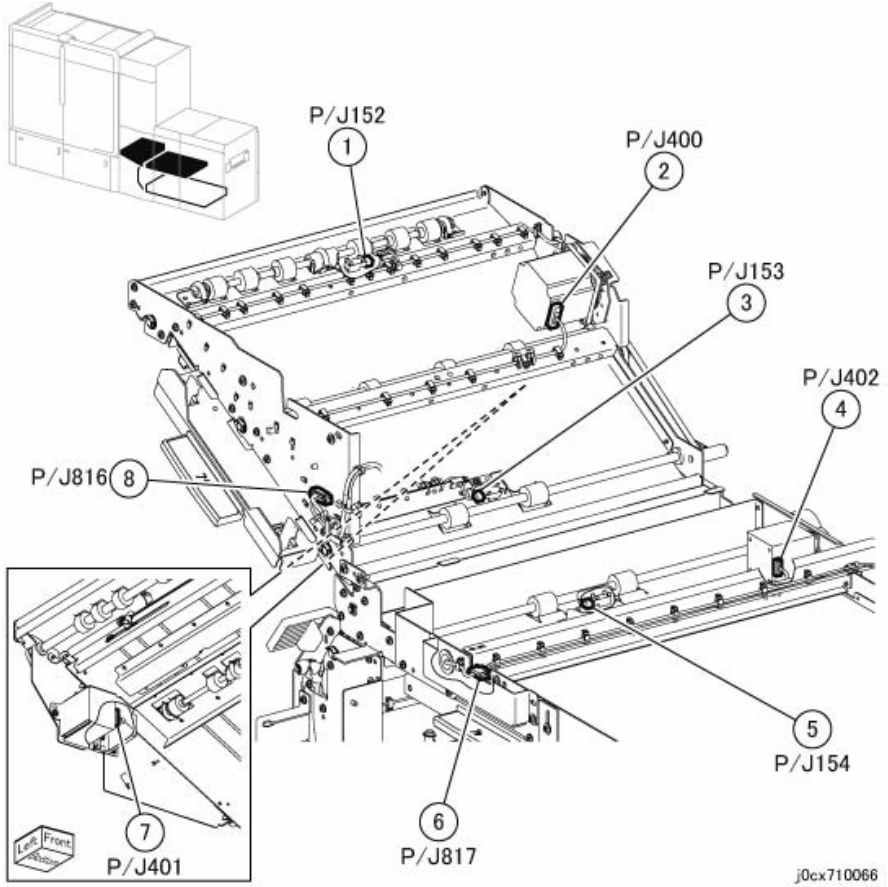


Figure 66 DUP Transport Assembly (j0cx710066)

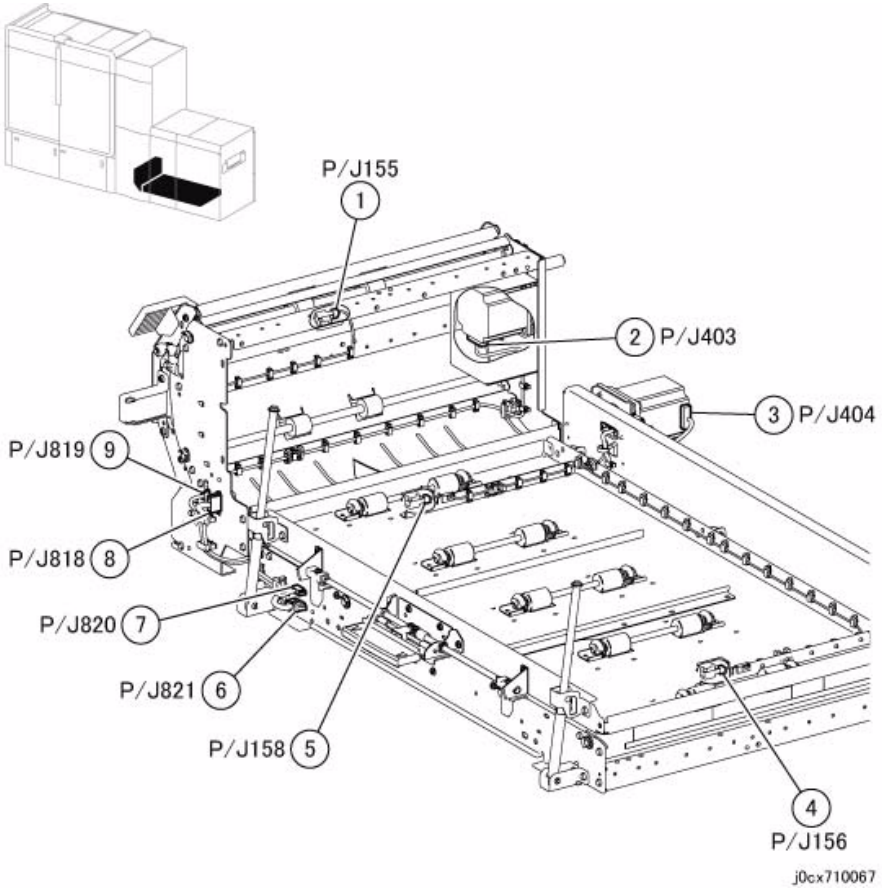


Figure 67 D-Transport Assembly / DUP INV (j0cx710067)

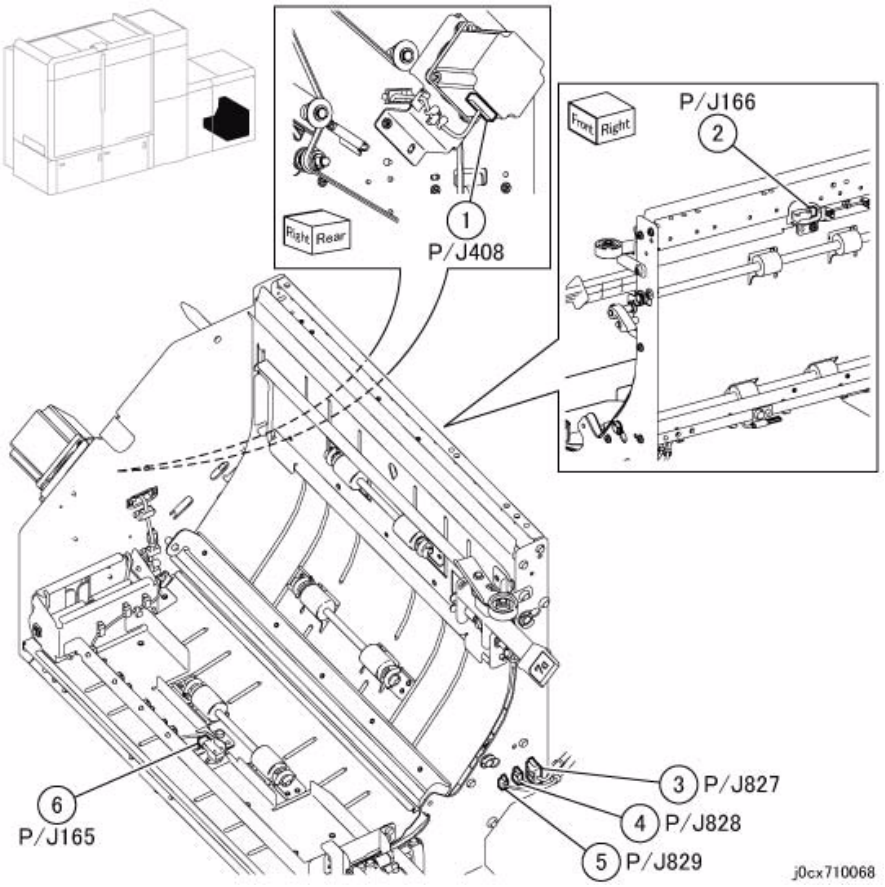


Figure 68 INV 2 Transport Assembly (j0cx710068)

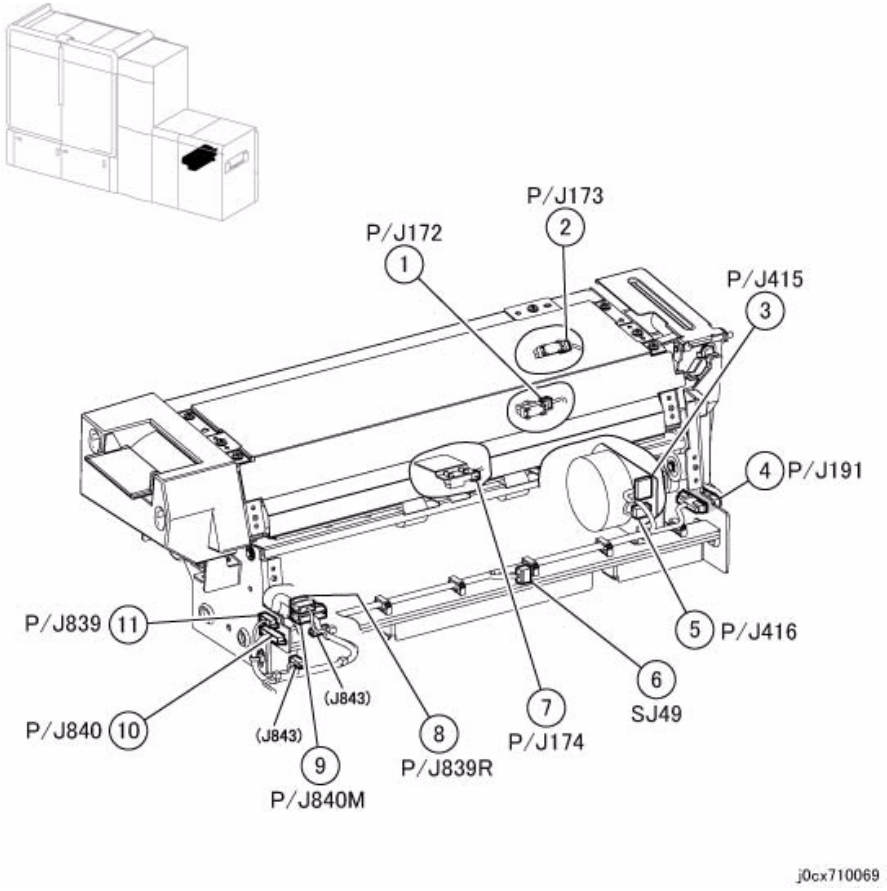


Figure 69 Decurl Assembly (j0cx710069)

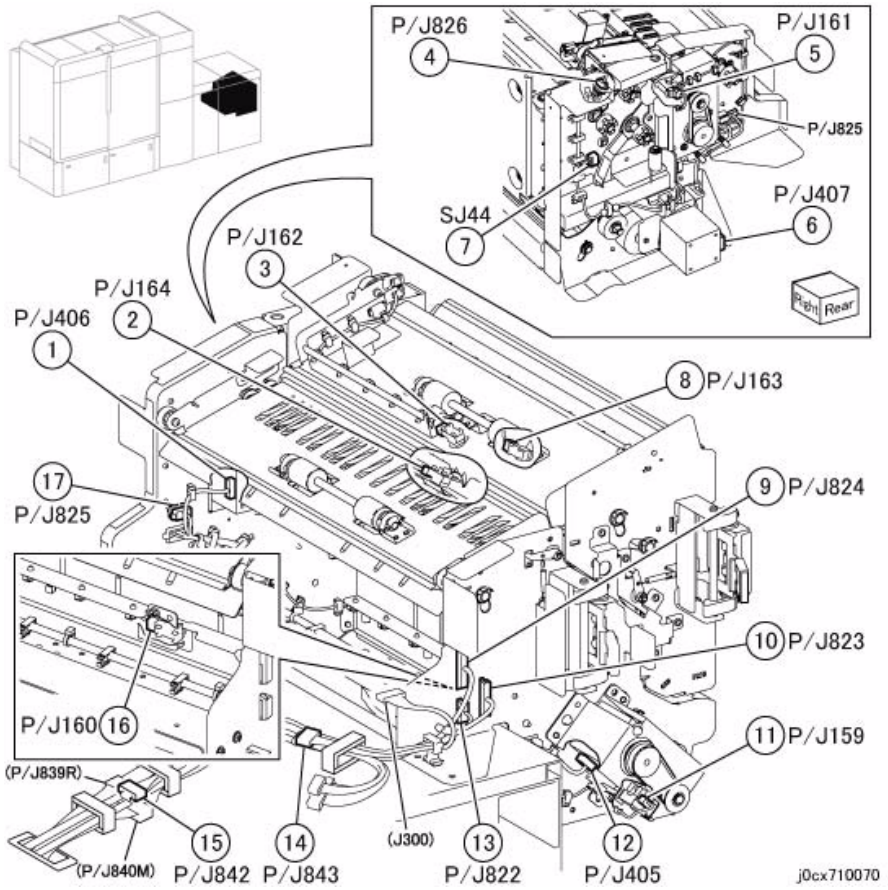


Figure 70 INV 1 Transport Assembly (j0cx710070)

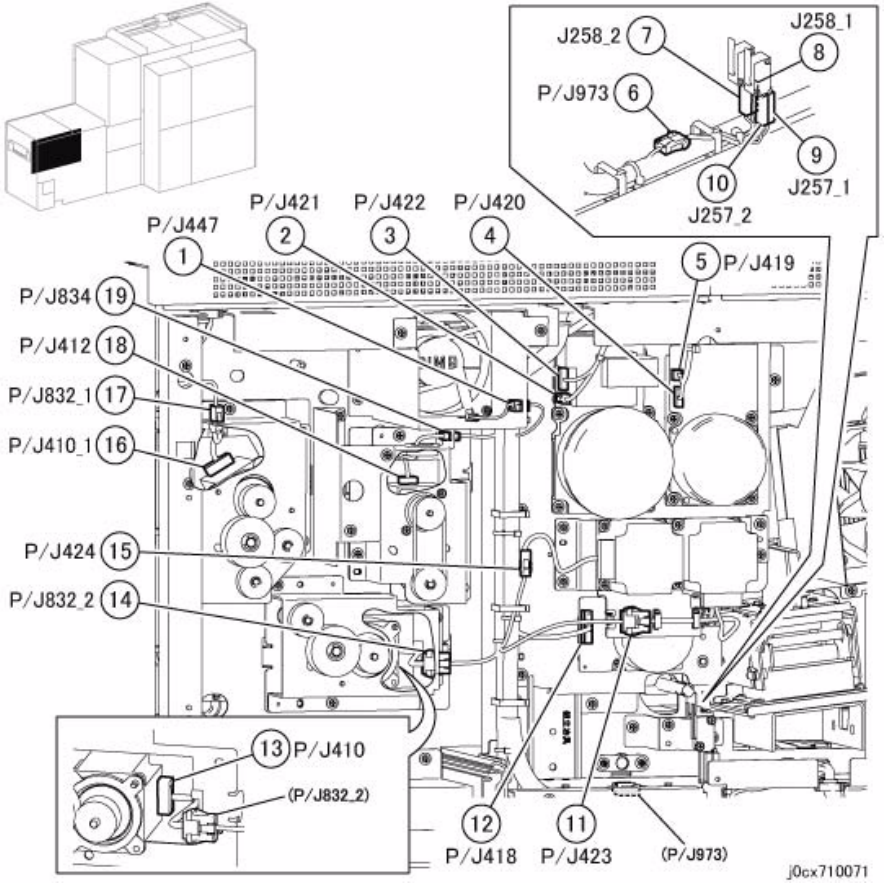


Figure 71 IOT-R REAR View_1 (j0cx710071)

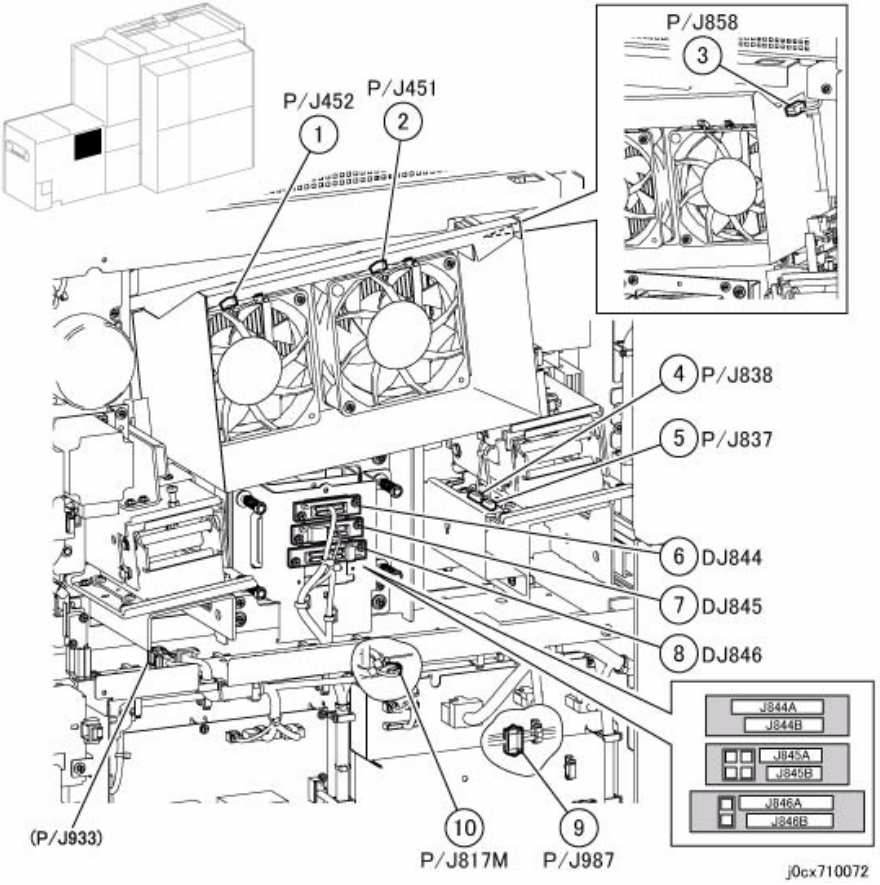


Figure 72 IOT-R REAR View_2 (j0cx710072)

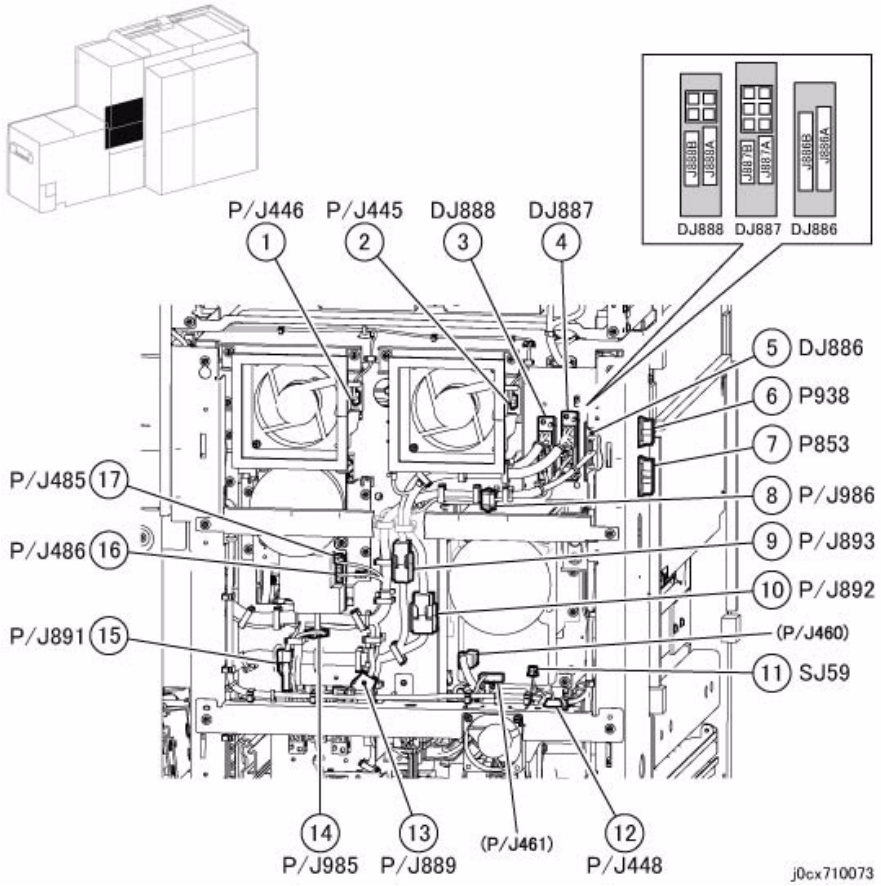


Figure 73 IOT-R REAR View_3 (j0cx710073)

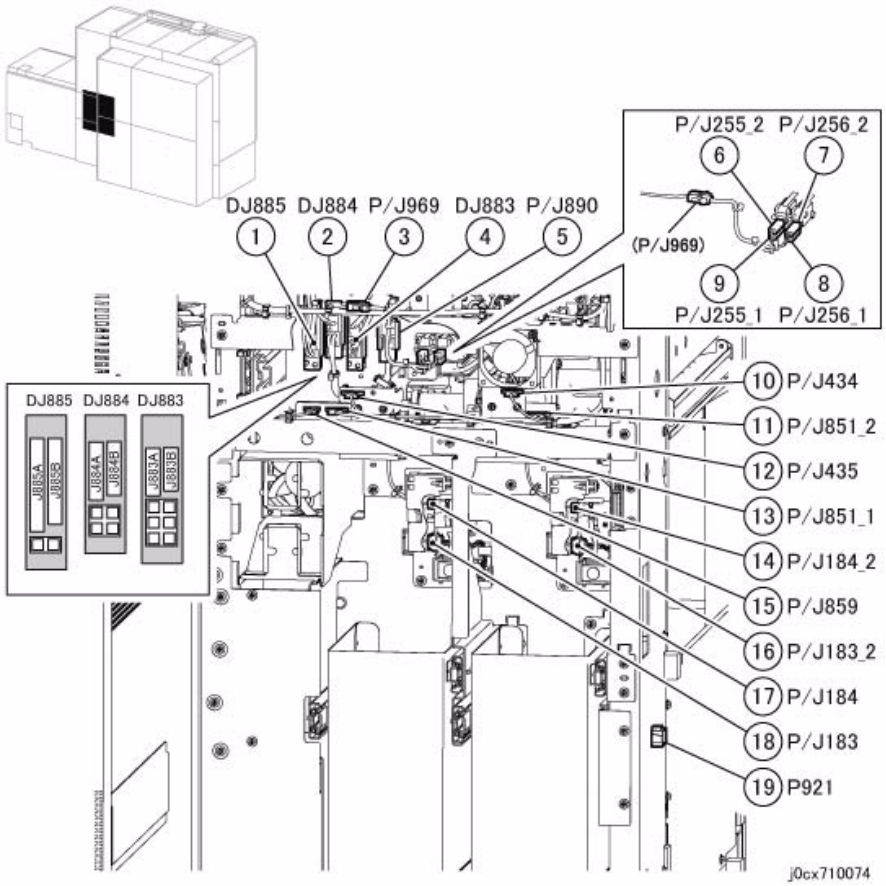


Figure 74 IOT-R REAR View_4 (j0cx710074)

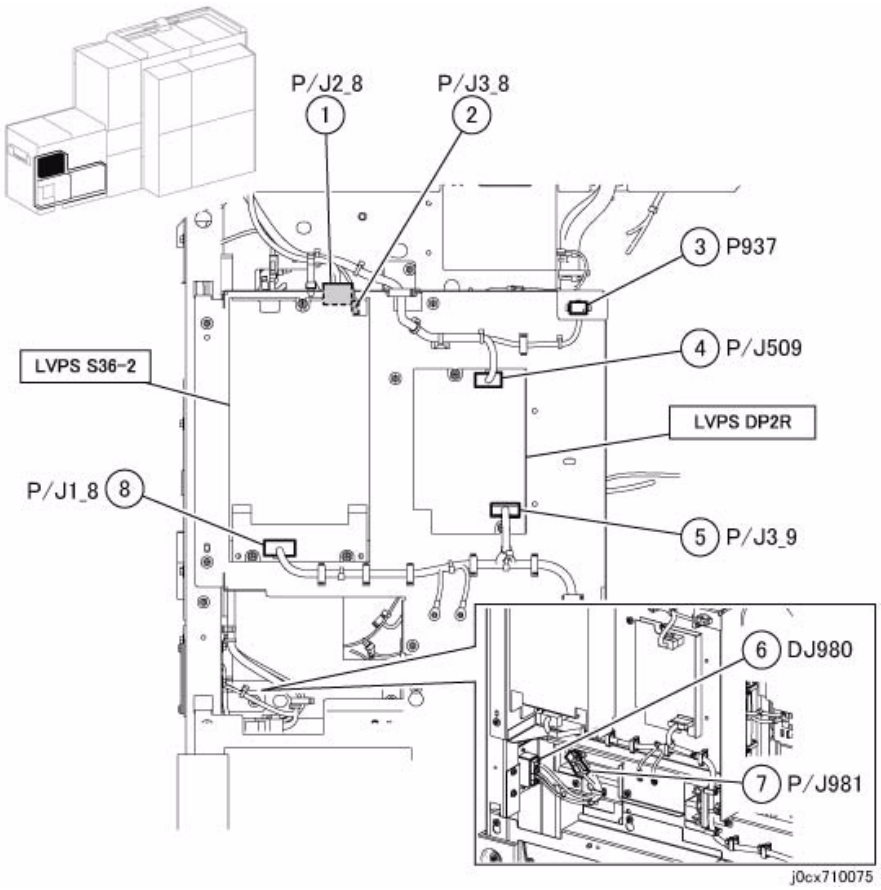


Figure 75 IOT-R REAR View_5 (j0cx710075)

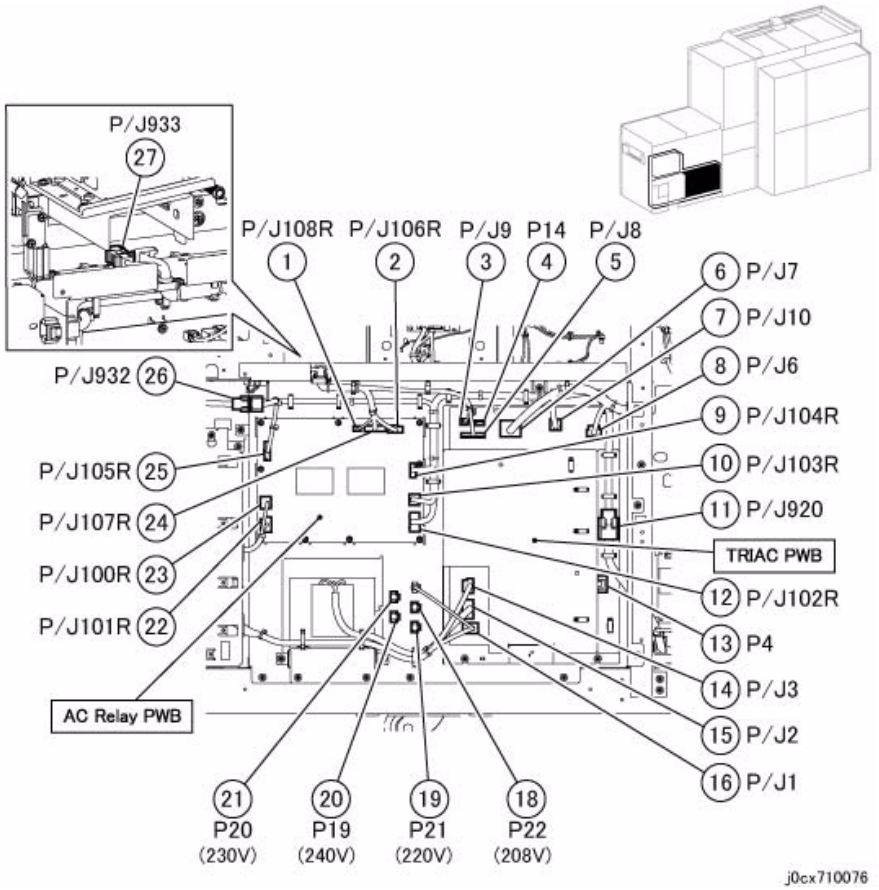


Figure 76 IOT-R REAR View_6 (j0cx710076)

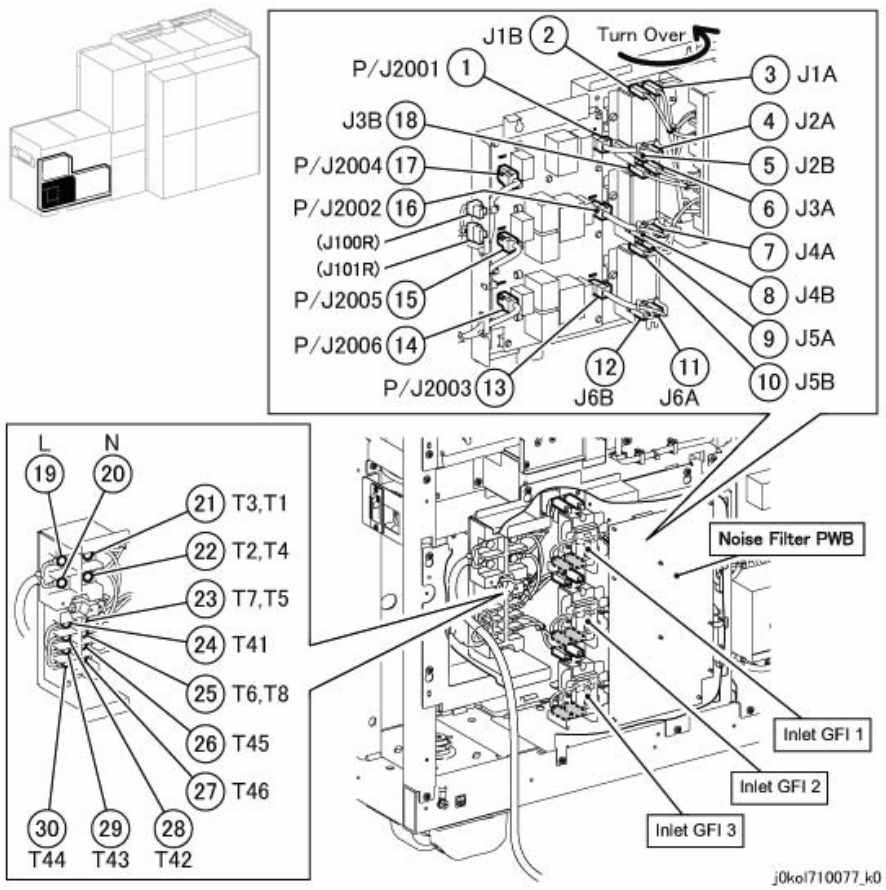


Figure 77 IOT-R REAR View_7 (j0kol710077_k0)

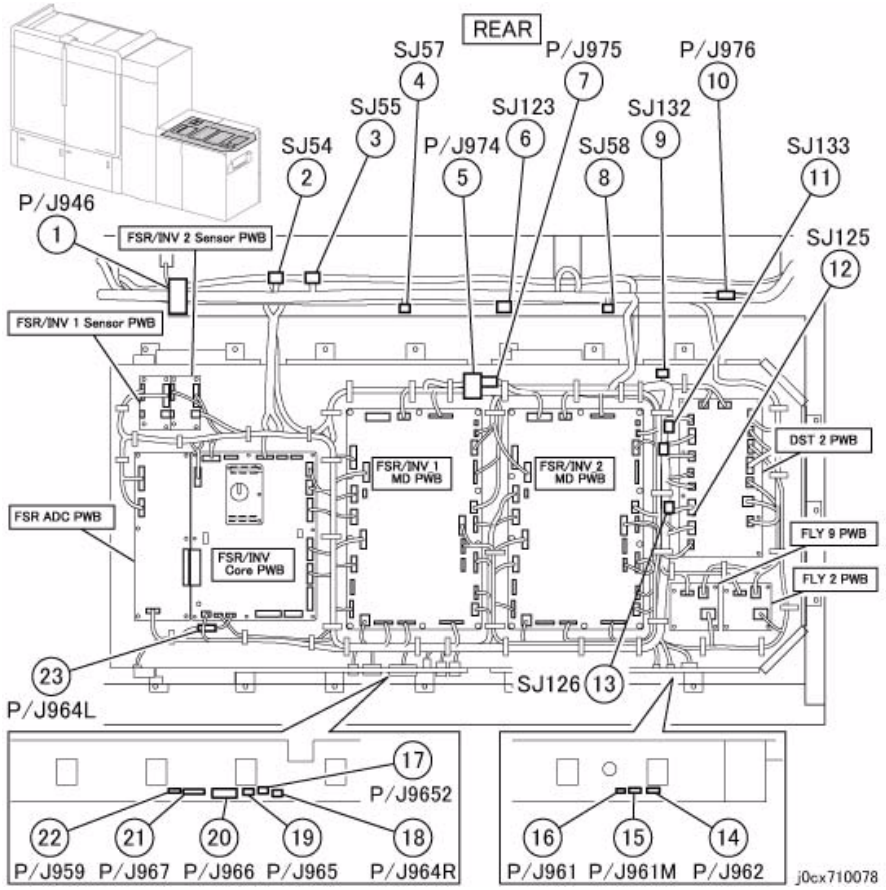


Figure 78 MCU Assembly_1 (j0cx710078)

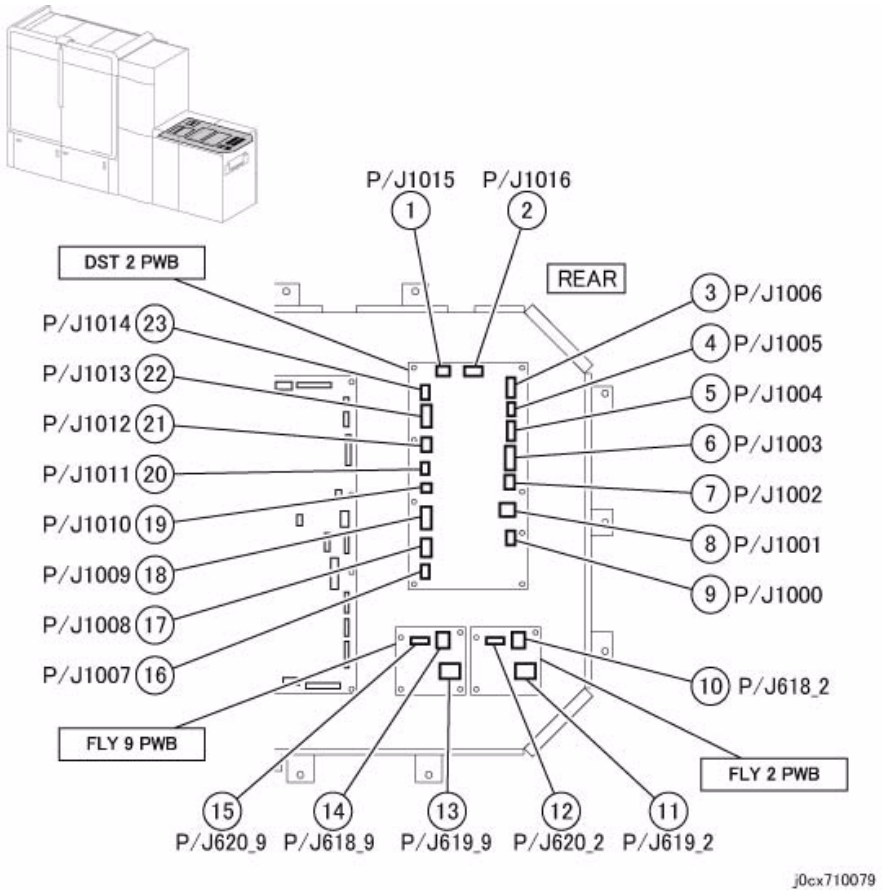


Figure 79 MCU Assembly_2 (j0cx710079)

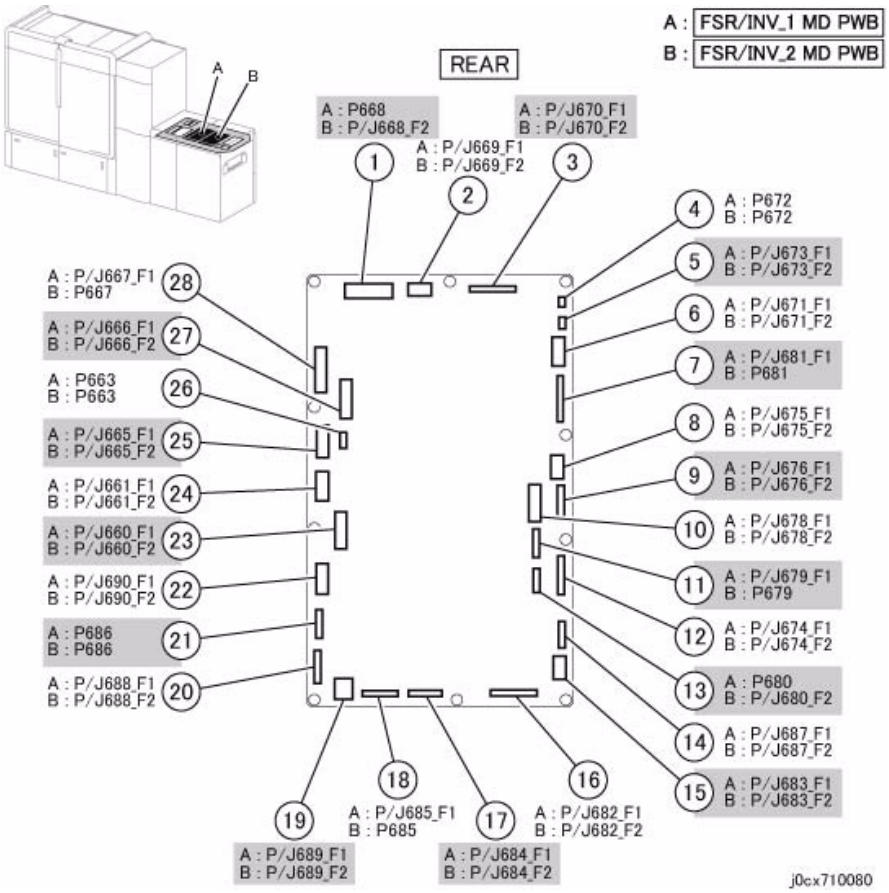


Figure 80 MCU Assembly_3 (j0cx710080)

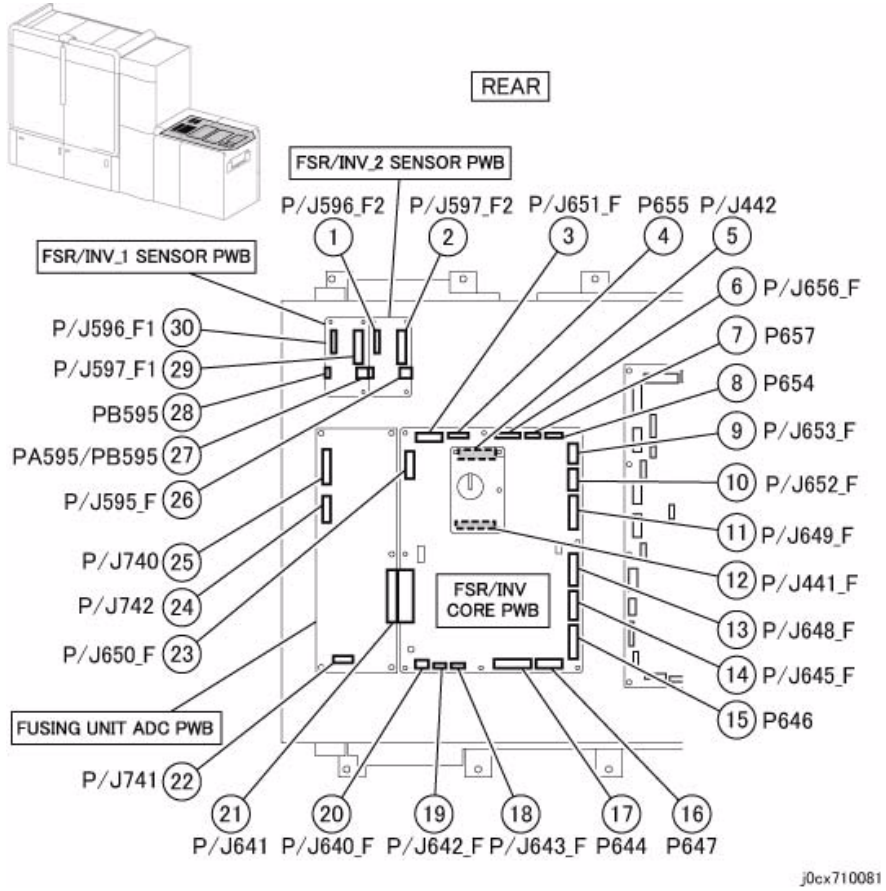


Figure 81 MCU Assembly_4 (j0cx710081)

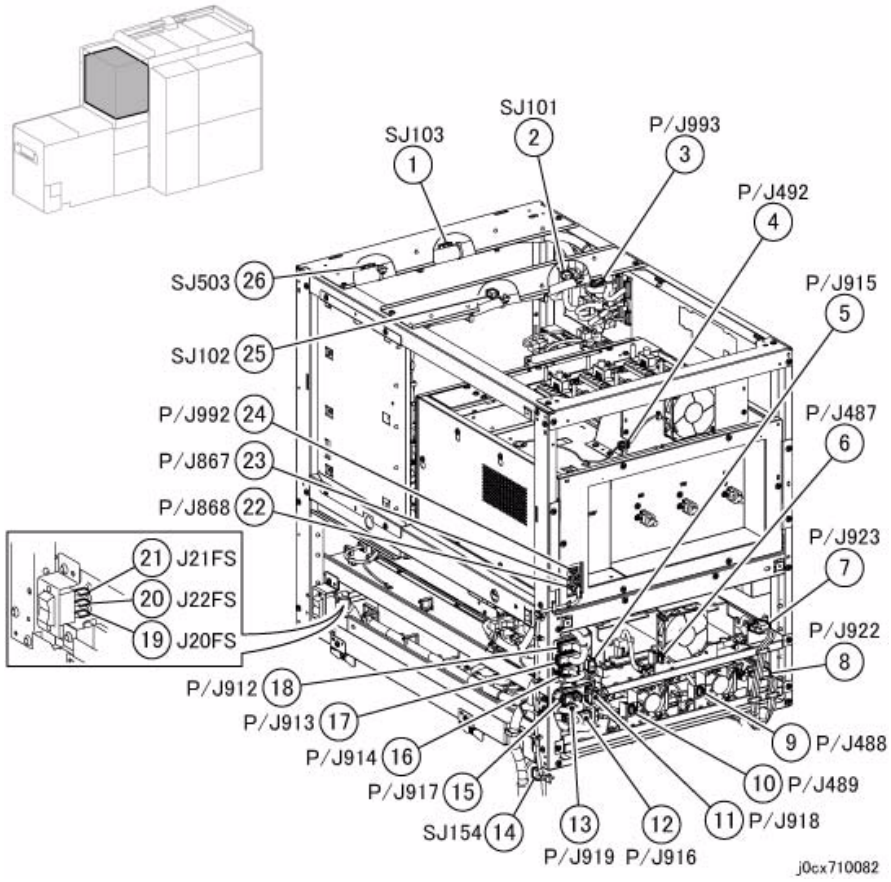


Figure 82 ELEC BOX_1 (j0cx710082)

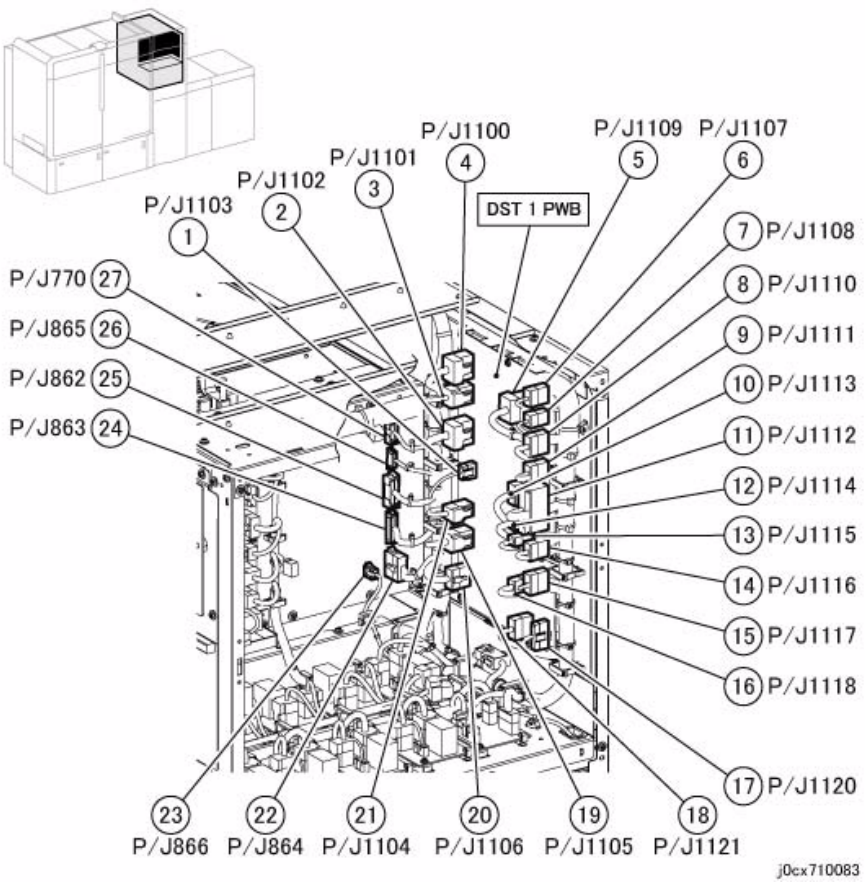


Figure 83 ELEC BOX_2 (j0cx710083)

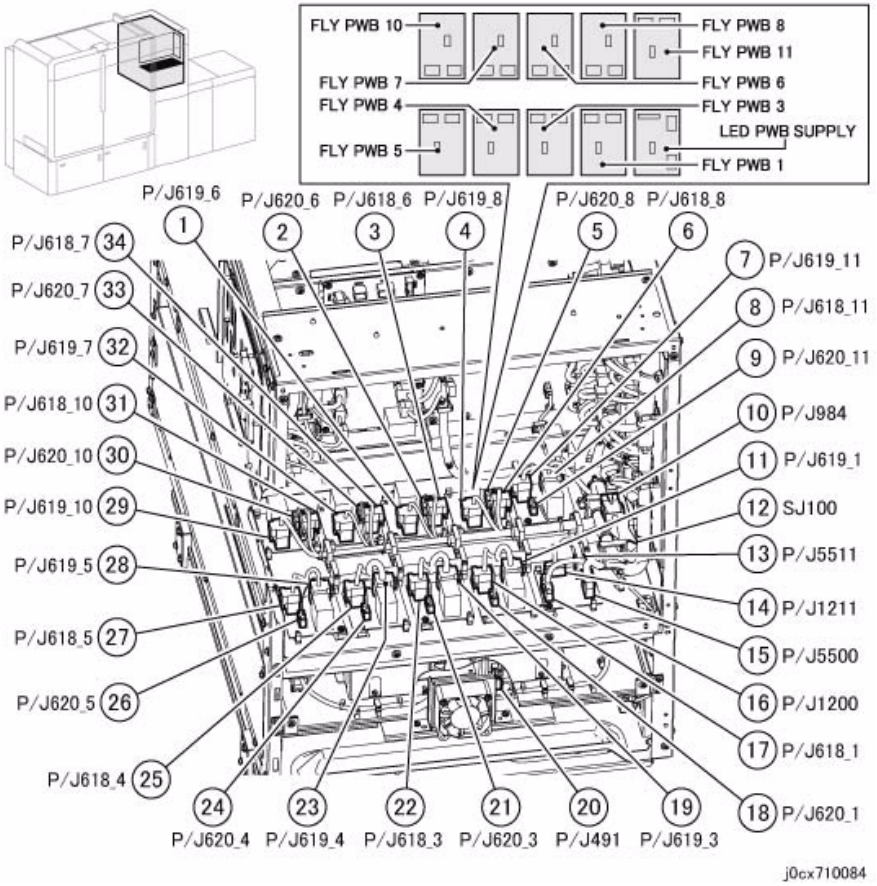


Figure 84 ELEC BOX_3 (j0cx710084)

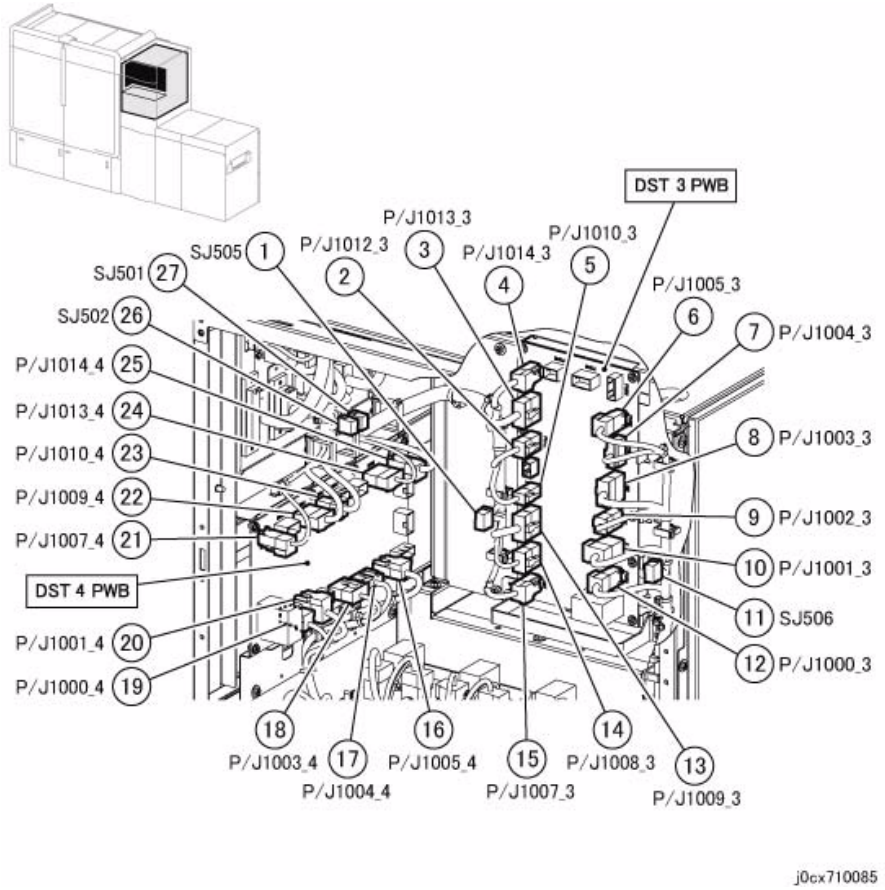


Figure 85 ELEC BOX_4 (j0cx710085)

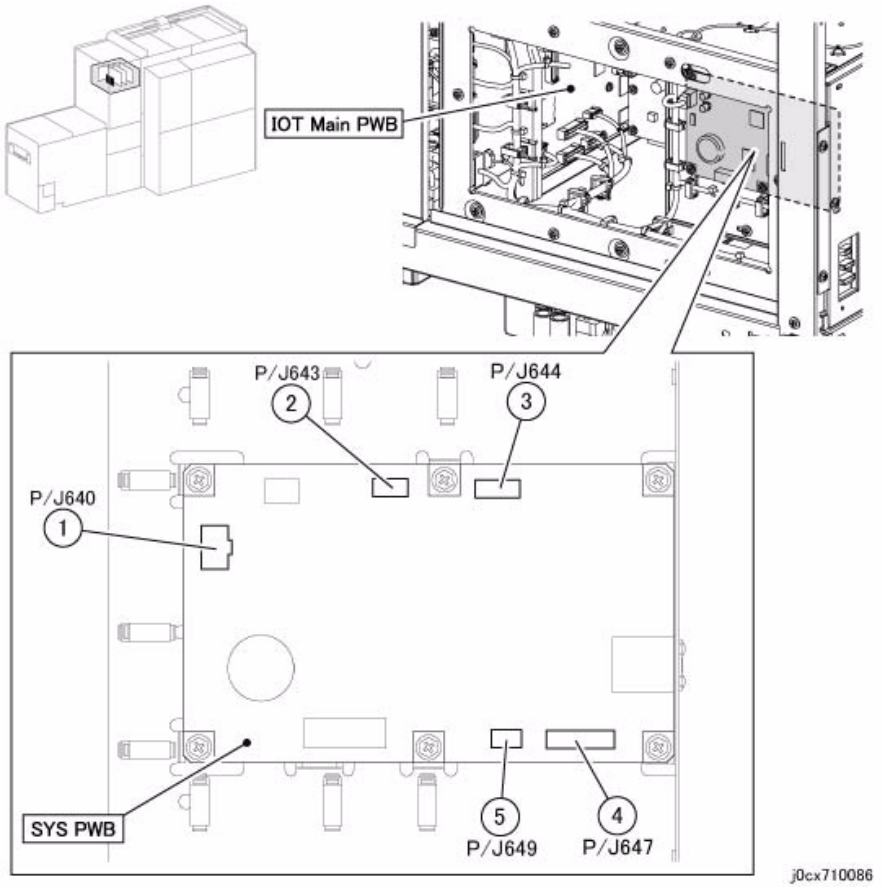


Figure 86 ELEC BOX_5 (j0cx710086)

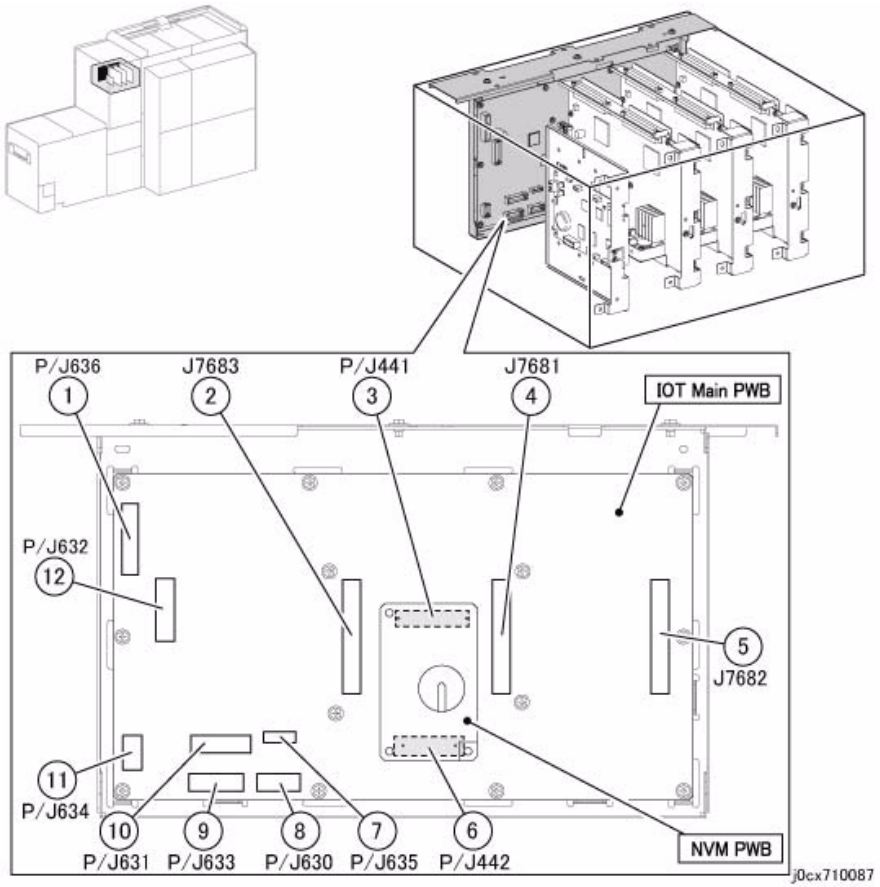


Figure 87 ELEC BOX_6 (j0cx710087)

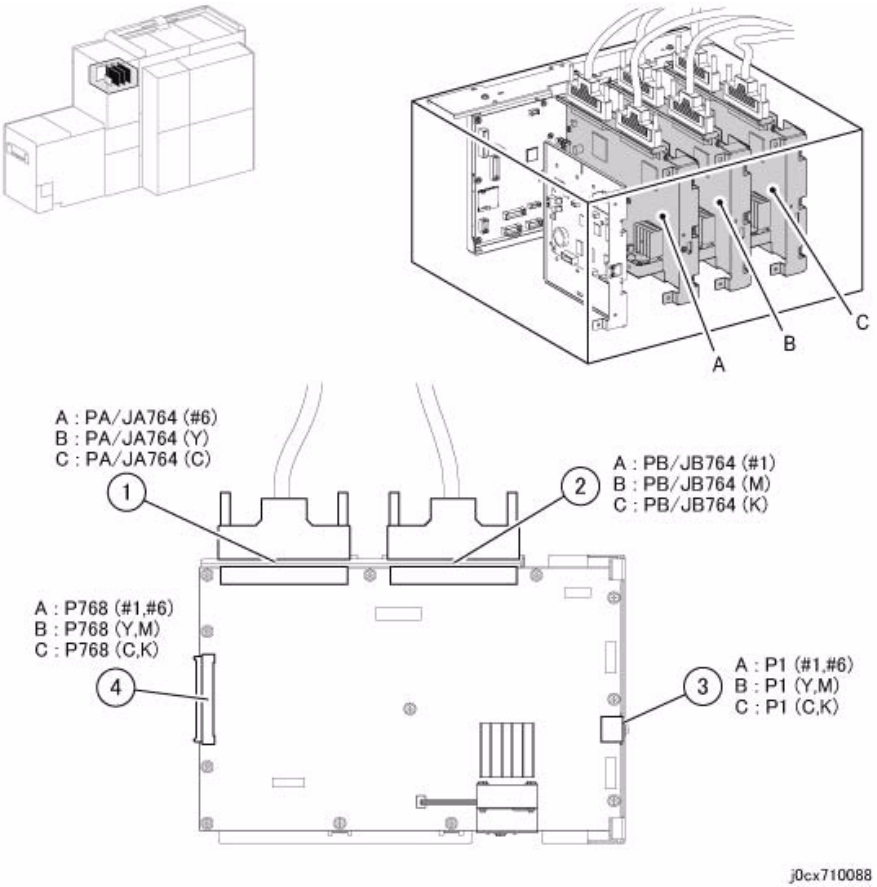


Figure 88 ELEC BOX_7 (j0cx710088)

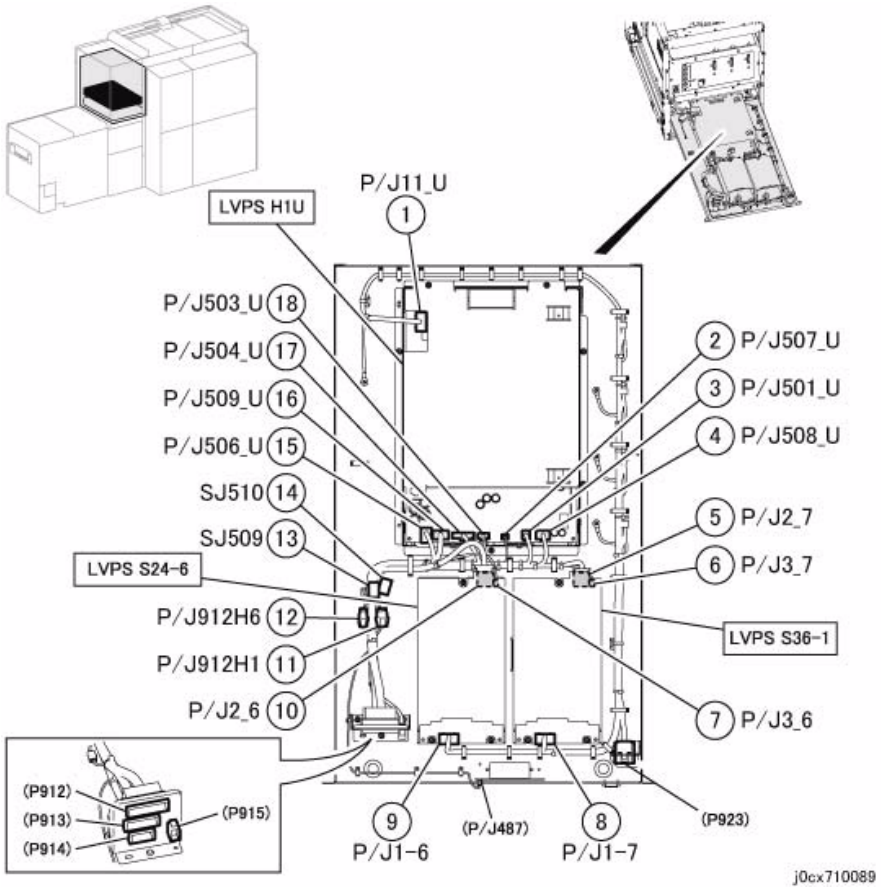


Figure 89 ELEC BOX_8 (j0cx710089)

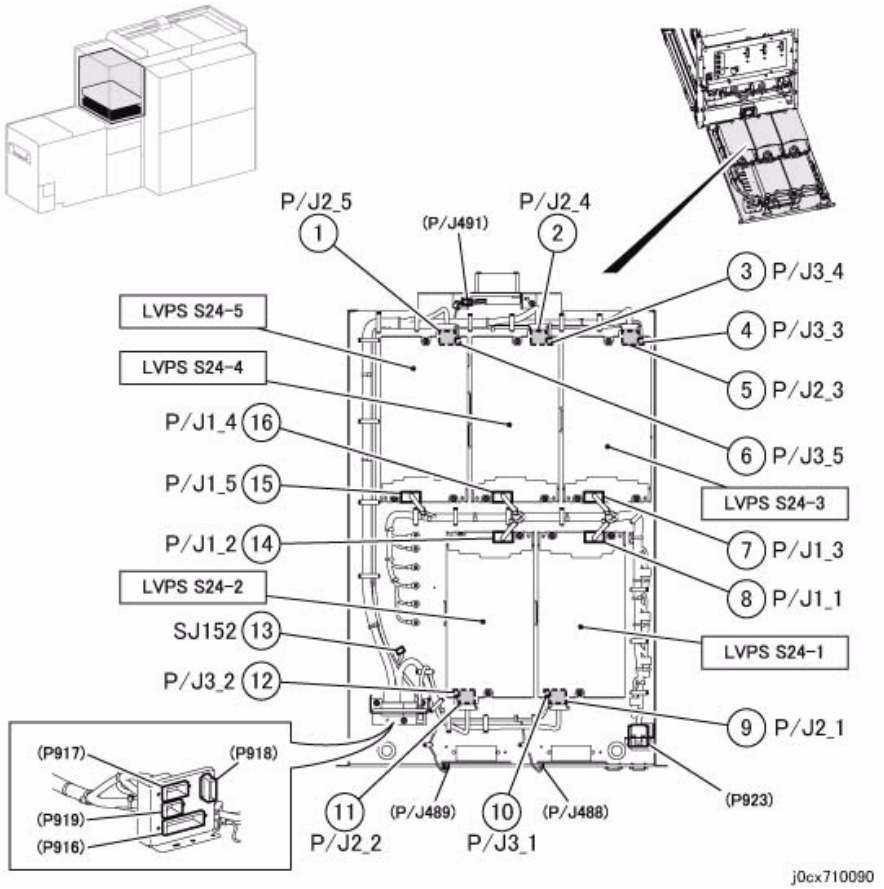


Figure 90 ELEC BOX_9 (j0cx710090)

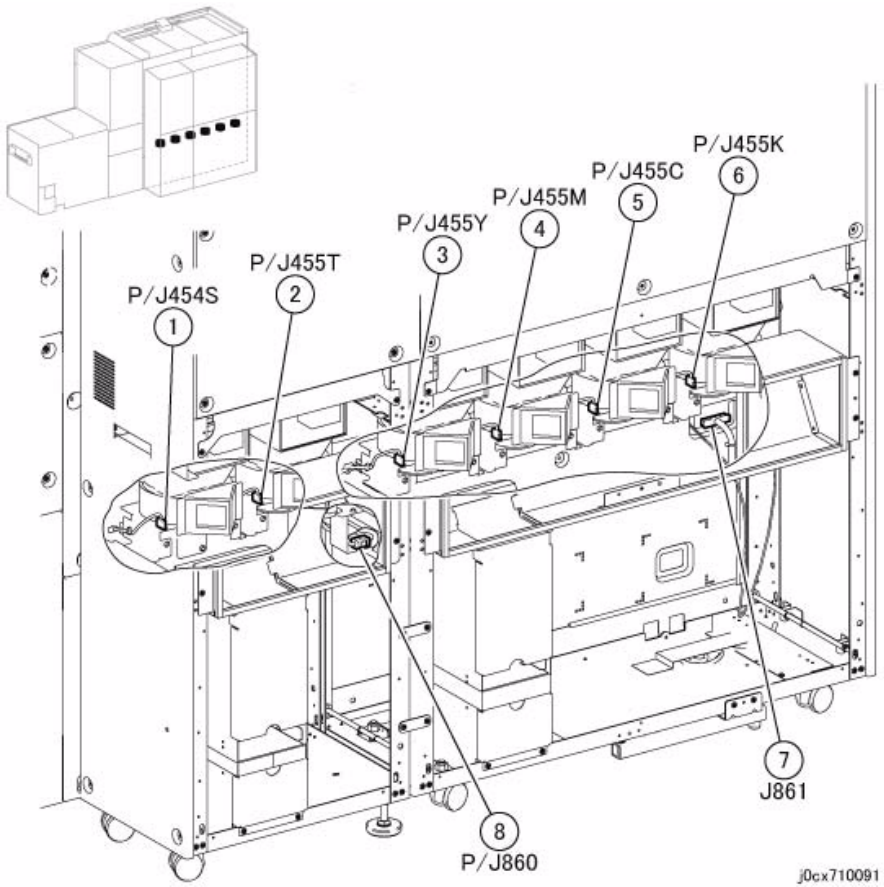


Figure 91 NOHAD ECO Assembly (j0cx710091)

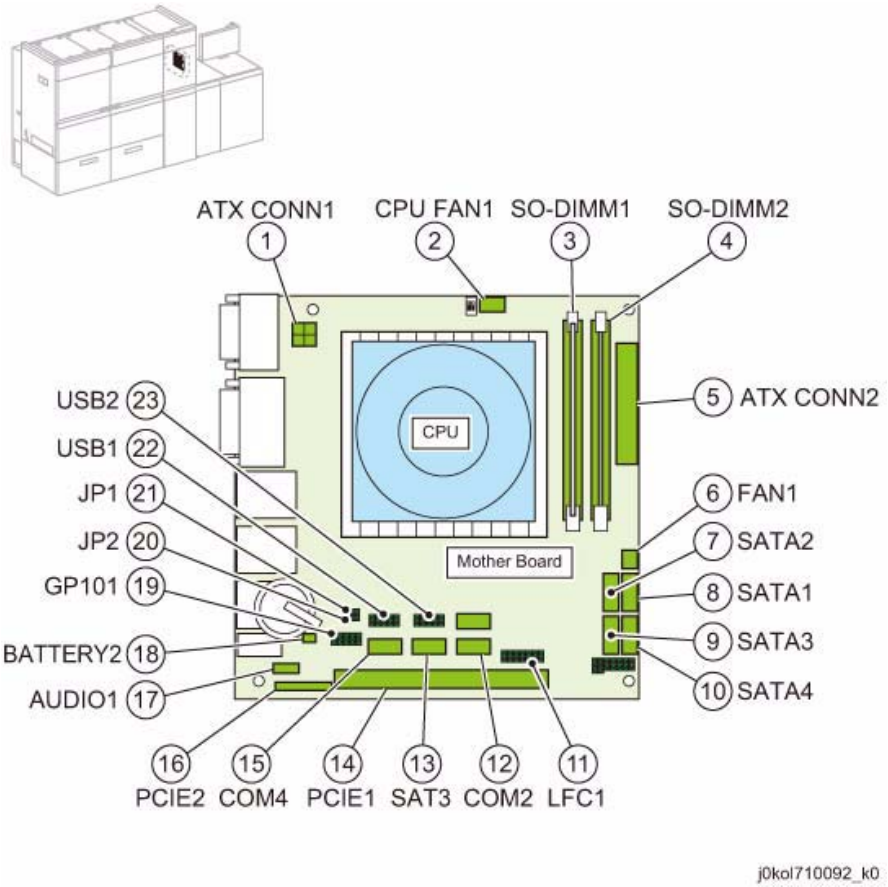


Figure 92 Control PC_1 (j0kol710092_k0)

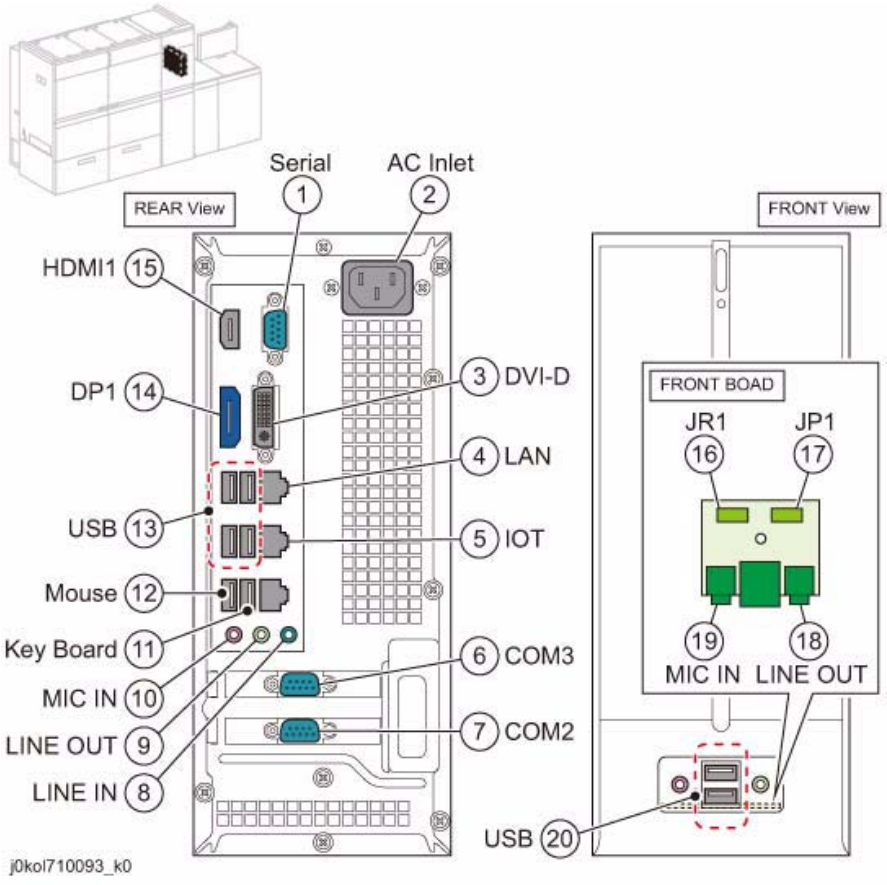


Figure 93 Control PC_2 (j0kol710093_k0)

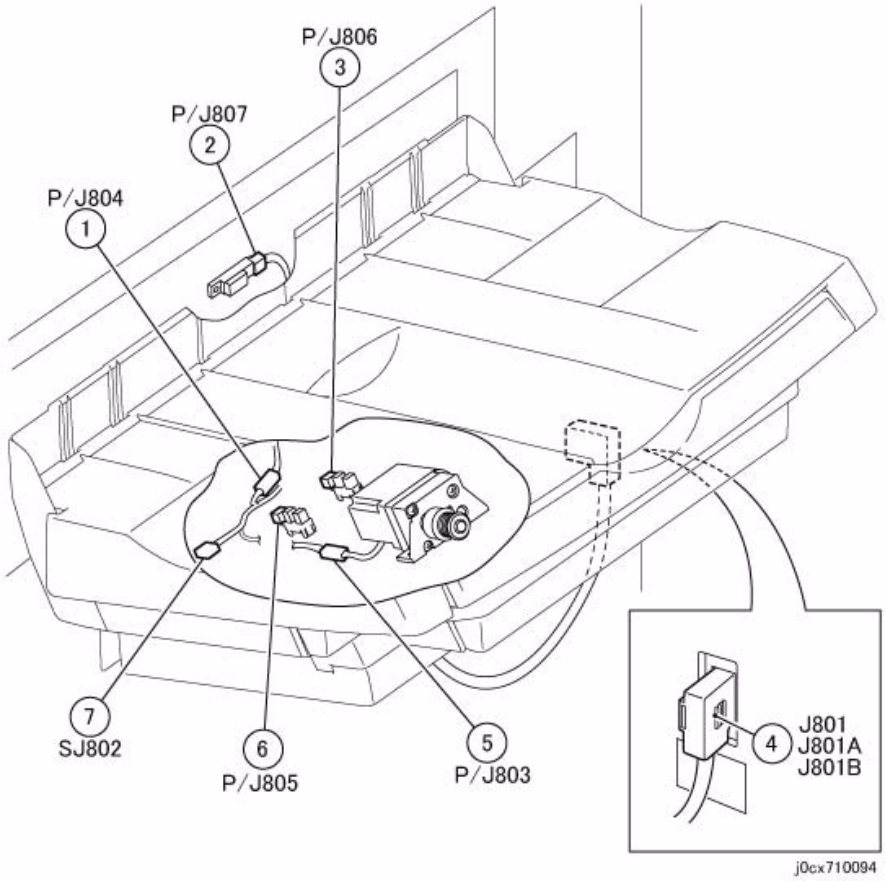


Figure 94 OFFSET CATCH TRAY (j0cx710094)

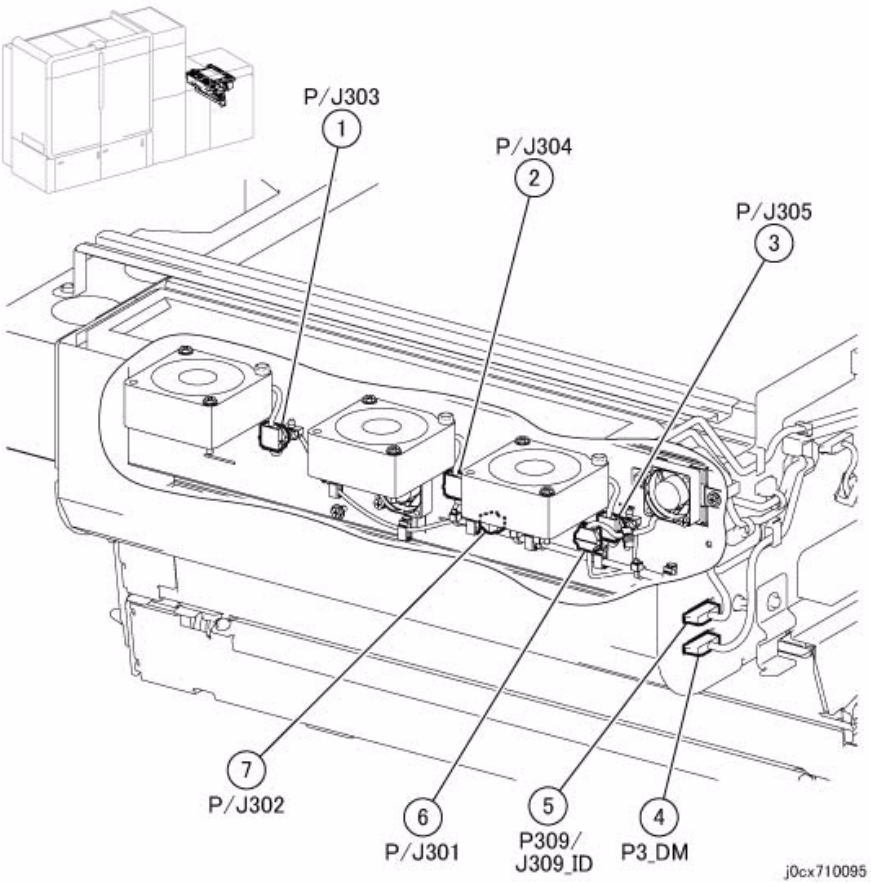


Figure 95 ILS Main Assembly (Fan) (j0cx710095)

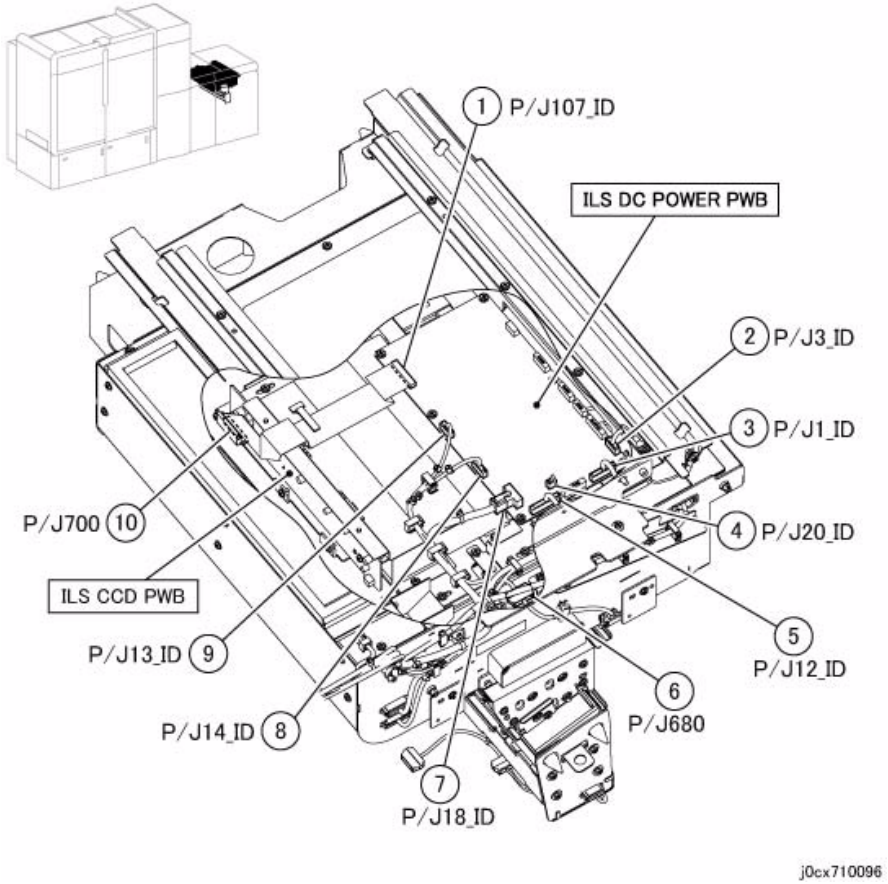


Figure 96 ILS Main Assembly (PWB) (j0cx710096)

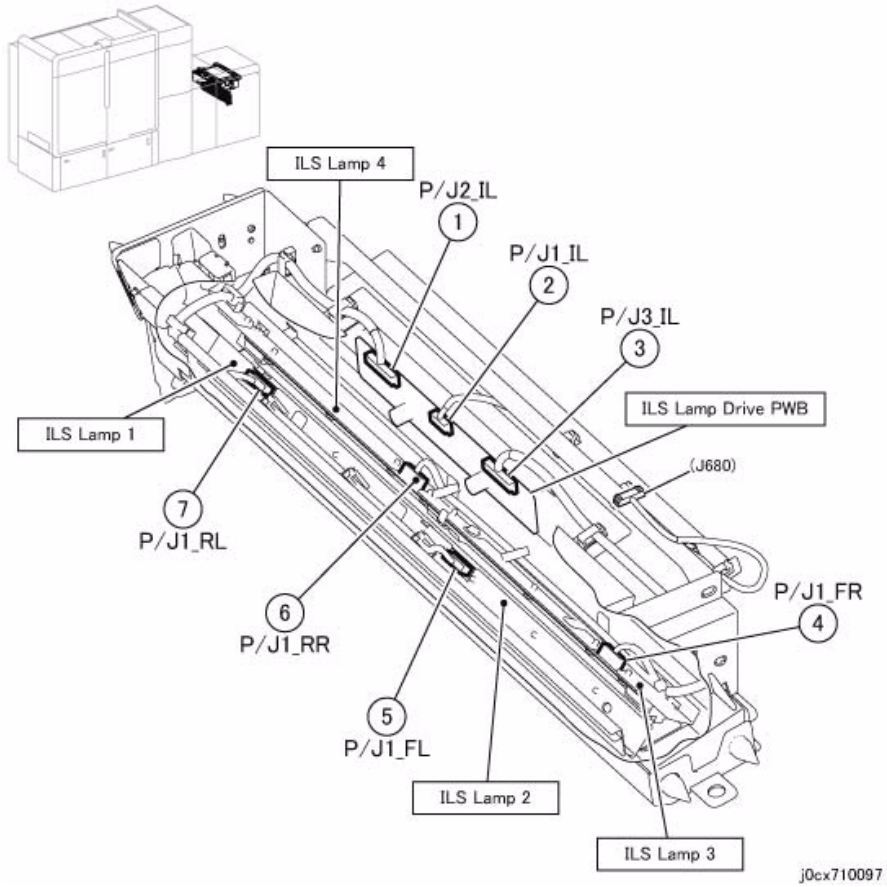


Figure 97 Lamp Assembly (LED Type) (j0cx710097)

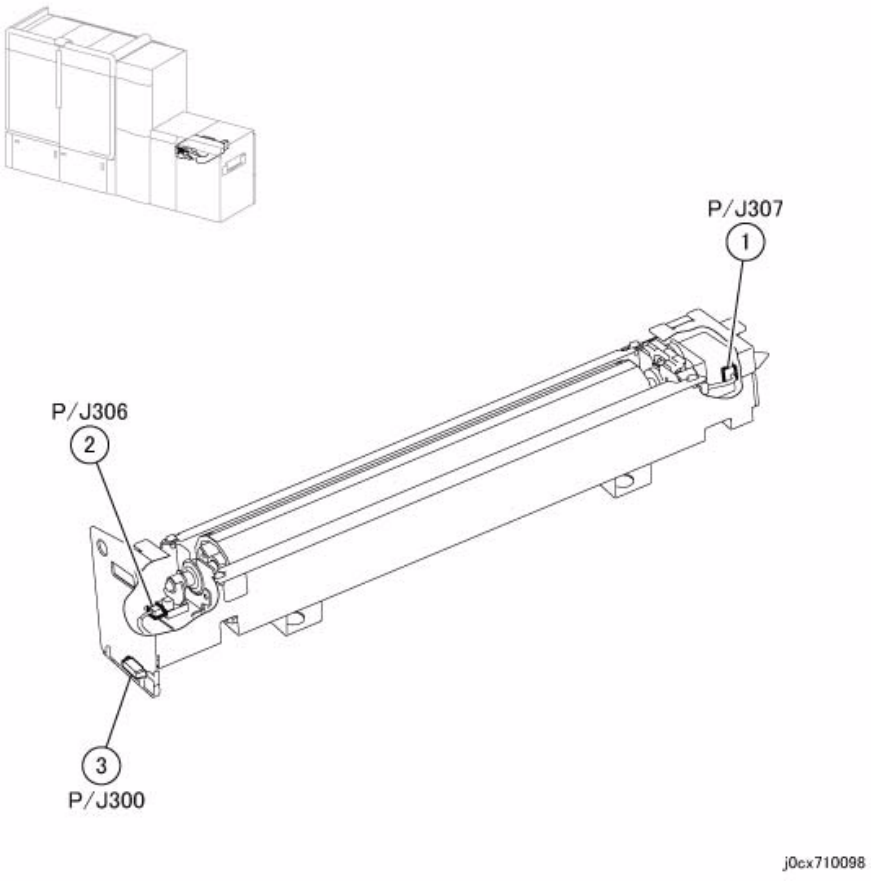


Figure 98 WR Roll Assembly (LED Type) (j0cx710098)

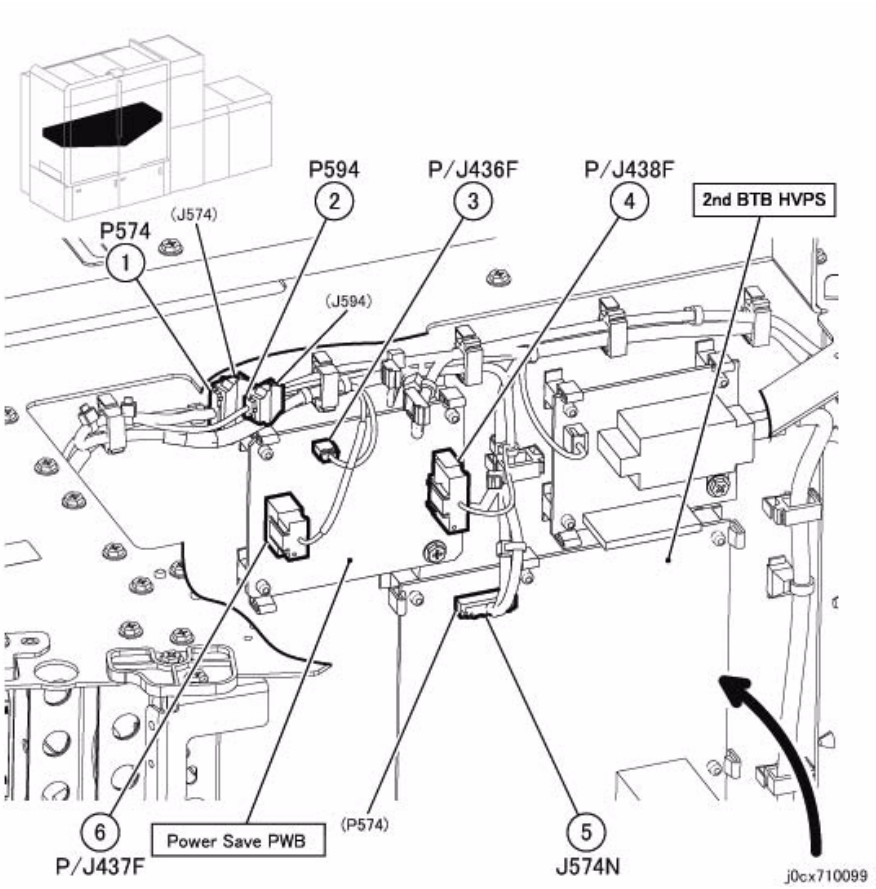


Figure 99 IBT Belt Assembly (Option) (j0cx710099)

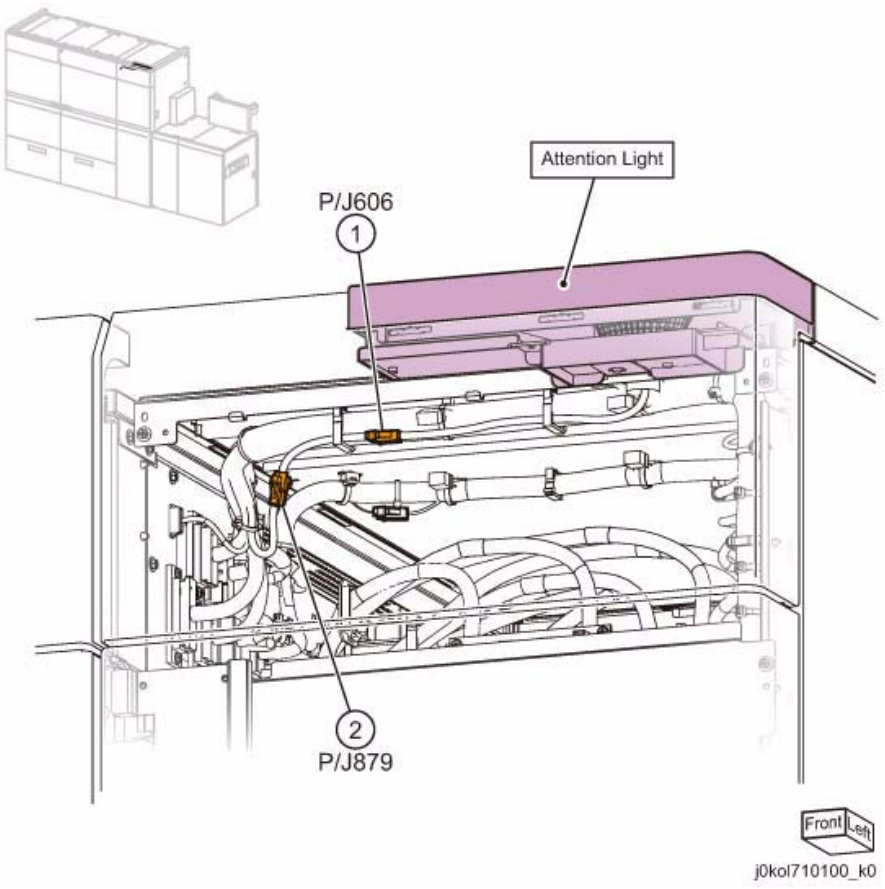


Figure 100 Attention Light (j0kol710100_k0)

7.2 Wirenets

7.2 Wirenets

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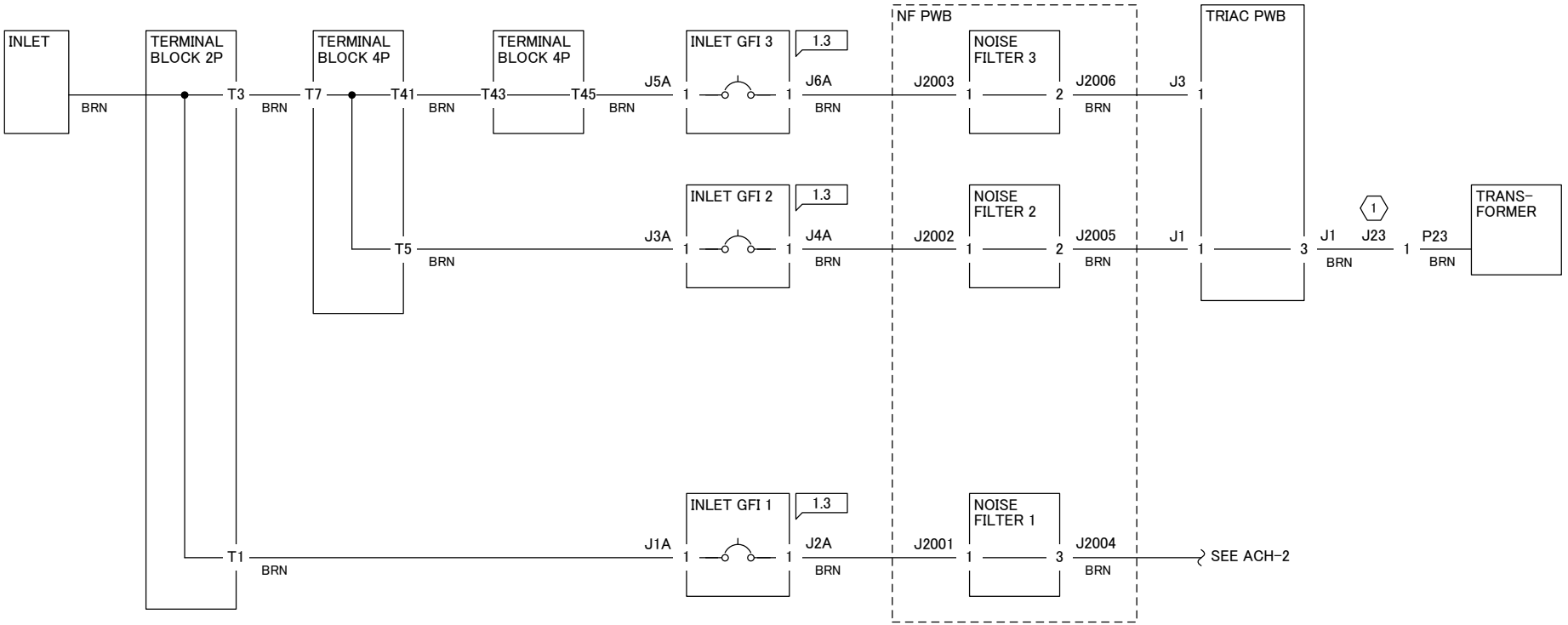
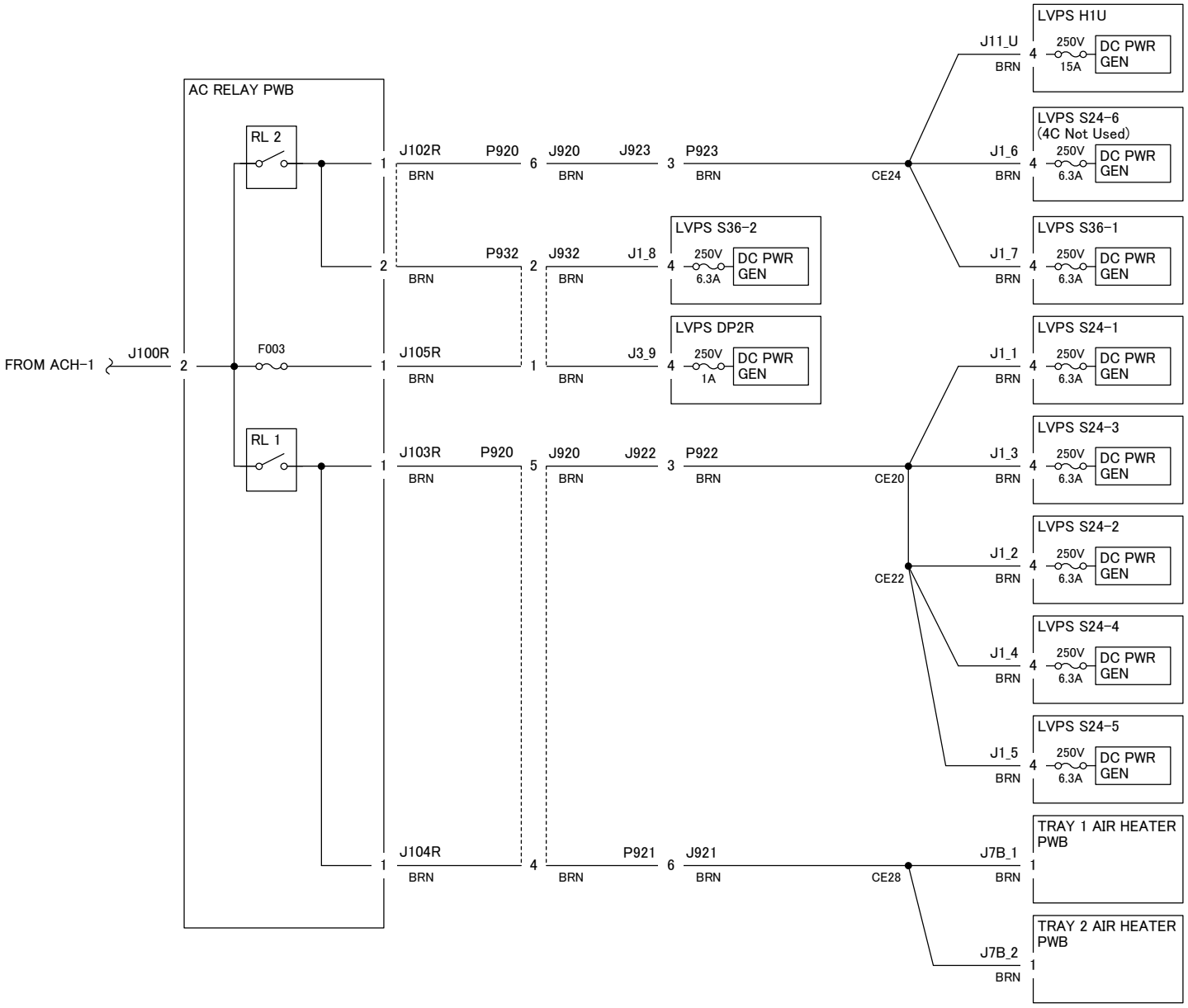


(1) Switch according to supply voltage.

j0cx721001

7.2.1.2 ACH-2



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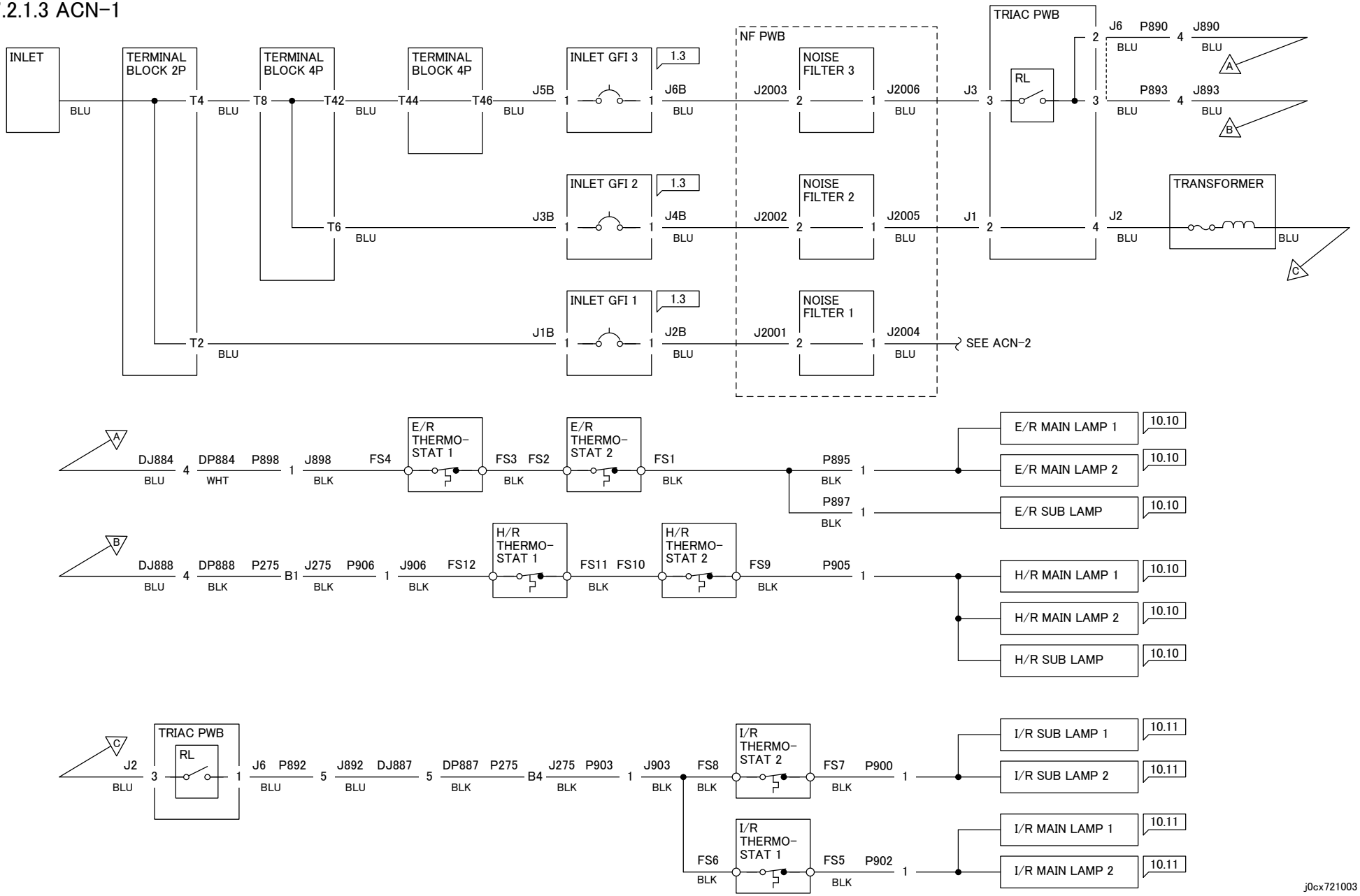
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TERMINAL BLOCK 4P
TERMINAL BLOCK 4P
INLET GFI 3
INLET GFI 2
INLET GFI 1
1.3
NF PWB
NOISE FILTER 3
NOISE FILTER 2
NOISE FILTER 1
TRIAC PWB
RL
TRANSFORMER
T4
T8
T42
T44
T46
T6
T2
J5B
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J3B
J4B
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DJ884
DP884
P898
J898
FS4
FS3
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FS1
P895
P897
DP888
P275
J275
P906
J906
FS12
FS11
FS10
FS9
P905
DJ888
B1
B4
J892
DJ887
DP887
P892
J903
FS8
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P900
FS6
FS5
P902
E/R THERMO-STAT 1
E/R THERMO-STAT 2
H/R THERMO-STAT 1
H/R THERMO-STAT 2
I/R THERMO-STAT 2
I/R THERMO-STAT 1
E/R MAIN LAMP 1
E/R MAIN LAMP 2
E/R SUB LAMP
H/R MAIN LAMP 1
H/R MAIN LAMP 2
H/R SUB LAMP
I/R SUB LAMP 1
I/R SUB LAMP 2
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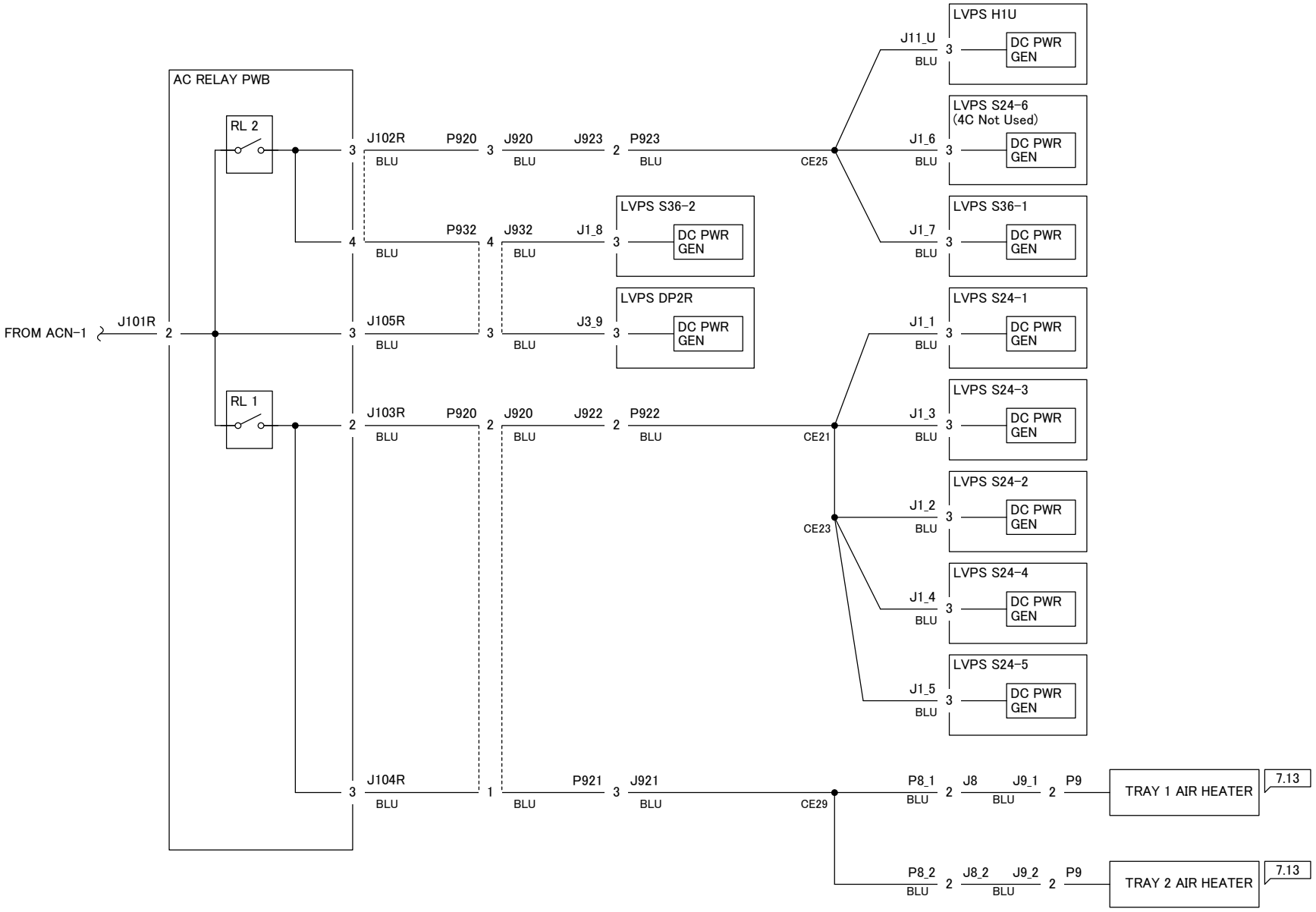
10.10
10.11
BLK
WHT
j0cx721003

7.2.1.4 ACN-2



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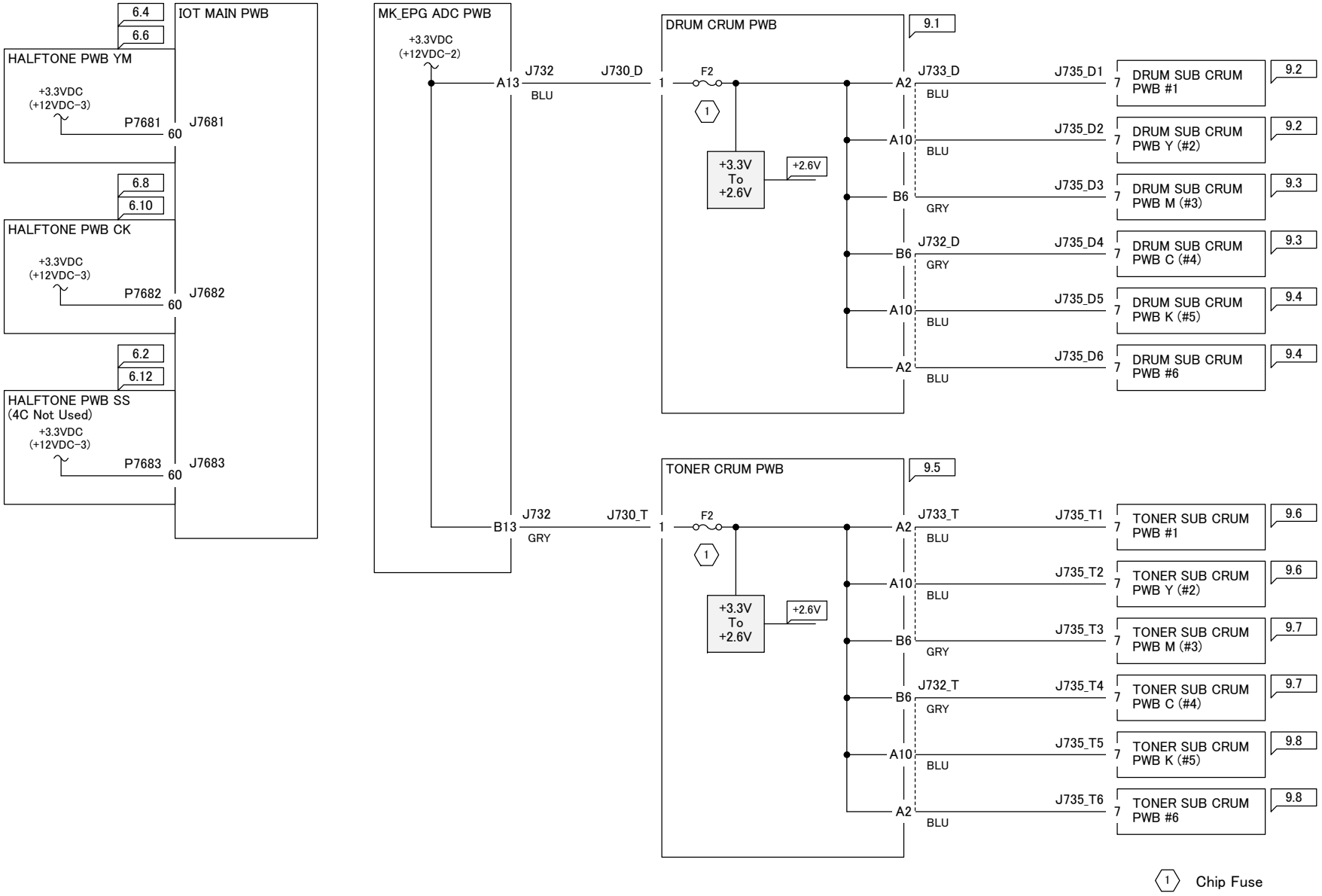
7.2.1.5 +3.3VDC-1



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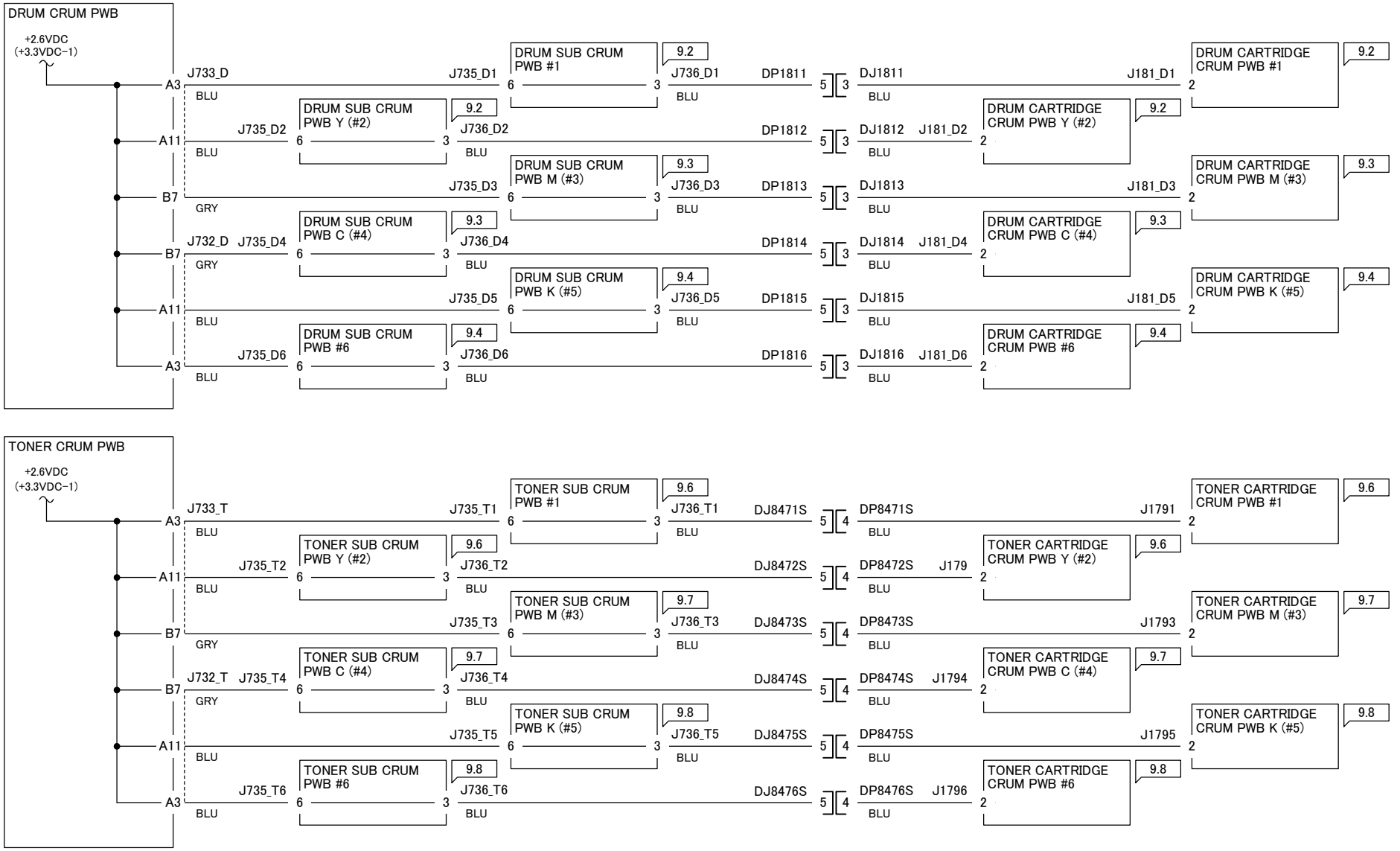

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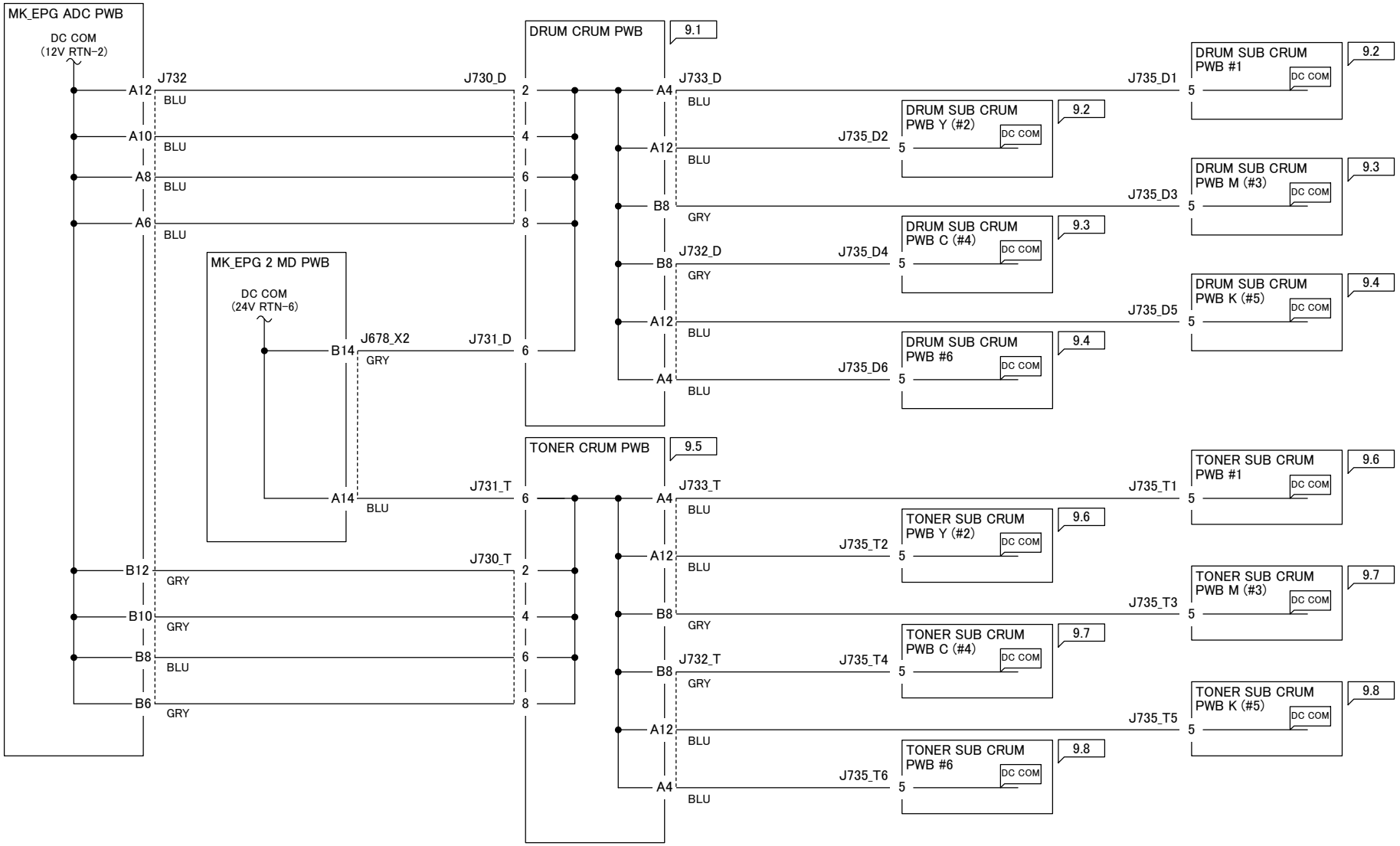
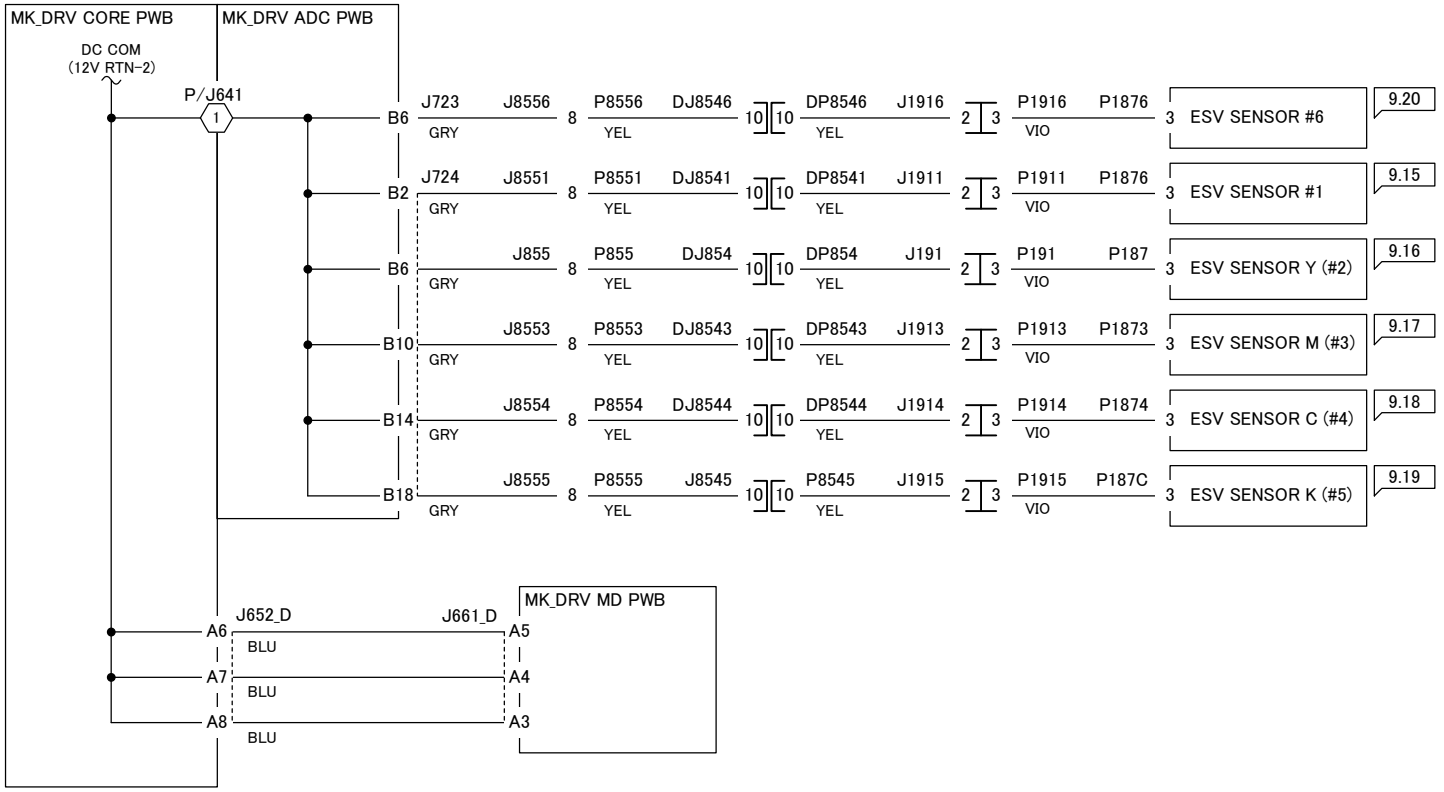


j0cx721007

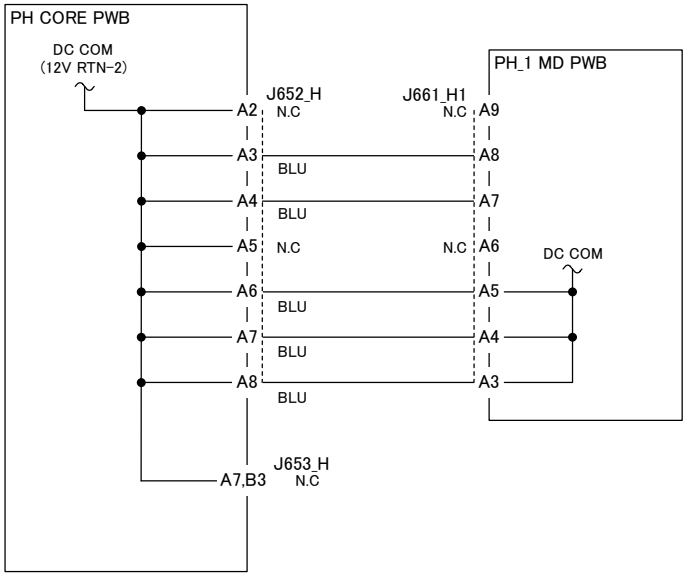
7.2.1.8 DC COM-2

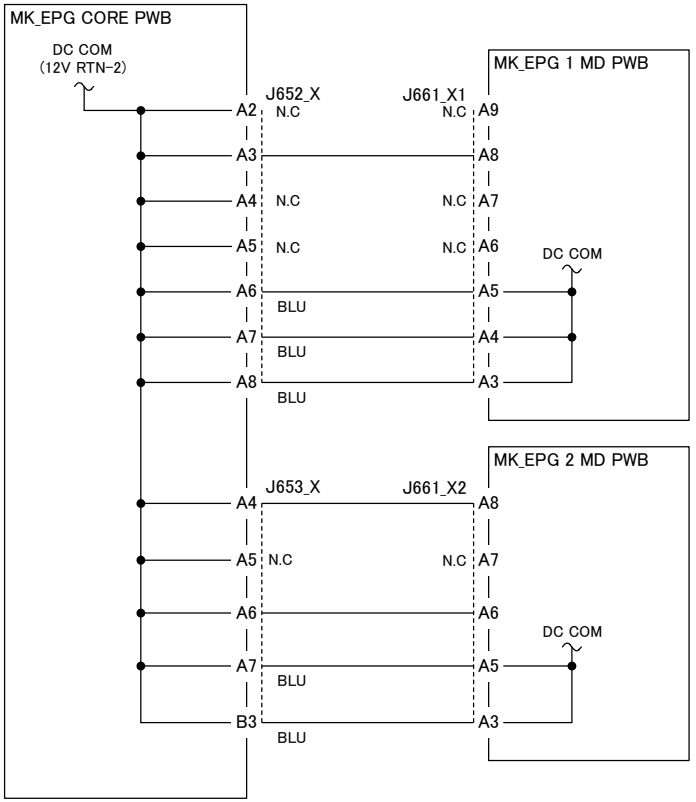


1 Pin numbers are assigned as follows.
2,11,13,16,18,20,22,24,26,27,29,32,33,35,37,39,42,51,56,60

j0cx721008

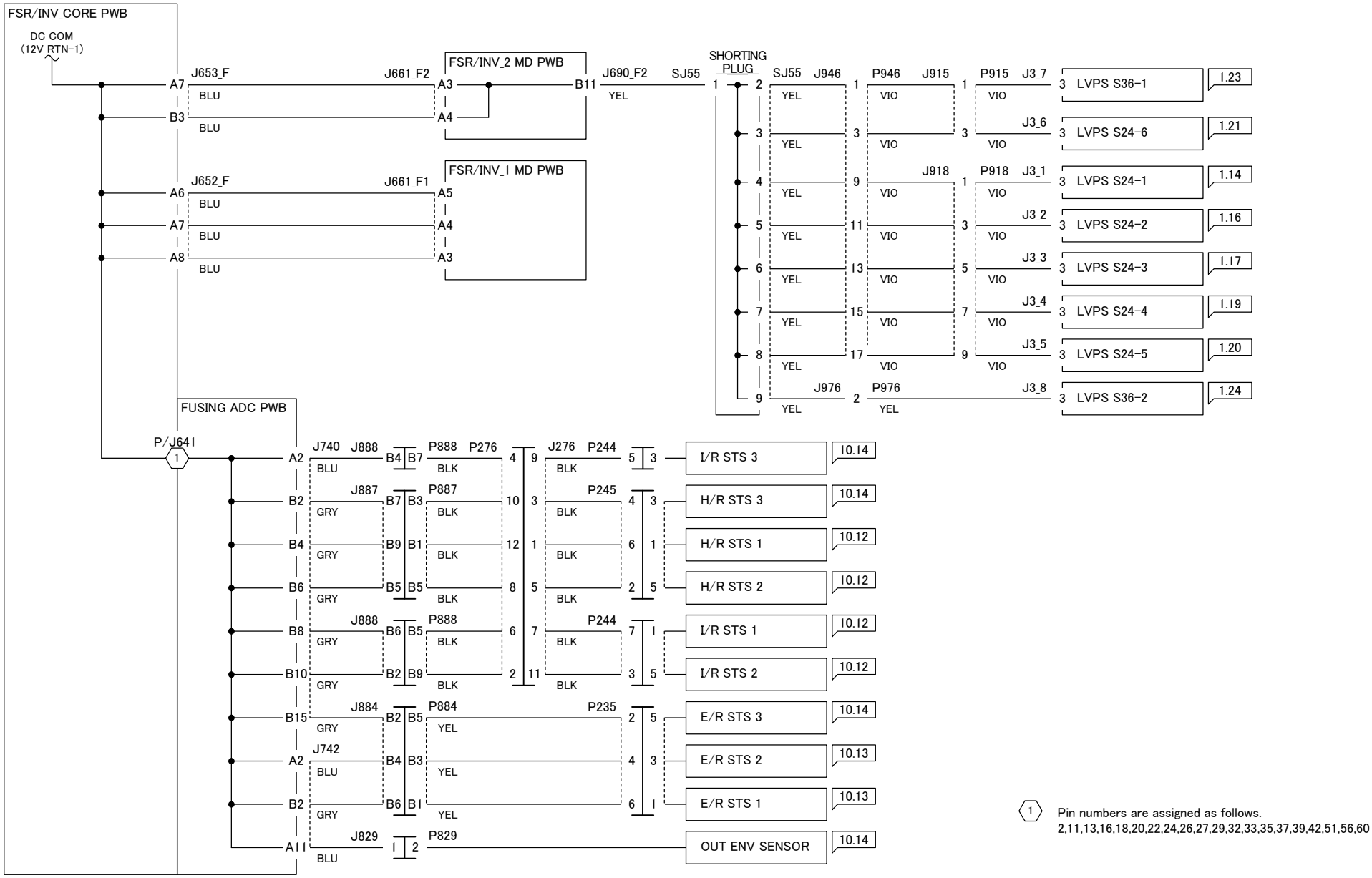
7.2.1.9 DC COM-3





j0cx721009

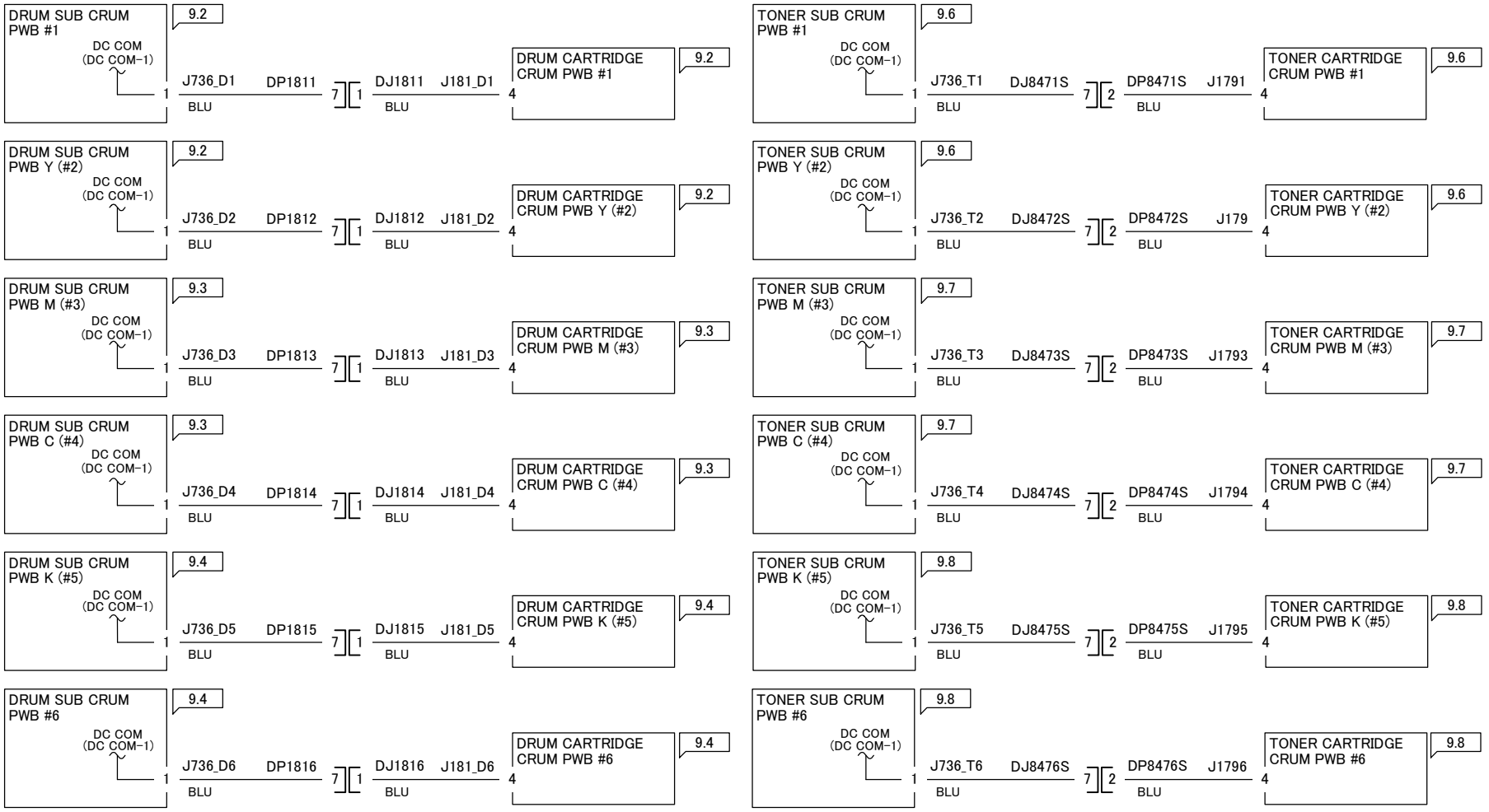
7.2.1.10 DC COM-4



1 Pin numbers are assigned as follows.
2,11,13,16,18,20,22,24,26,27,29,32,33,35,37,39,42,51,56,60

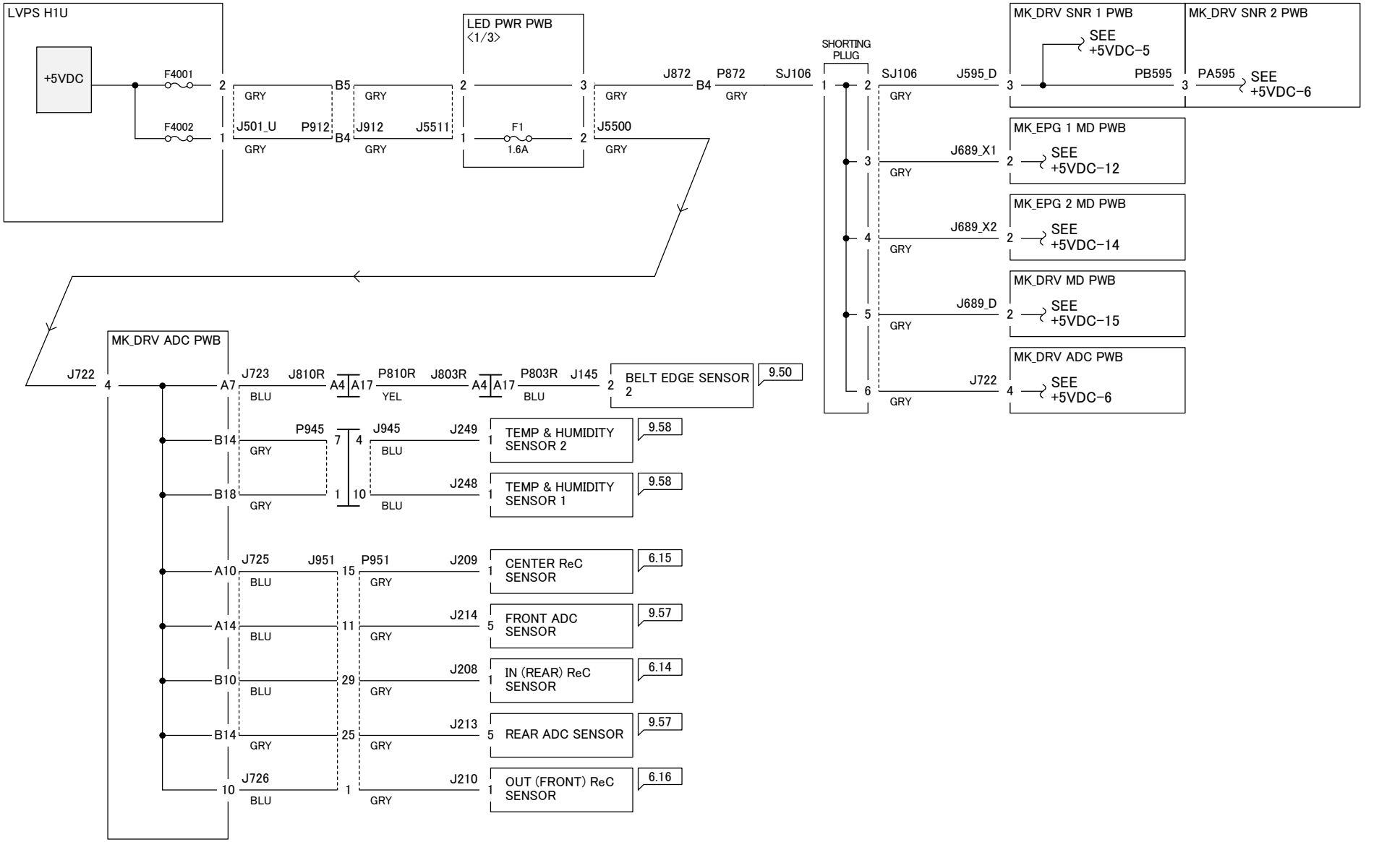
j0cx721010

7.2.1.11 DC COM-5



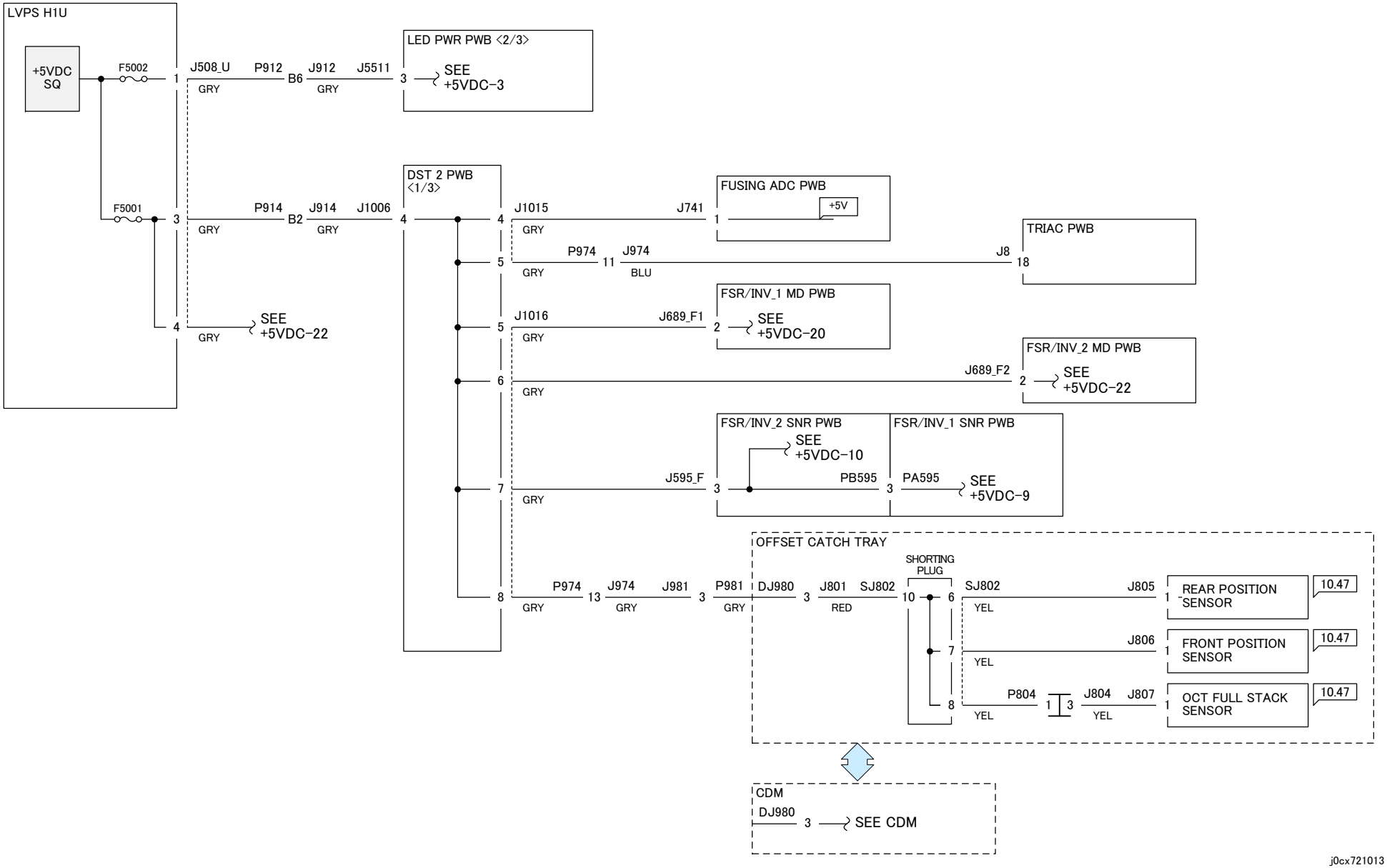
j0cx721011

7.2.1.12 +5VDC-1

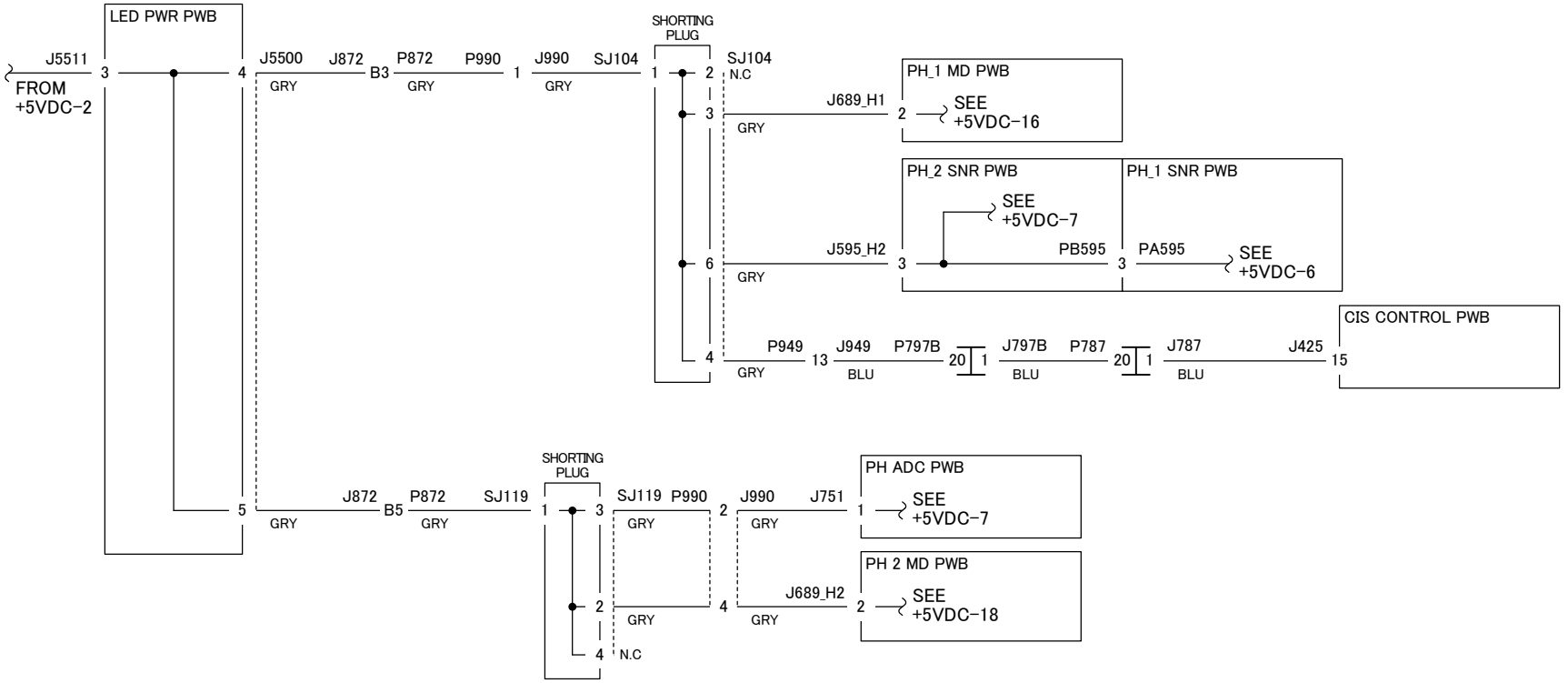


j0cx721012

7.2.1.13 +5VDC-2

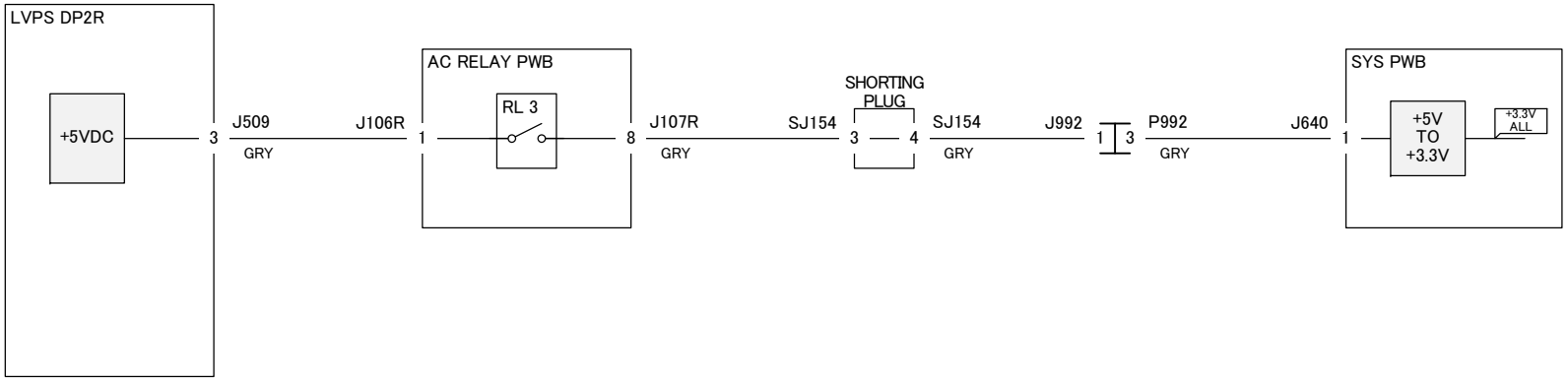

LVPS H1U
+5VDC SQ
F5002
F5001
J508_U
P912
B6
J912
J5511
GRY
LED PWR PWB <2/3>
SEE +5VDC-3
P914
B2
J914
J1006
DST 2 PWB <1/3>
SEE +5VDC-22
J1015
J741
FUSING ADC PWB
+5V
P974
J974
J8
TRIAC PWB
BLU
J1016
J689_F1
FSR/INV_1 MD PWB
SEE +5VDC-20
J689_F2
FSR/INV_2 MD PWB
SEE +5VDC-22
FSR/INV_2 SNR PWB
SEE +5VDC-10
J595_F
PB595
FSR/INV_1 SNR PWB
PA595
SEE +5VDC-9
OFFSET CATCH TRAY
SHORTING PLUG
P974
J974
J981
P981
DJ980
J801
SJ802
RED
YEL
J805
REAR POSITION SENSOR
10.47
J806
FRONT POSITION SENSOR
P804
J804
J807
OCT FULL STACK SENSOR
CDM
DJ980
SEE CDM
j0cx721013

7.2.1.14 +5VDC-3



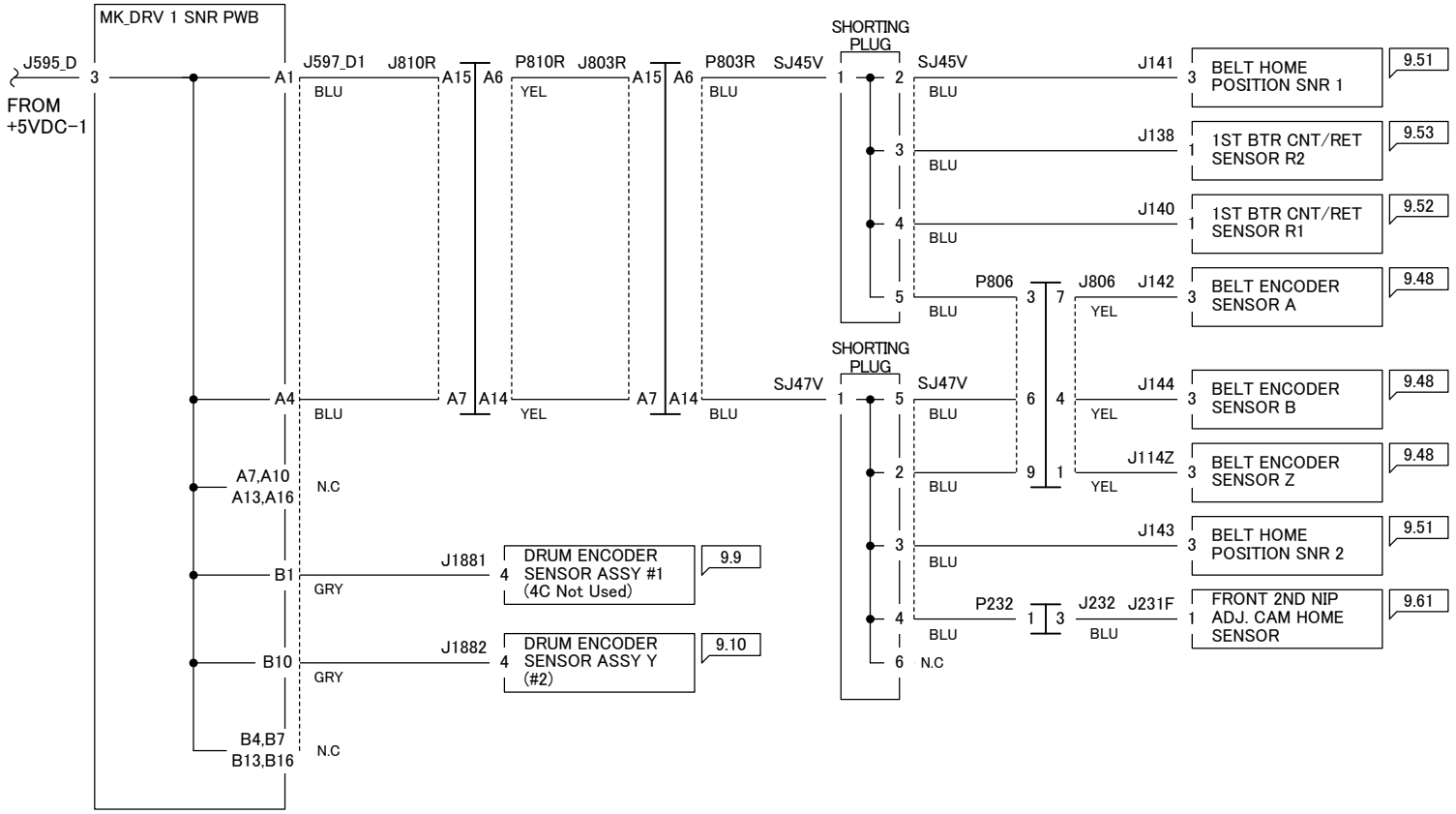
j0cx721014

7.2.1.15 +5VDC-4



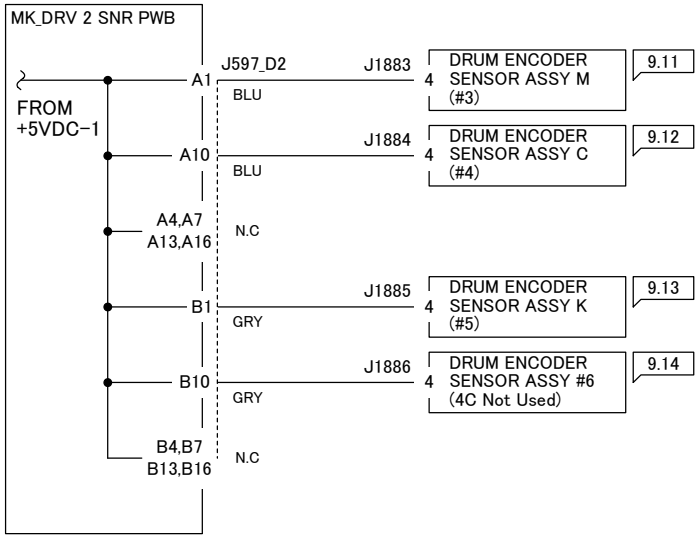
j0cx721015

7.2.1.16 +5VDC-5



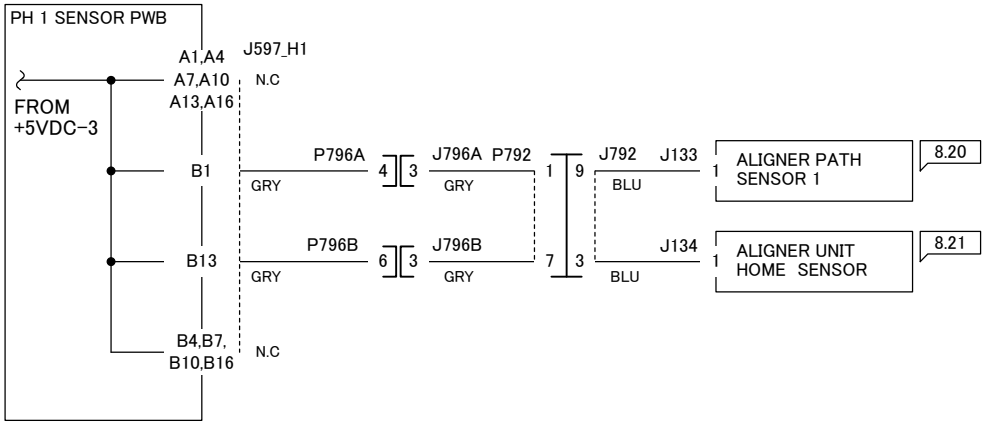
j0cx721016

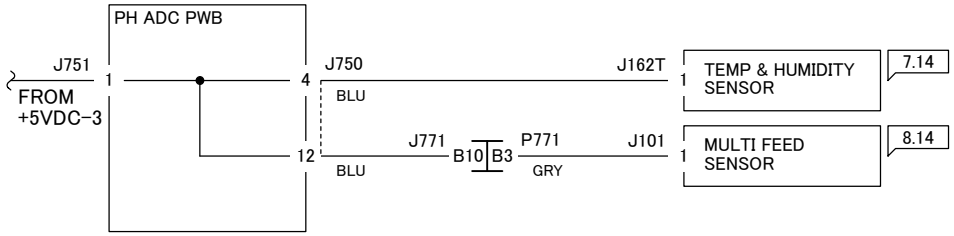
7.2.1.17 +5VDC-6



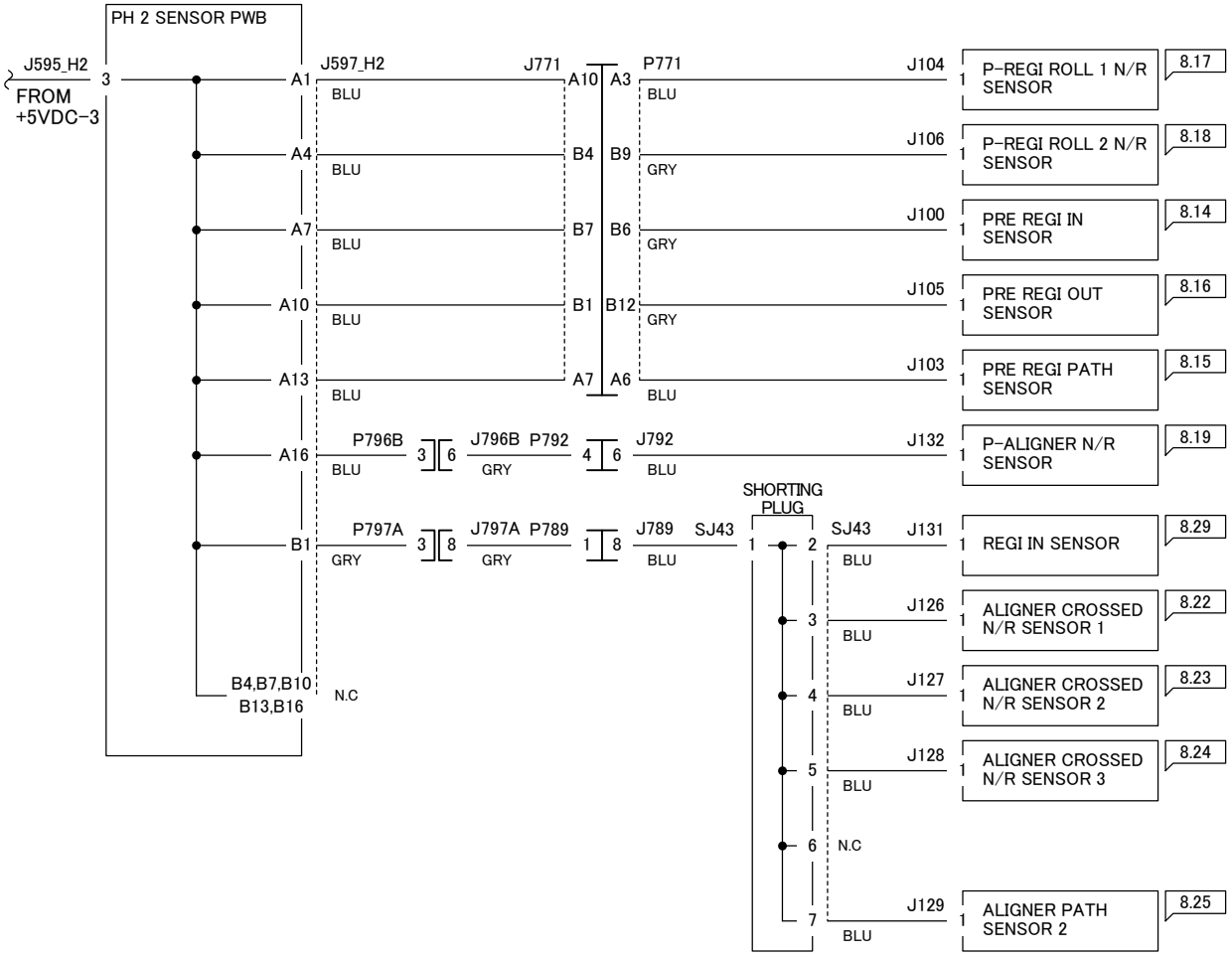
j0cx721017

7.2.1.18 +5VDC-7


PH 1 SENSOR PWB
A1,A4
A7,A10
A13,A16
J597_H1
N.C
FROM
+5VDC-3
B1
B13
B4,B7,
B10,B16
N.C
P796A
4
3
GRY
J796A
P792
GRY
1
9
J792
J133
BLU
1
ALIGNER PATH
SENSOR 1
8.20
P796B
6
3
GRY
J796B
GRY
7
3
J134
BLU
1
ALIGNER UNIT
HOME SENSOR
8.21

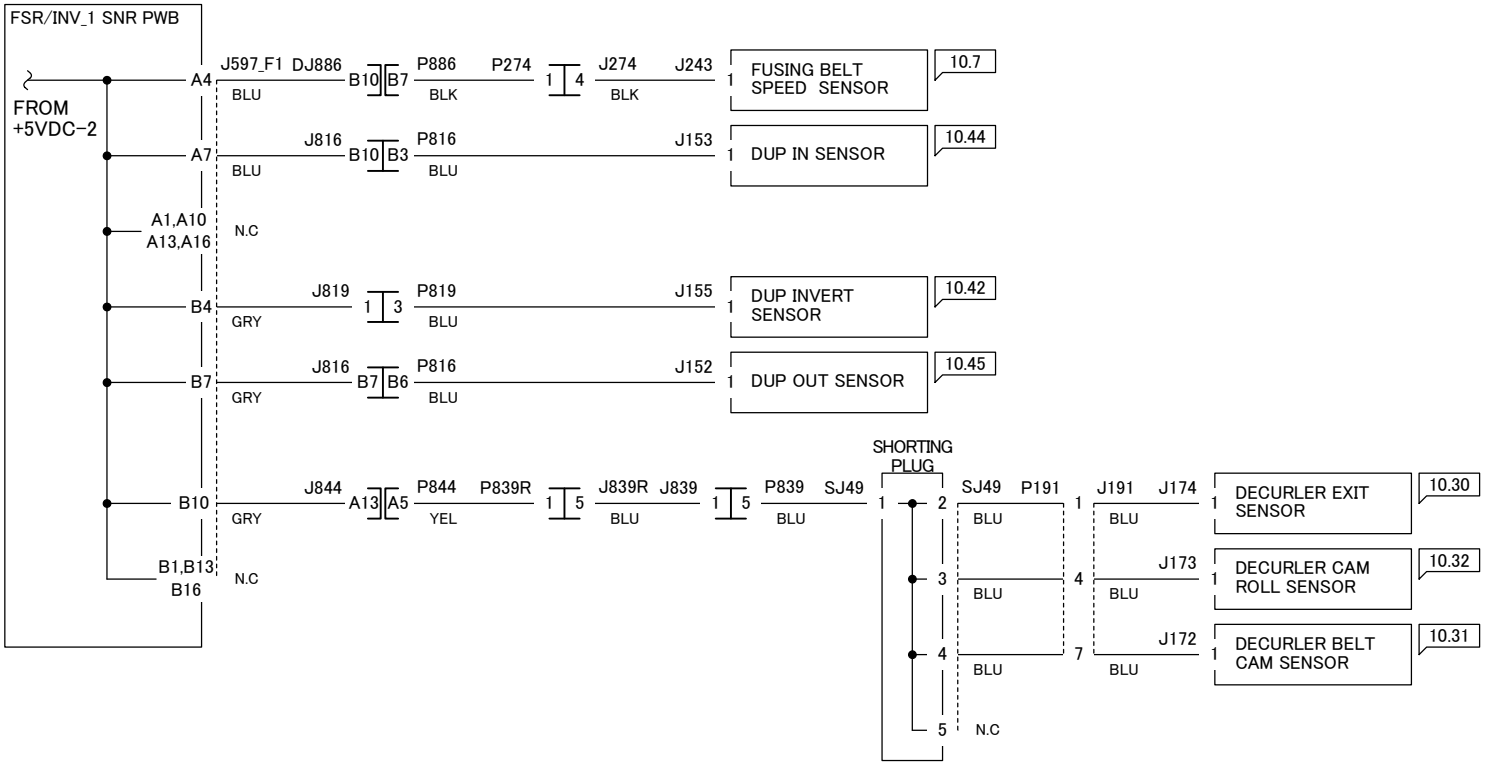

PH ADC PWB
J751
1
FROM
+5VDC-3
4
12
J750
BLU
J771
BLU
B10
B3
P771
GRY
J101
J162T
1
TEMP & HUMIDITY
SENSOR
7.14
1
MULTI FEED
SENSOR
8.14

7.2.1.19 +5VDC-8

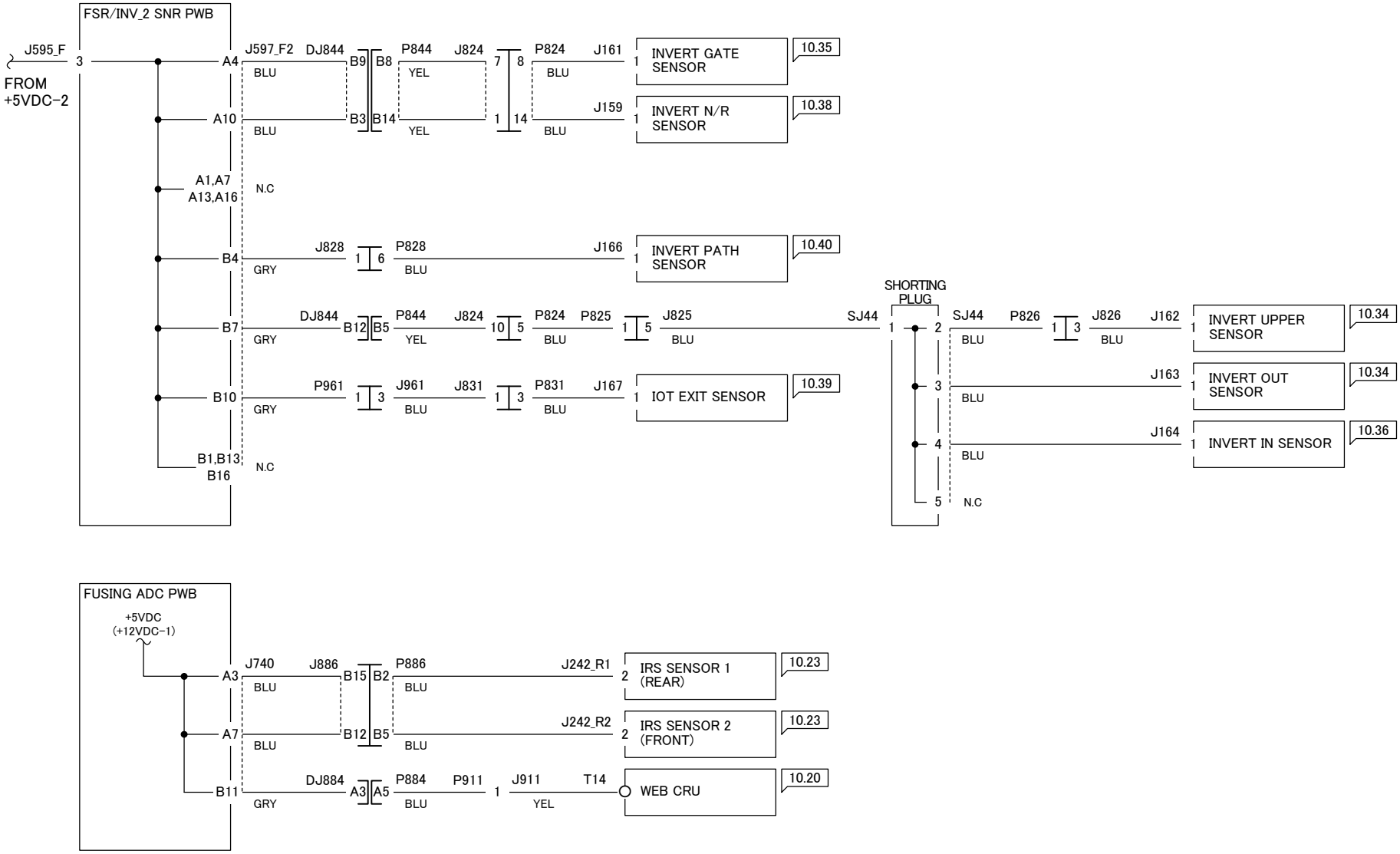


j0cx721019

7.2.1.20 +5VDC-9

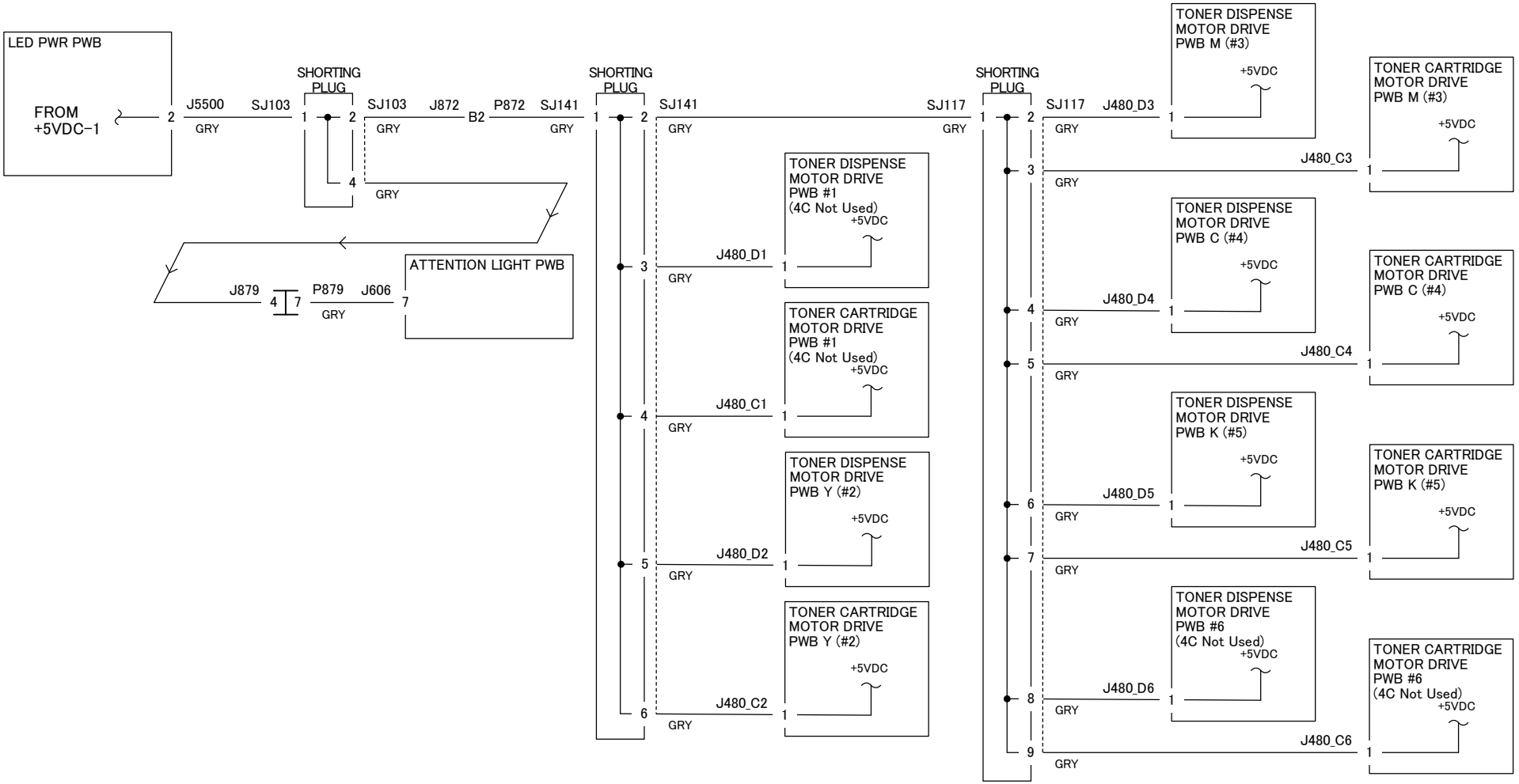

FSR/INV_1 SNR PWB
FROM
+5VDC-2
A4
J597_F1 DJ886
BLU
B10 B7
P886
BLK
P274
1 4
J274
BLK
J243
1
FUSING BELT
SPEED SENSOR
10.7
A7
J816
BLU
B10 B3
P816
BLU
J153
1
DUP IN SENSOR
10.44
A1,A10
A13,A16
N.C
B4
J819
GRY
1 3
P819
BLU
J155
1
DUP INVERT
SENSOR
10.42
B7
J816
GRY
B7 B6
P816
BLU
J152
1
DUP OUT SENSOR
10.45
SHORTING
PLUG
B10
J844
GRY
A13 A5
P844
YEL
P839R
1 5
J839R
BLU
J839
1 5
P839
BLU
SJ49
1
2
SJ49
BLU
P191
1
4
J191
BLU
J174
1
DECURLER EXIT
SENSOR
10.30
3
BLU
J173
BLU
1
DECURLER CAM
ROLL SENSOR
10.32
4
BLU
7
J172
BLU
1
DECURLER BELT
CAM SENSOR
10.31
5
N.C
B1,B13
B16
N.C

7.2.1.21 +5VDC-10



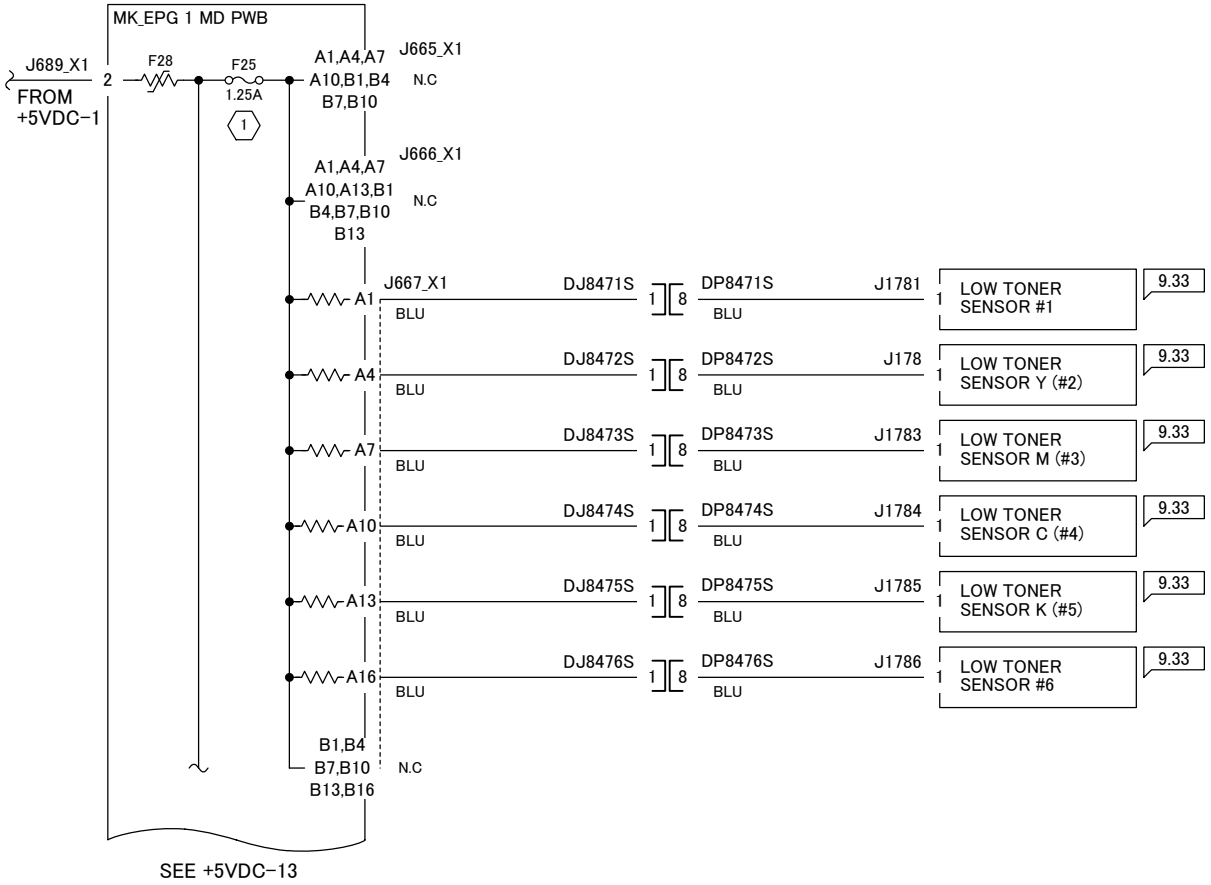
j0cx721021

7.2.1.22 +5VDC-11



j0cx721022

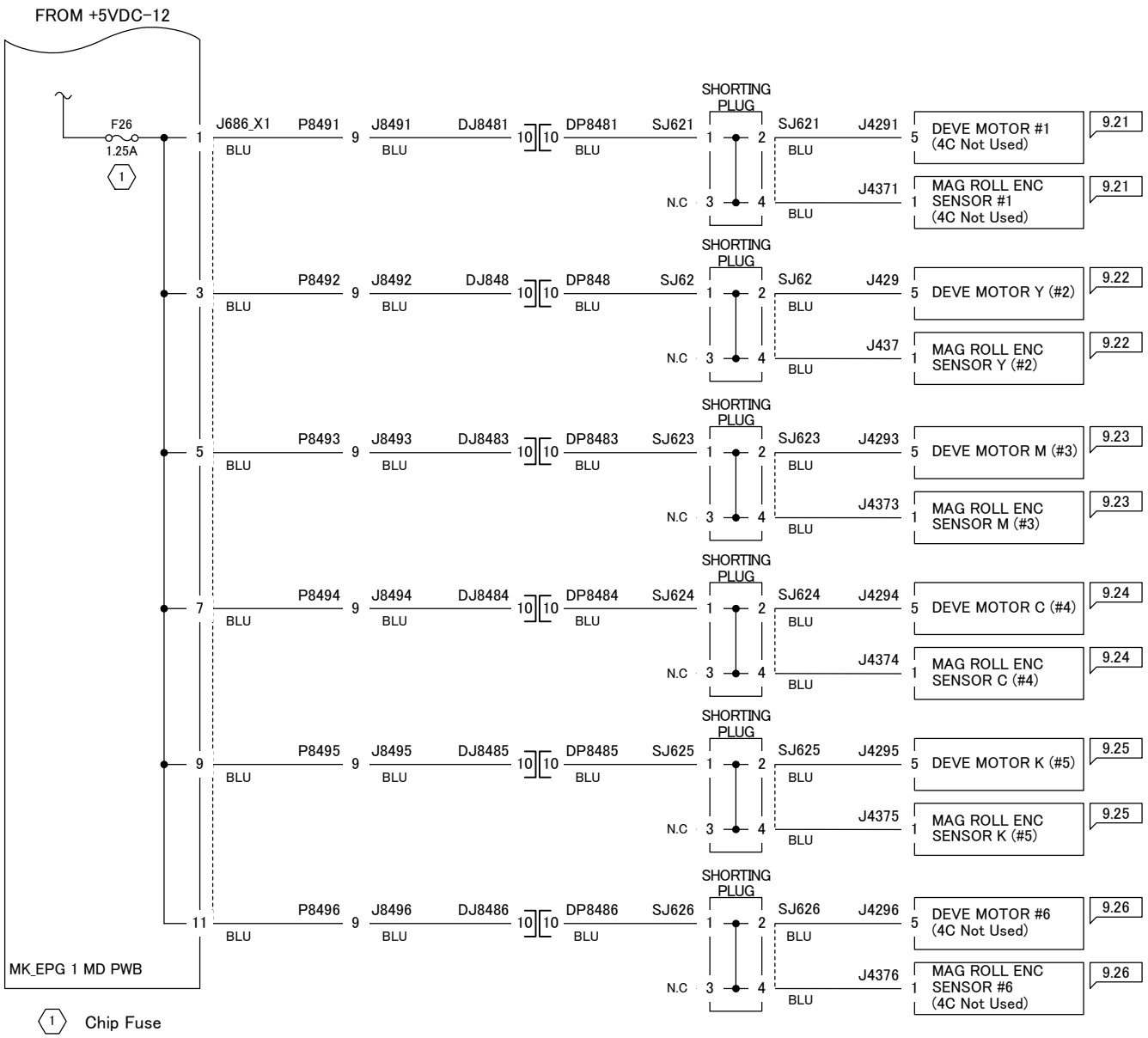
7.2.1.23 +5VDC-12



1 Chip Fuse

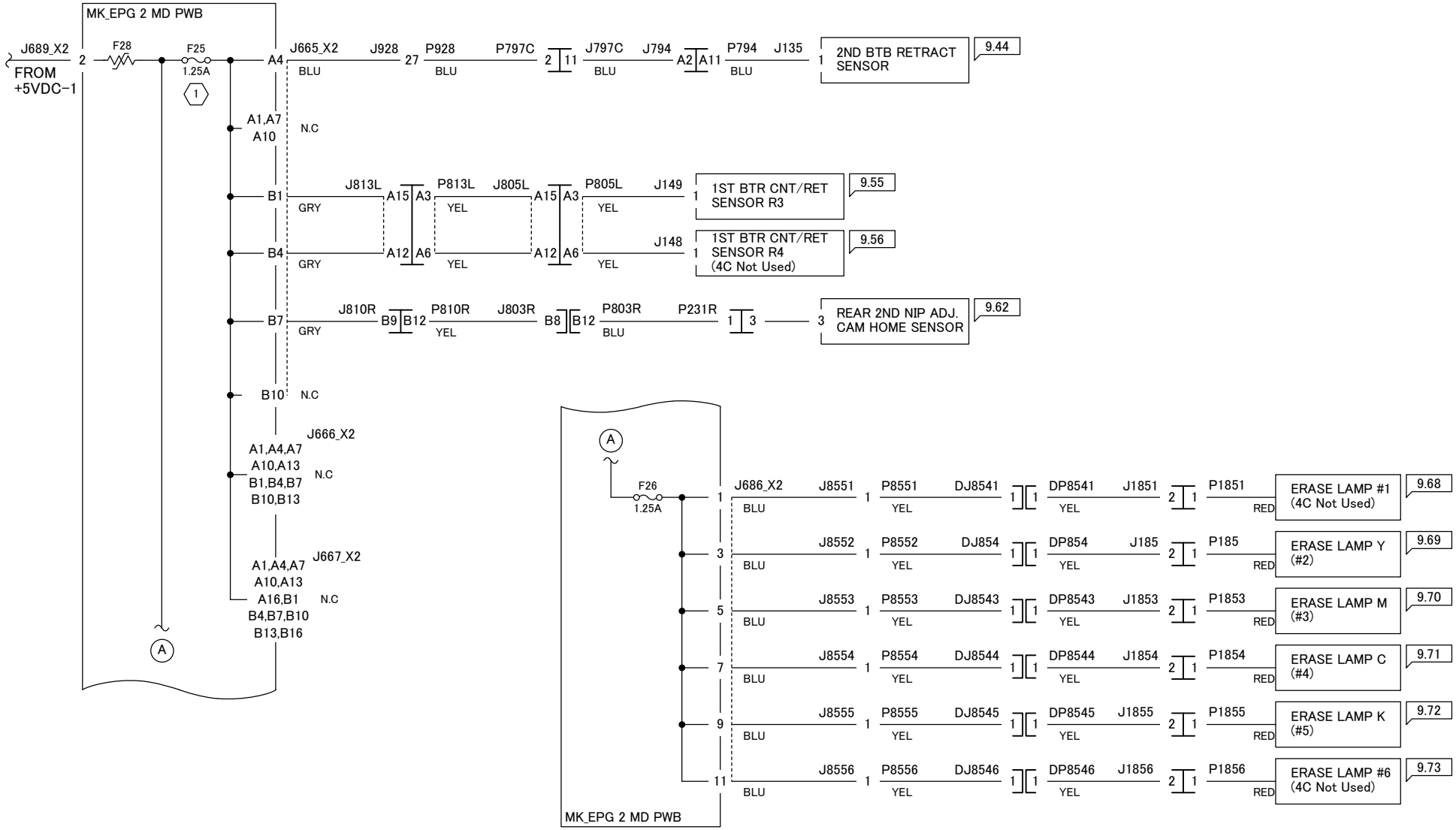
j0cx721023

7.2.1.24 +5VDC-13


FROM +5VDC-12
F26
1.25A
1
MK_EPG 1 MD PWB
1 Chip Fuse
SHORTING PLUG
1 J686_X1 P8491 9 J8491 DJ8481 10 10 DP8481 SJ621 1 2 SJ621 J4291 5 DEVE MOTOR #1 (4C Not Used) 9.21
BLU BLU BLU BLU
N.C 3 4 J4371 1 MAG ROLL ENC SENSOR #1 (4C Not Used) 9.21
BLU
3 P8492 9 J8492 DJ848 10 10 DP848 SJ62 1 2 SJ62 J429 5 DEVE MOTOR Y (#2) 9.22
BLU BLU BLU BLU
N.C 3 4 J437 1 MAG ROLL ENC SENSOR Y (#2) 9.22
BLU
5 P8493 9 J8493 DJ8483 10 10 DP8483 SJ623 1 2 SJ623 J4293 5 DEVE MOTOR M (#3) 9.23
BLU BLU BLU BLU
N.C 3 4 J4373 1 MAG ROLL ENC SENSOR M (#3) 9.23
BLU
7 P8494 9 J8494 DJ8484 10 10 DP8484 SJ624 1 2 SJ624 J4294 5 DEVE MOTOR C (#4) 9.24
BLU BLU BLU BLU
N.C 3 4 J4374 1 MAG ROLL ENC SENSOR C (#4) 9.24
BLU
9 P8495 9 J8495 DJ8485 10 10 DP8485 SJ625 1 2 SJ625 J4295 5 DEVE MOTOR K (#5) 9.25
BLU BLU BLU BLU
N.C 3 4 J4375 1 MAG ROLL ENC SENSOR K (#5) 9.25
BLU
11 P8496 9 J8496 DJ8486 10 10 DP8486 SJ626 1 2 SJ626 J4296 5 DEVE MOTOR #6 (4C Not Used) 9.26
BLU BLU BLU BLU
N.C 3 4 J4376 1 MAG ROLL ENC SENSOR #6 (4C Not Used) 9.26
BLU

j0cx721024

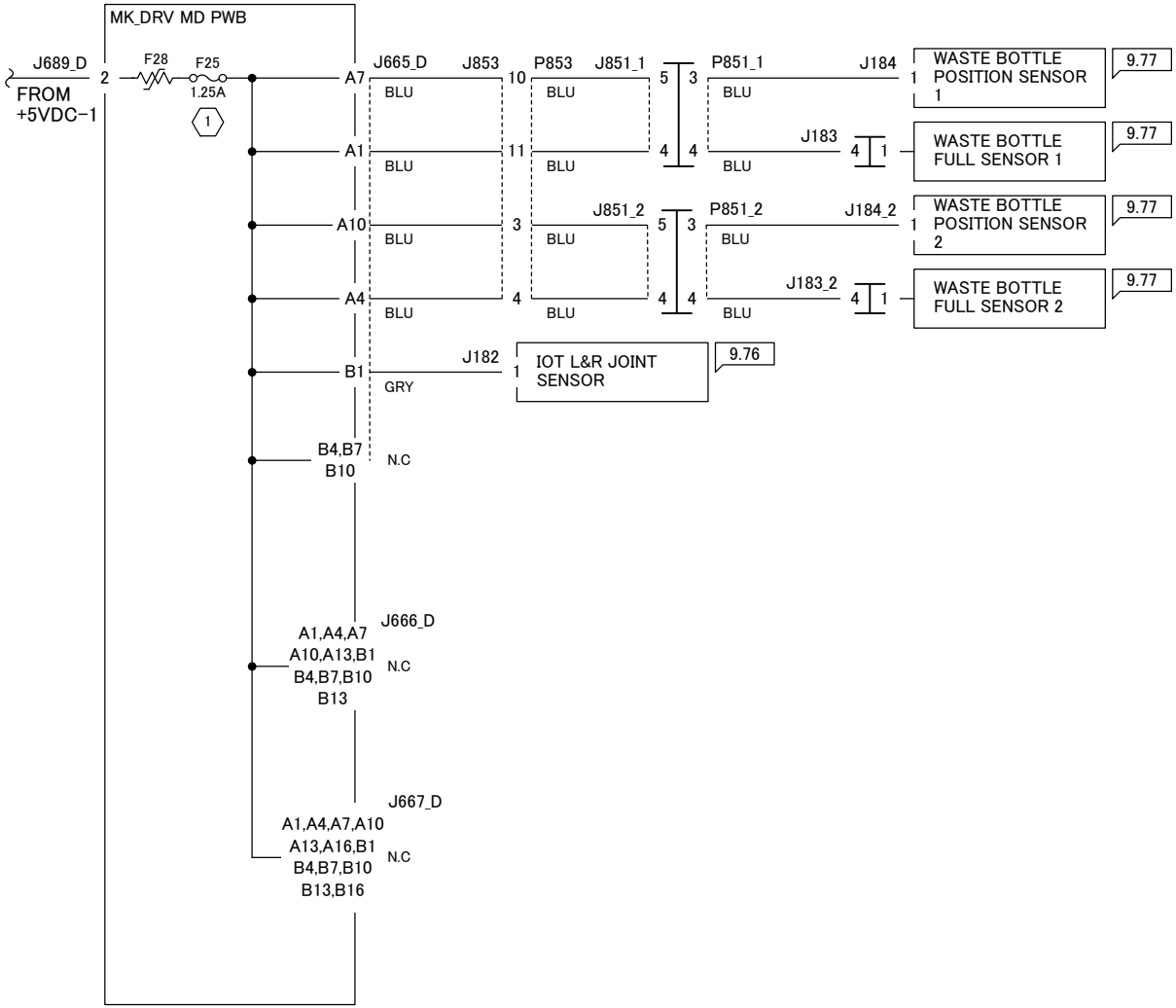
7.2.1.25 +5VDC-14



1 Chip Fuse

j0cx721025

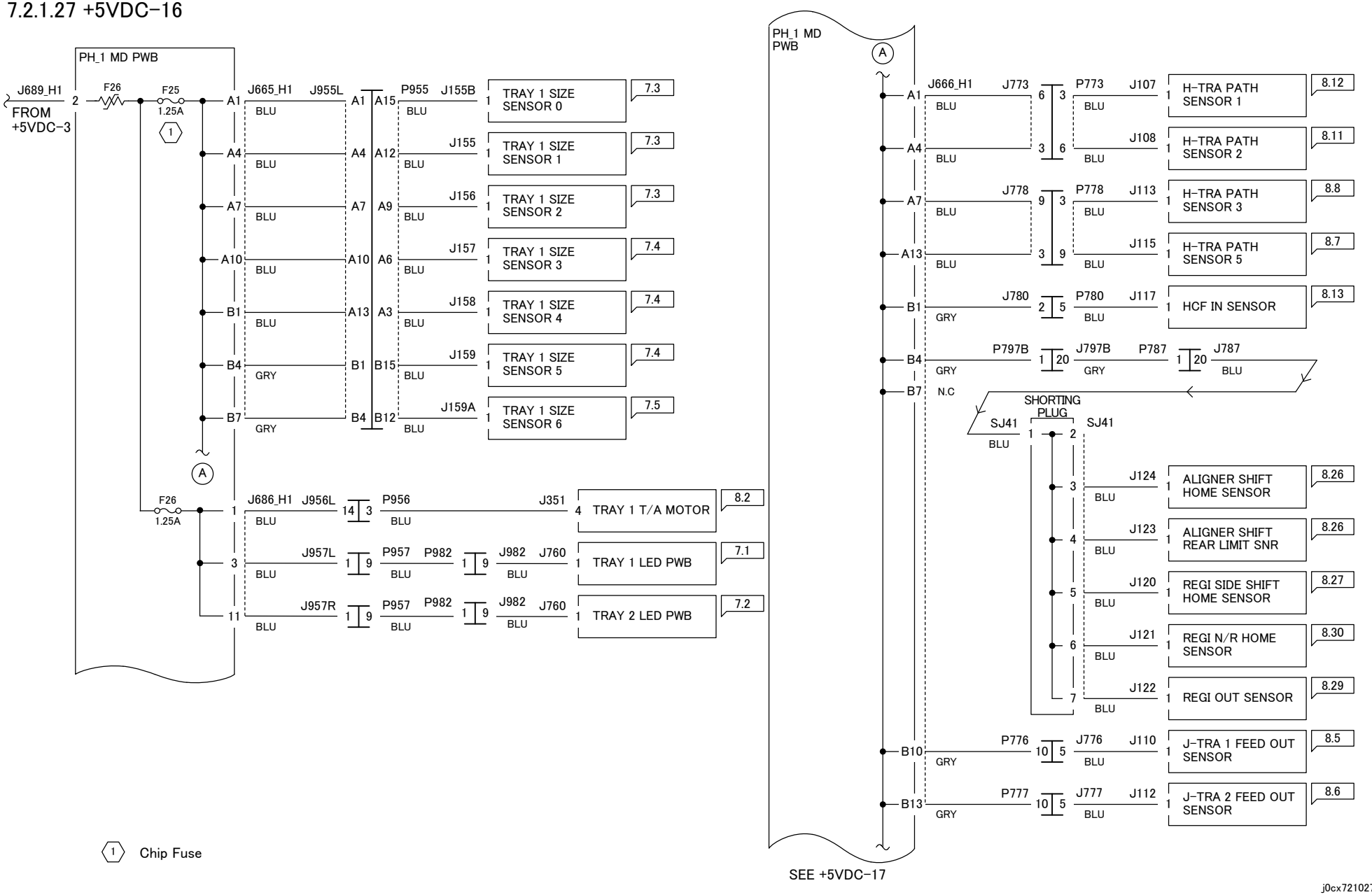
7.2.1.26 +5VDC-15



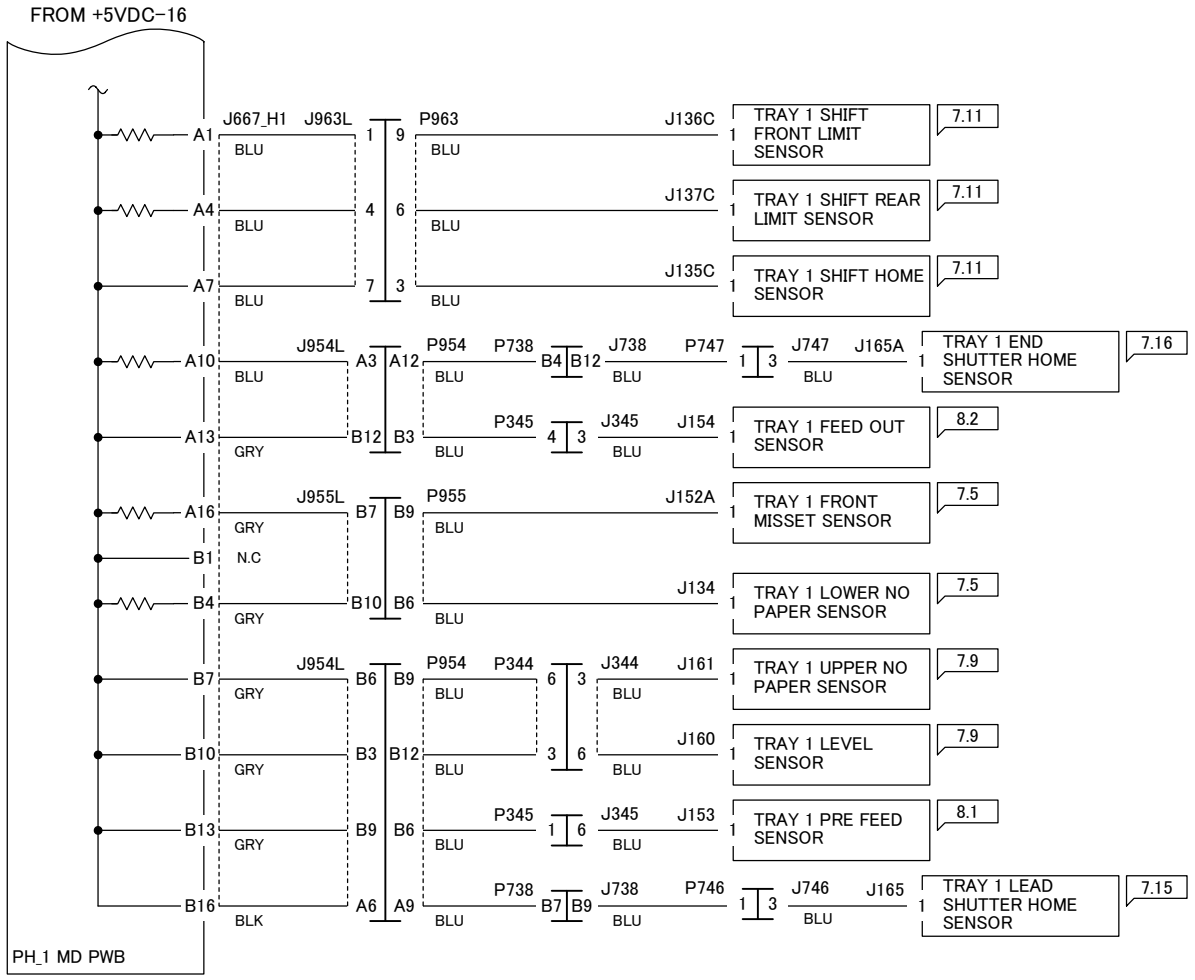
1 Chip Fuse

j0cx721026

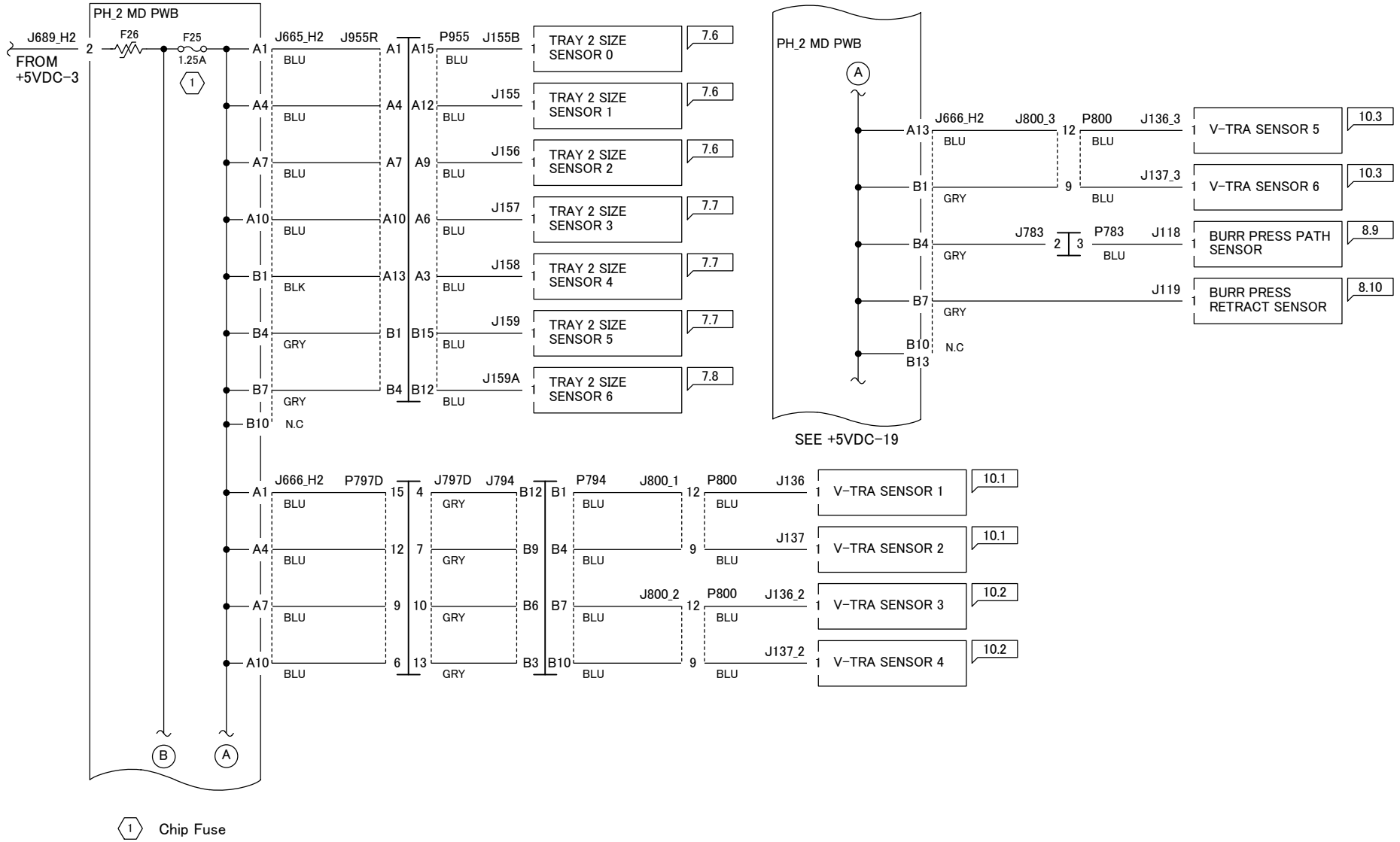
7.2.1.27 +5VDC-16



7.2.1.28 +5VDC-17

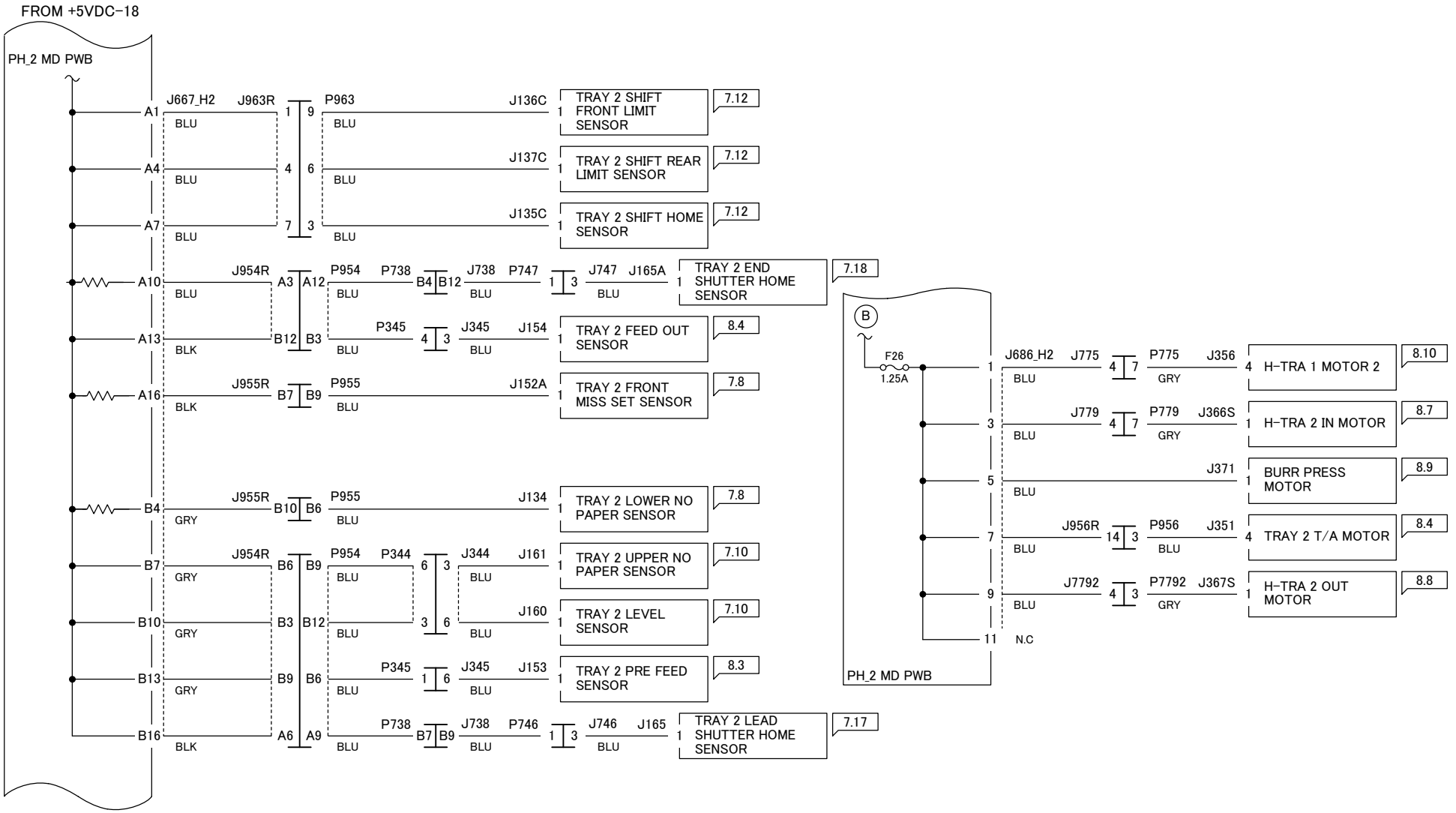


7.2.1.29 +5VDC-18



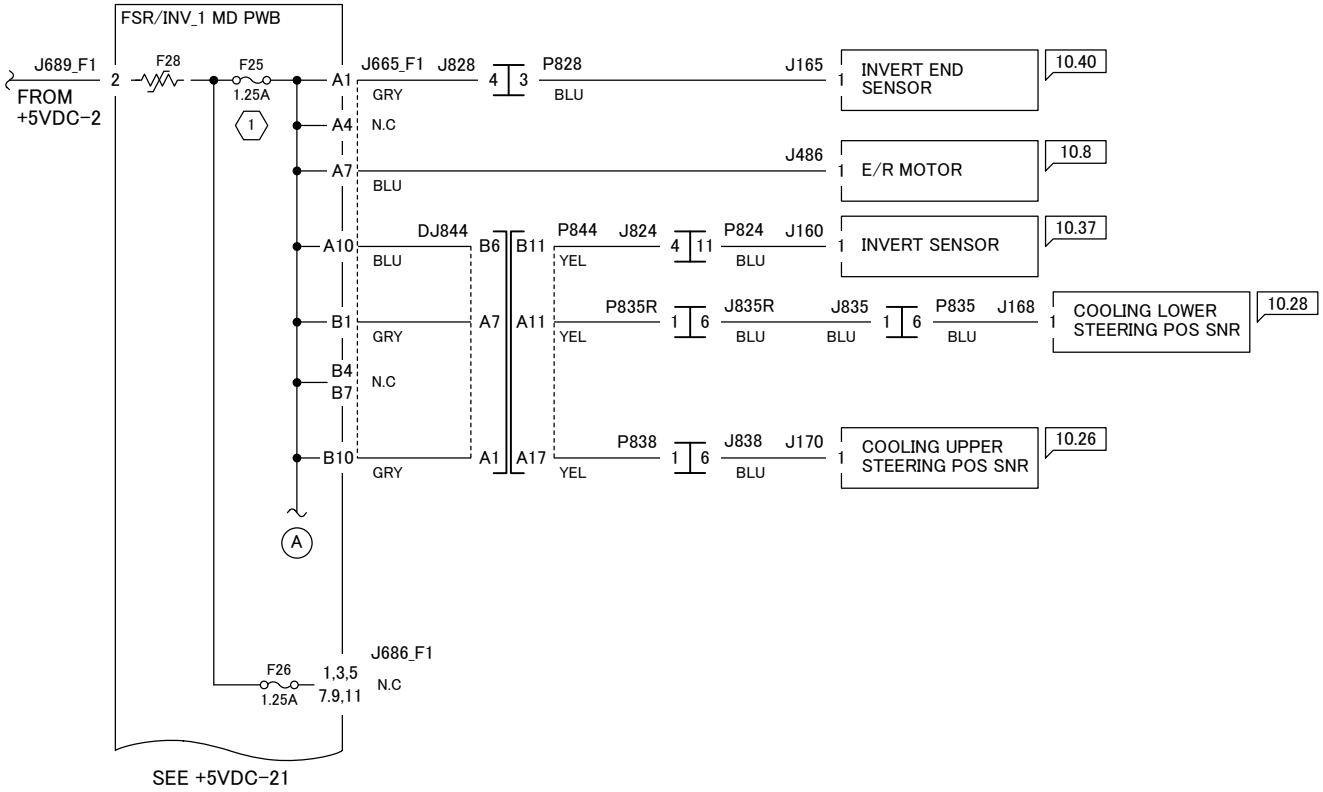
j0cx721029

7.2.1.30 +5VDC-19



j0cx721030

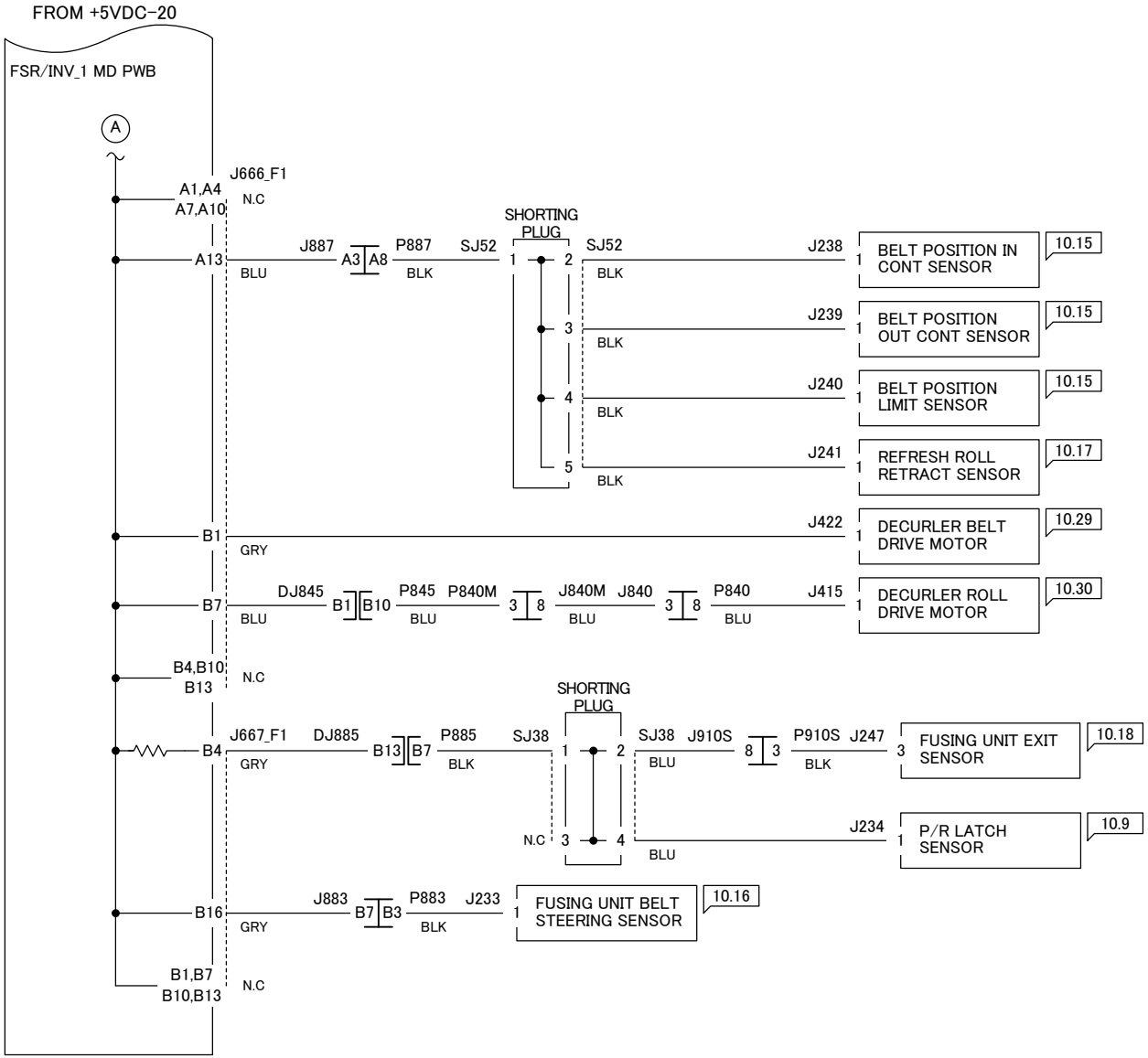
7.2.1.31 +5VDC-20



1 Chip Fuse

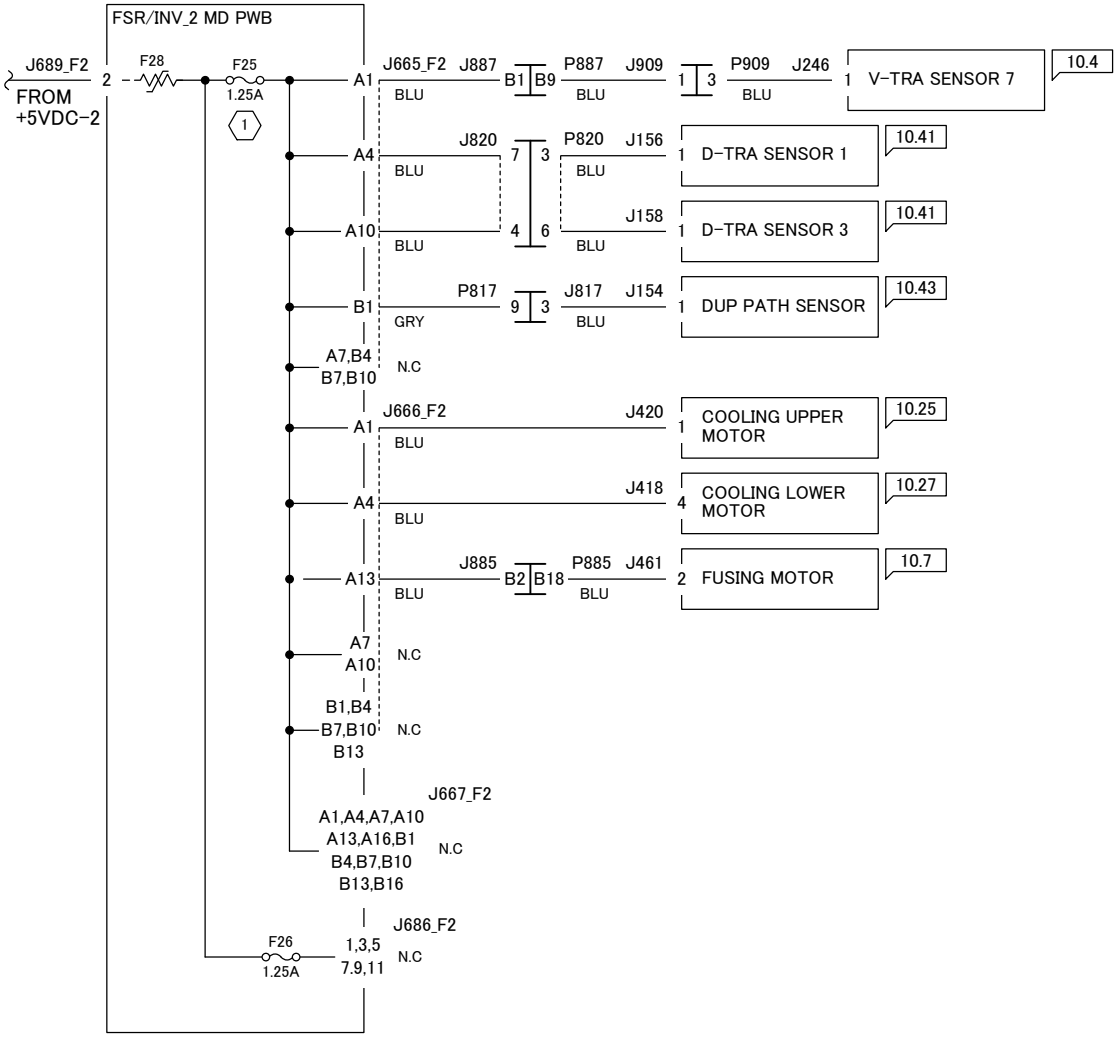
j0cx721031

7.2.1.32 +5VDC-21



j0cx721032

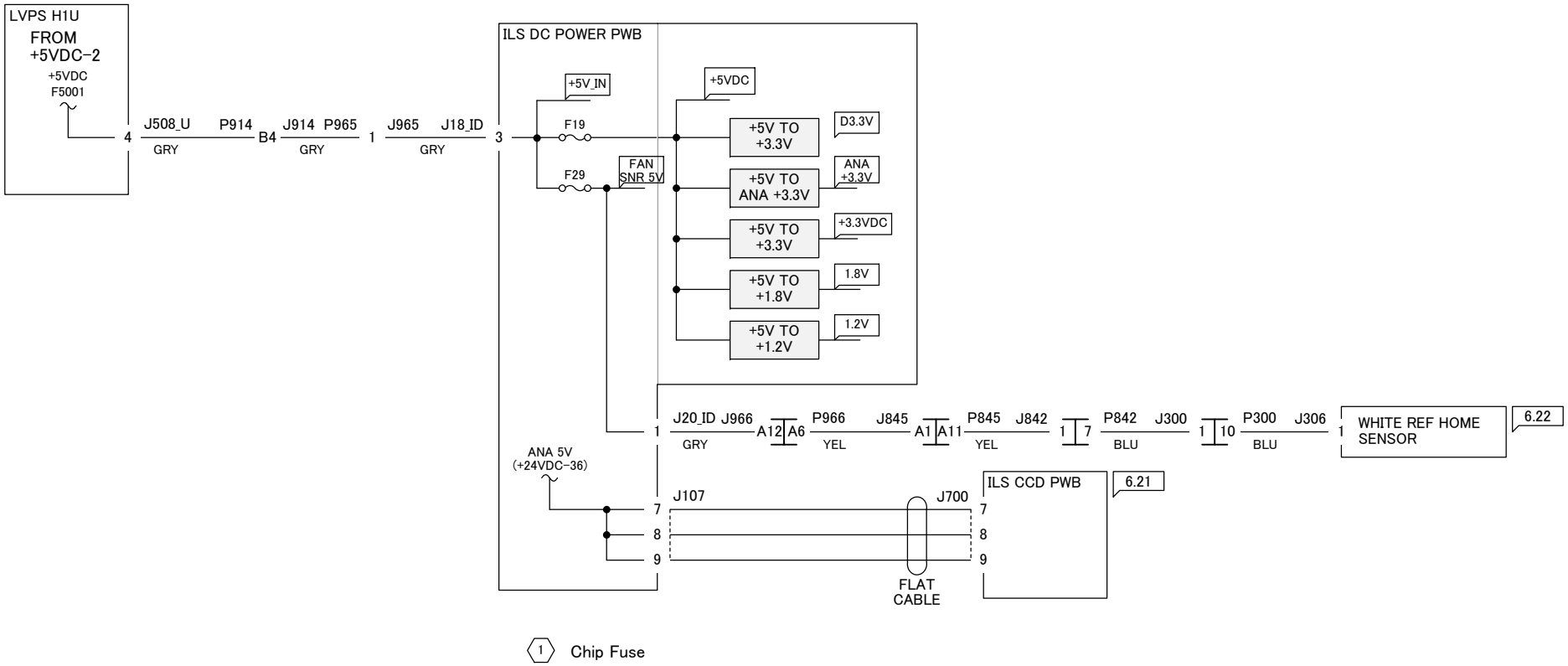
7.2.1.33 +5VDC-22



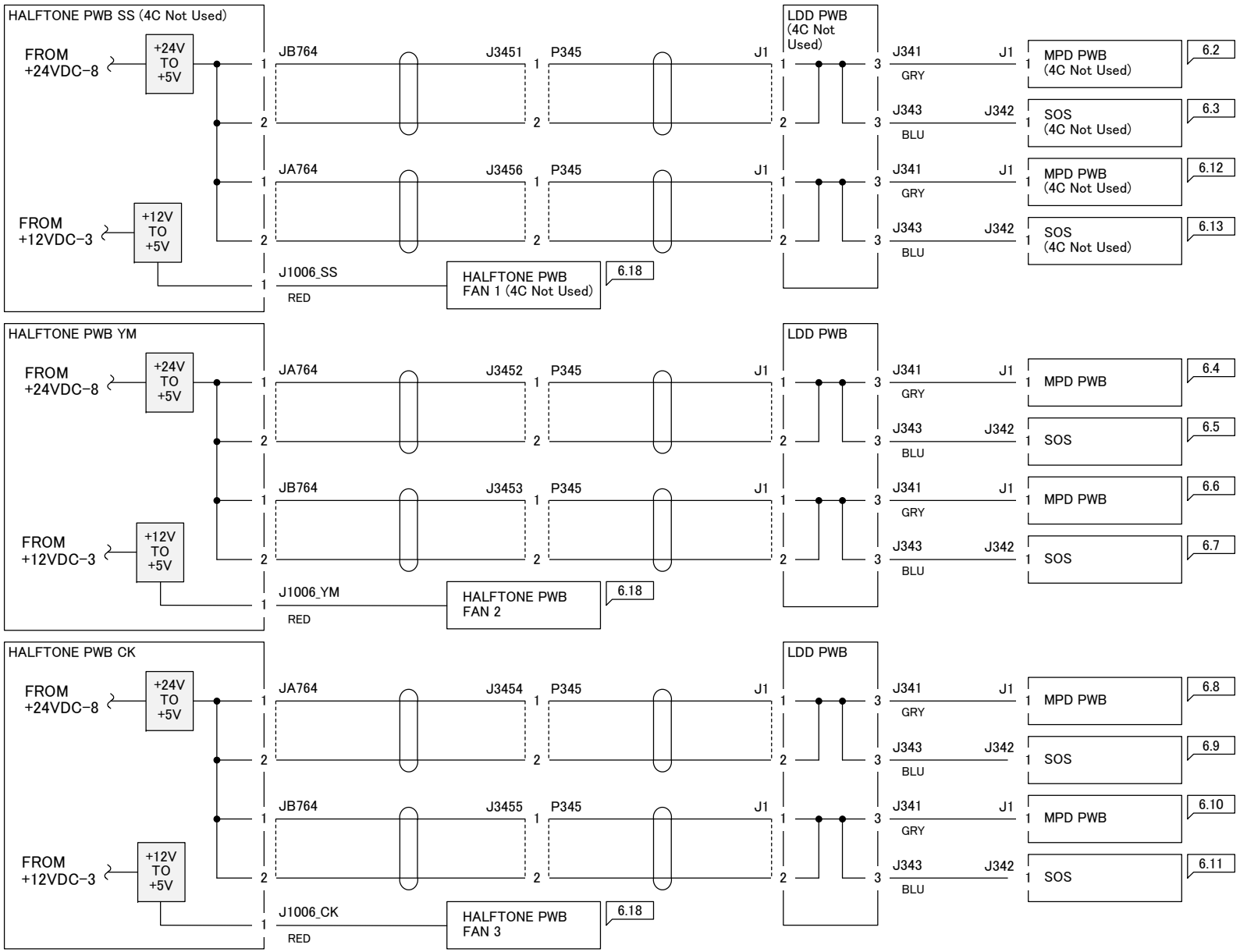
1 Chip Fuse

j0cx721033

7.2.1.34 +5VDC-23

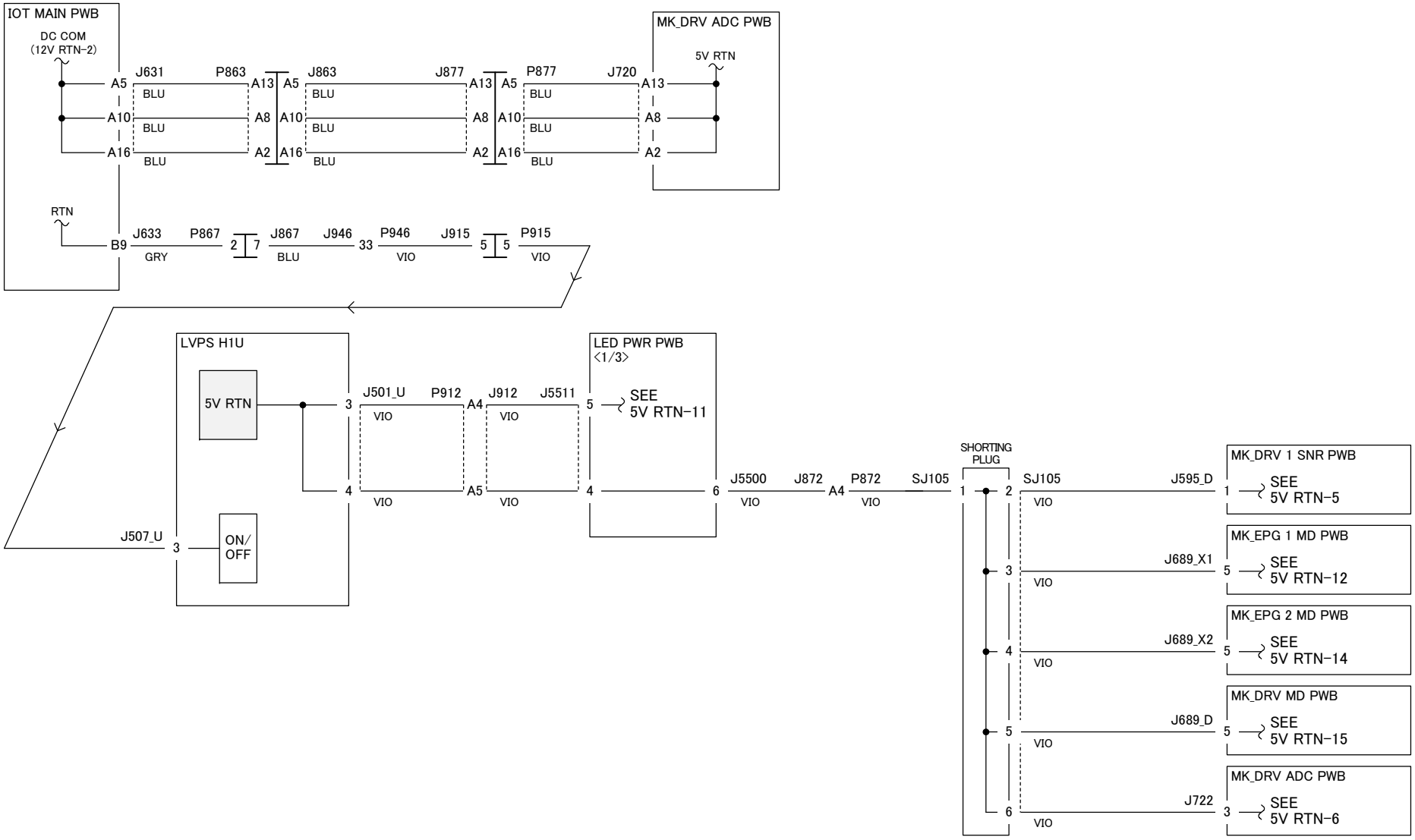


7.2.1.35 +5VDC-24



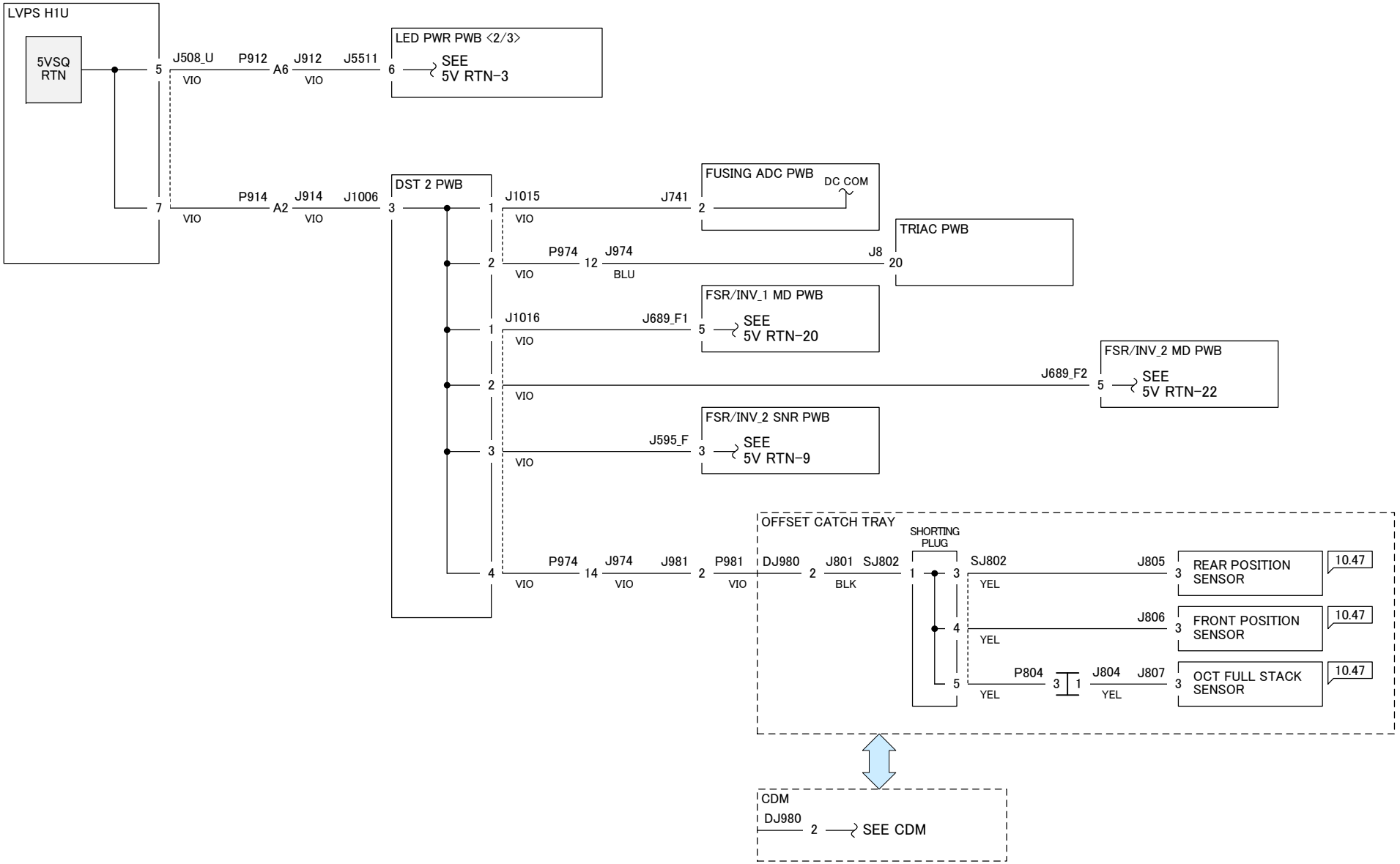
j0cx721035

7.2.1.36 DC COM (5V RTN-1)

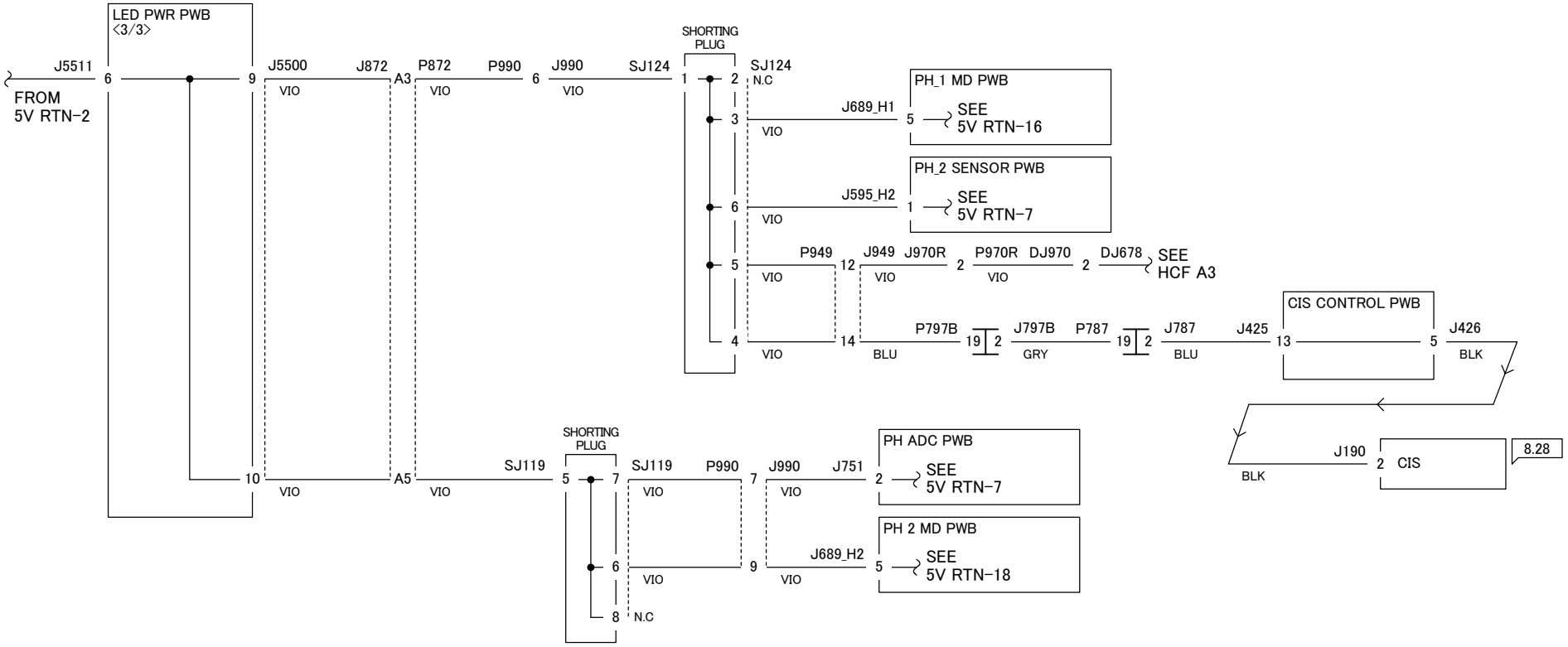


j0cx721036

7.2.1.37 DC COM (5V RTN-2)

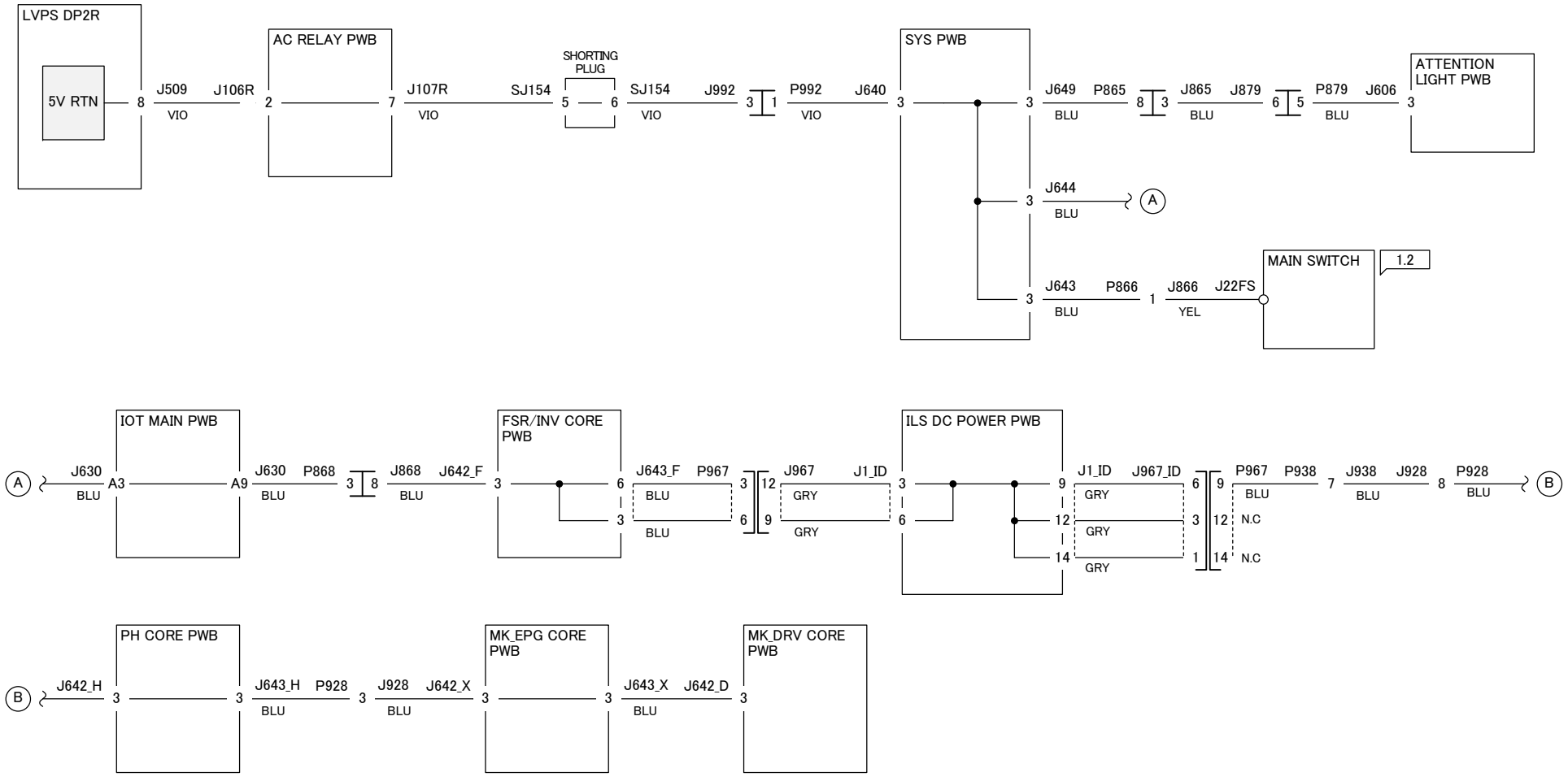


7.2.1.38 DC COM (5V RTN-3)



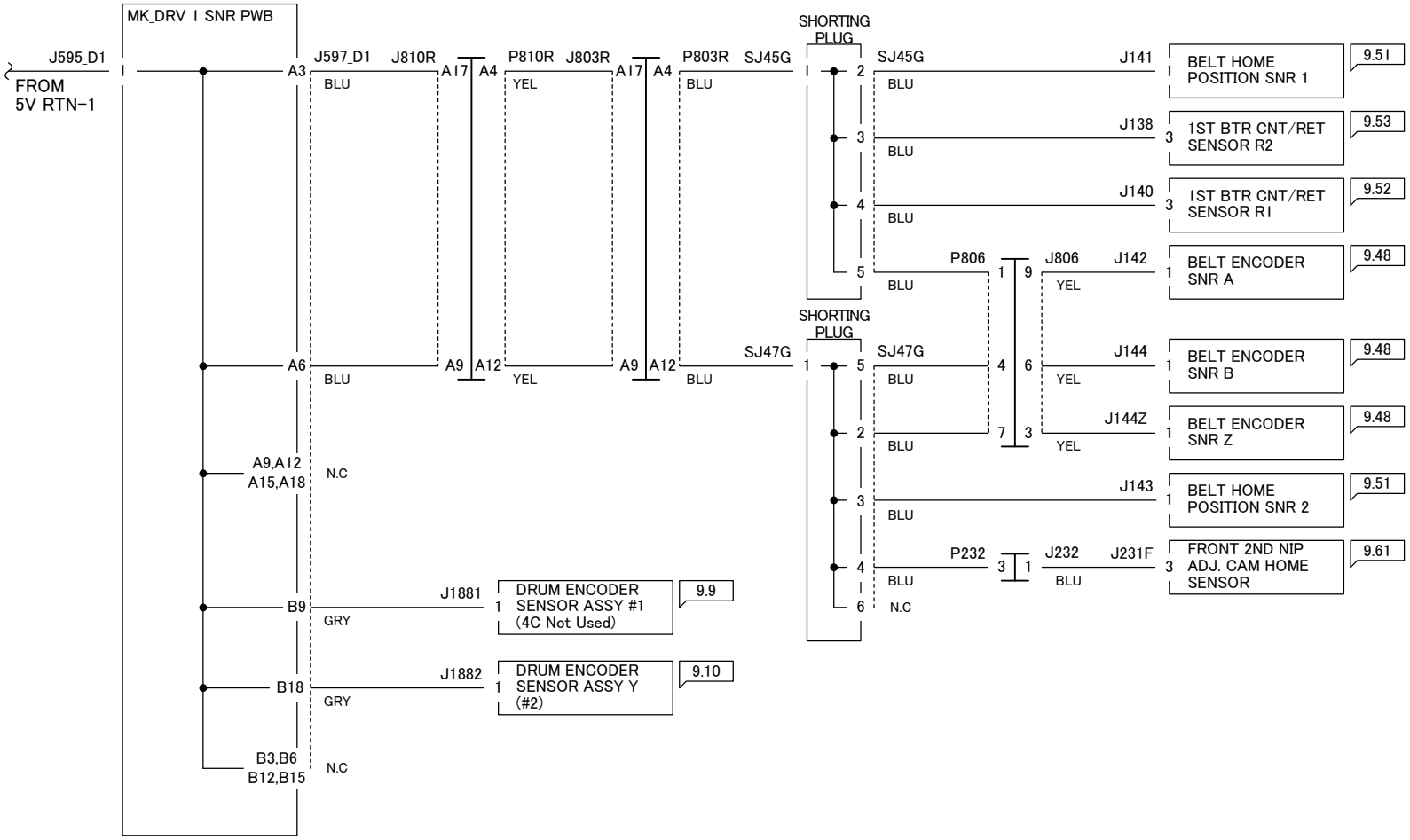
j0cx721038

7.2.1.39 DC COM (5V RTN-4)



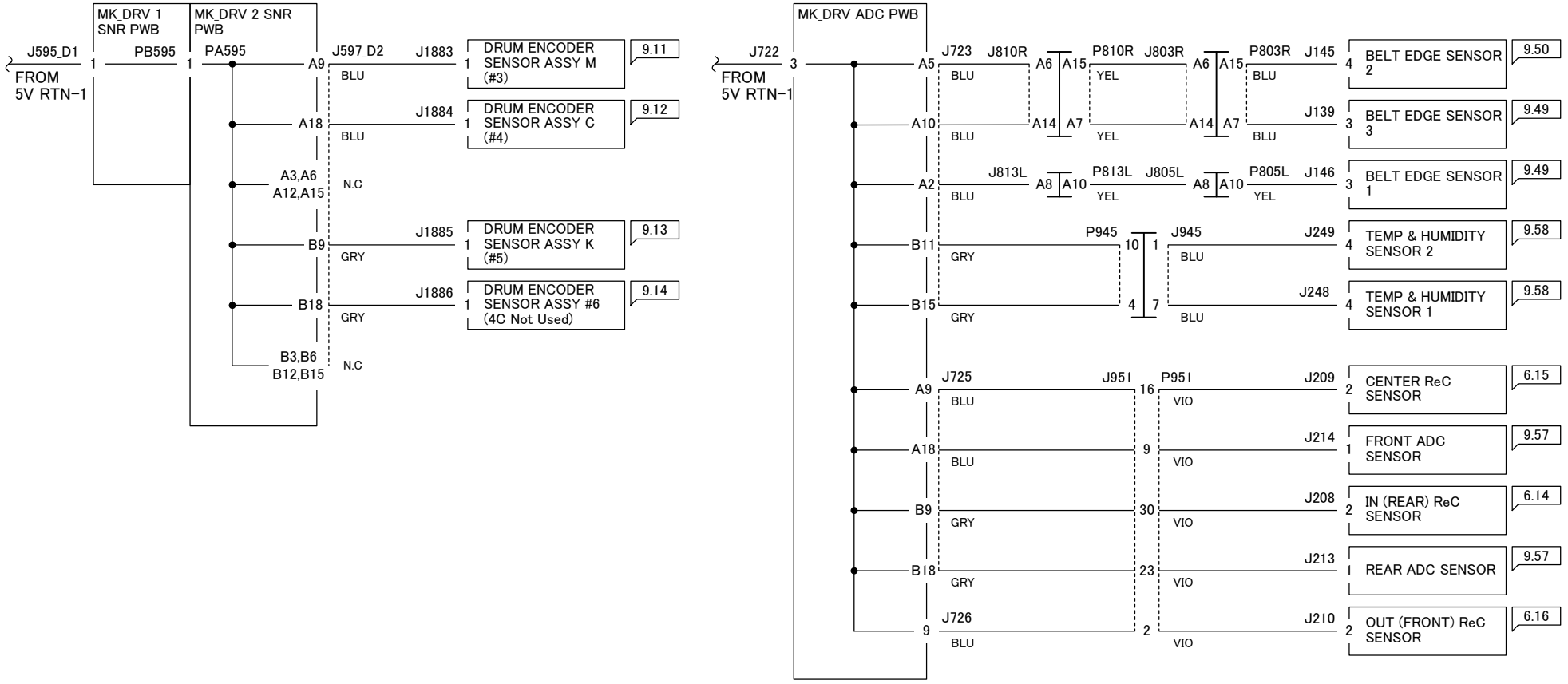
j0cx721039

7.2.1.40 DC COM (5V RTN-5)



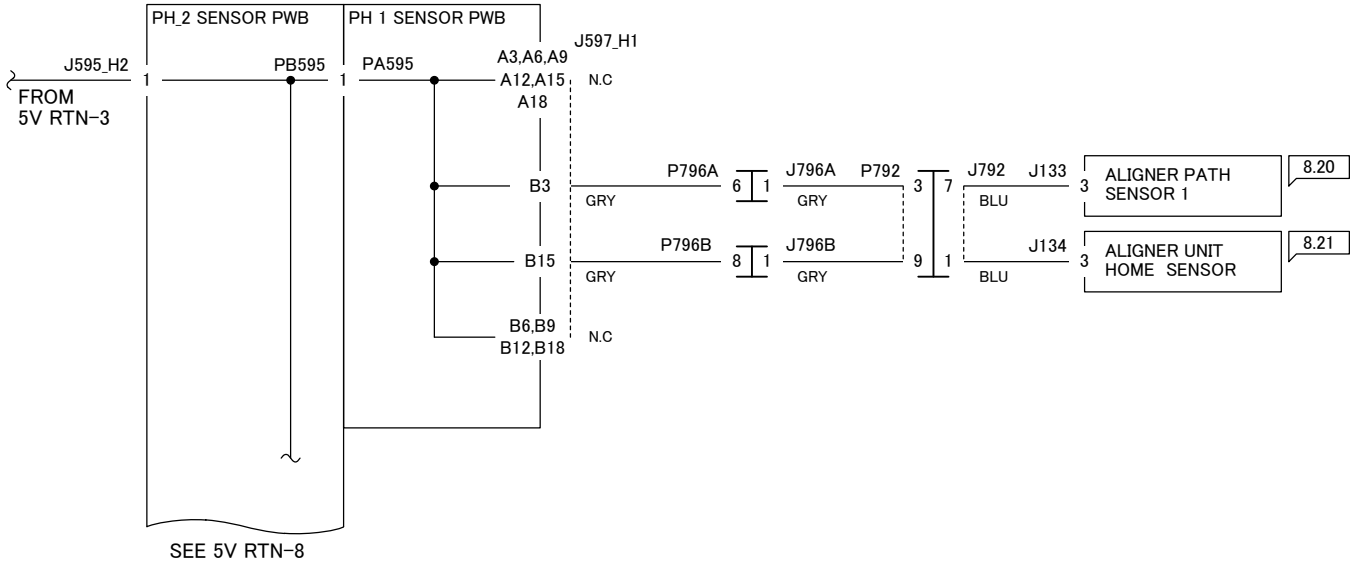
j0cx721040

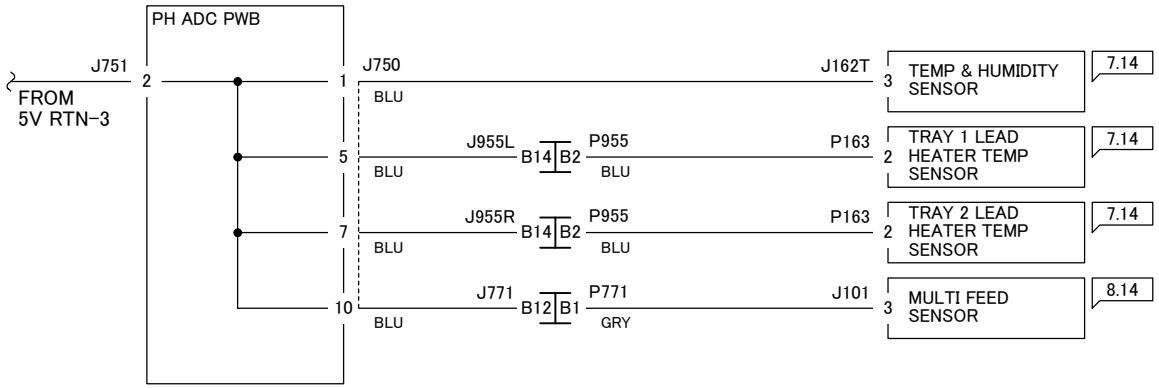
7.2.1.41 DC COM (5V RTN-6)



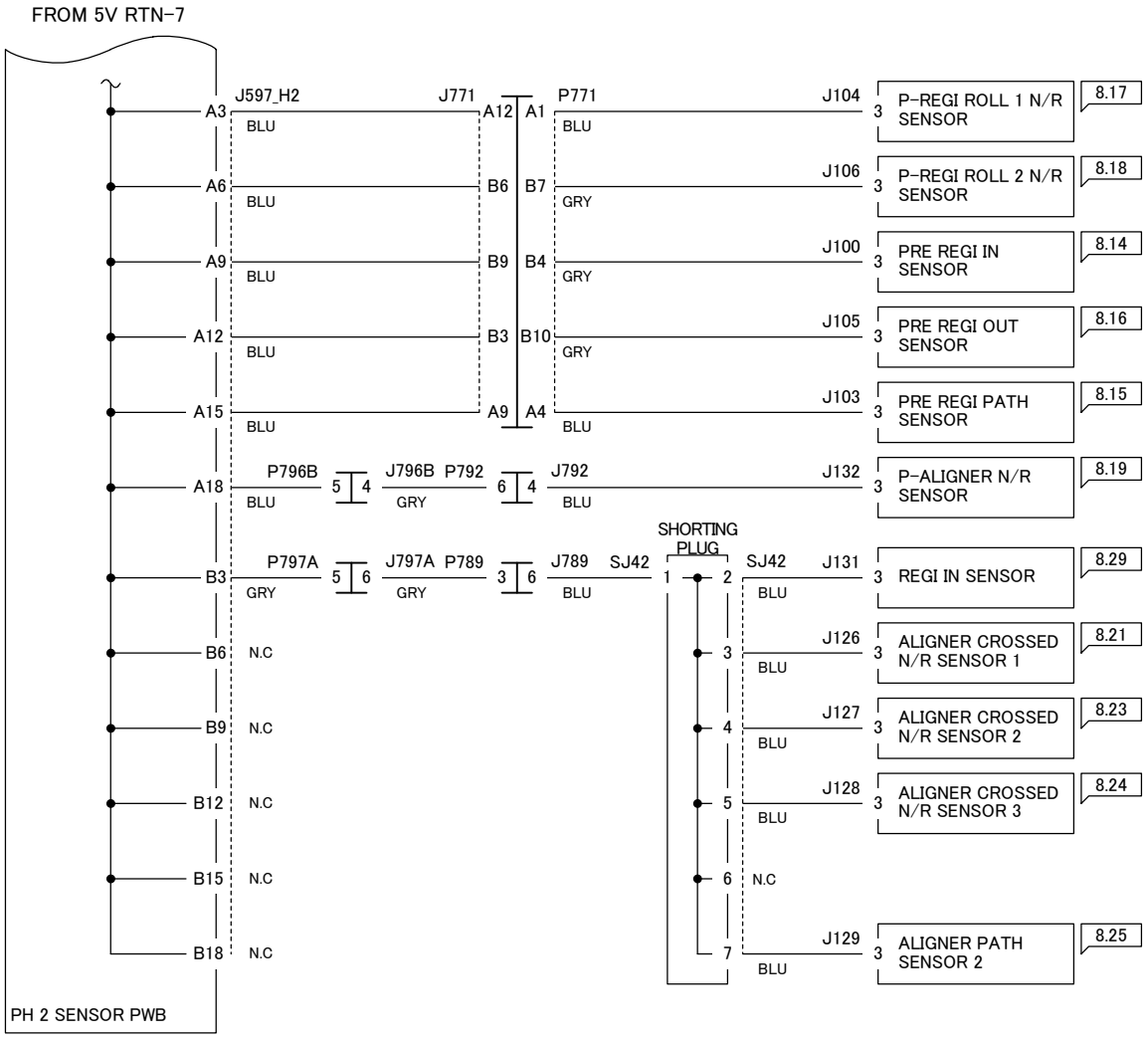
j0cx721041

7.2.1.42 DC COM (5V RTN-7)



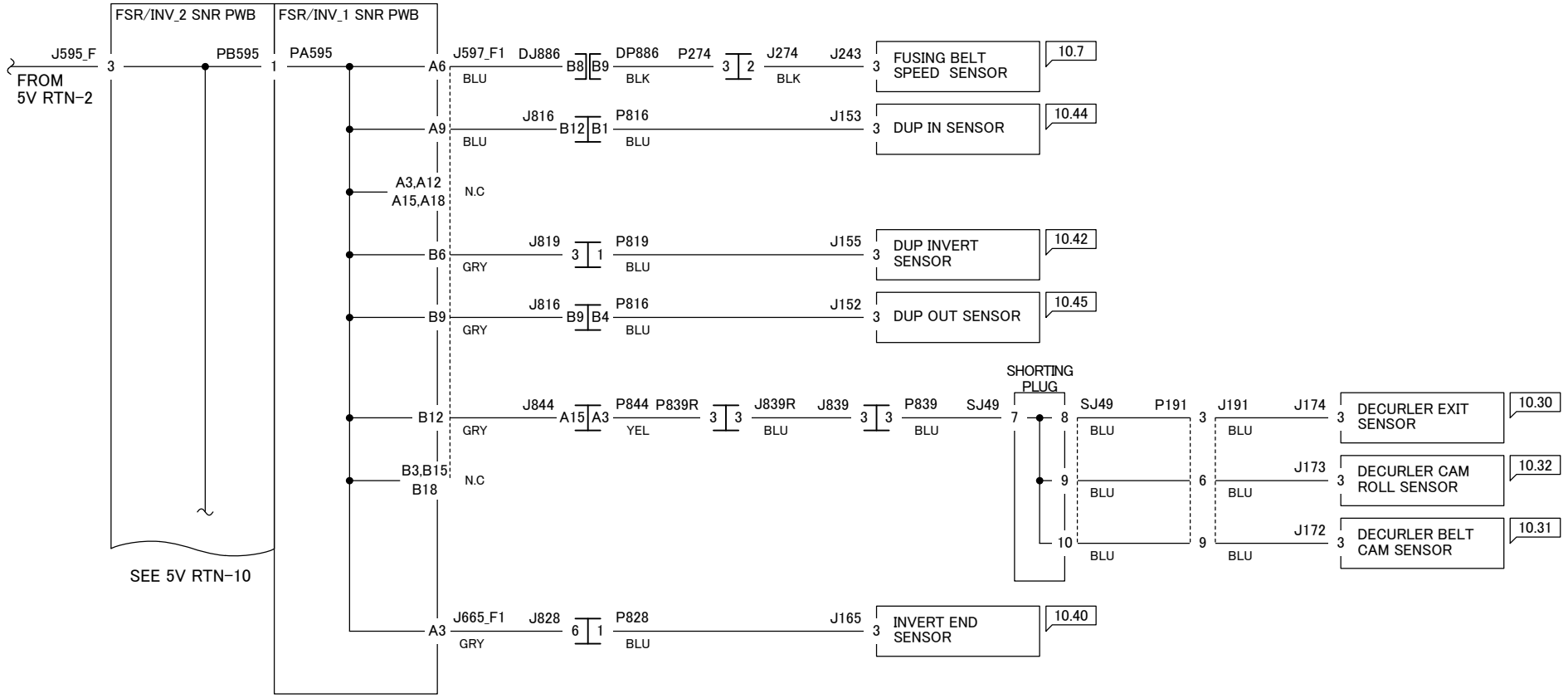


7.2.1.43 DC COM (5V RTN-8)



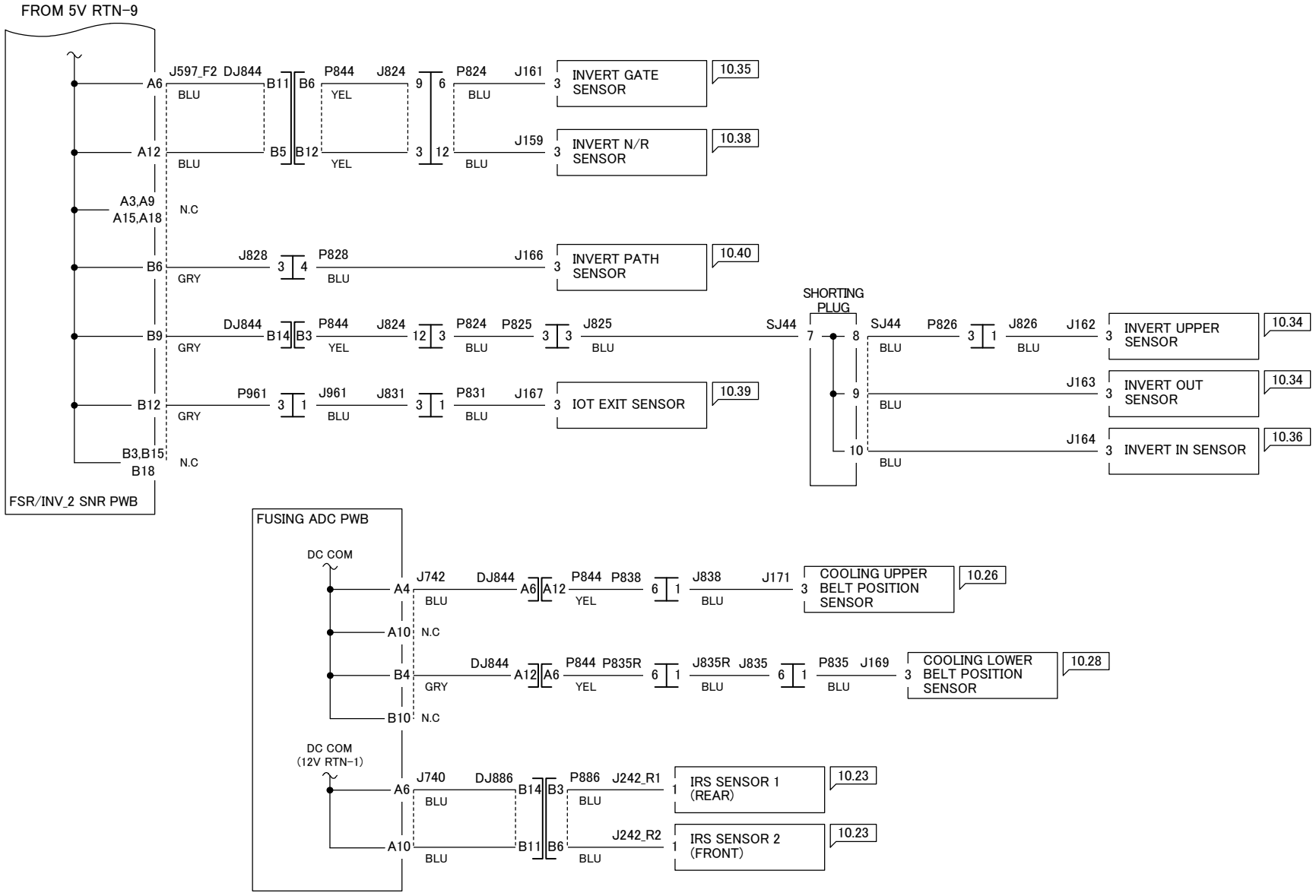
j0cx721043

7.2.1.44 DC COM (5V RTN-9)



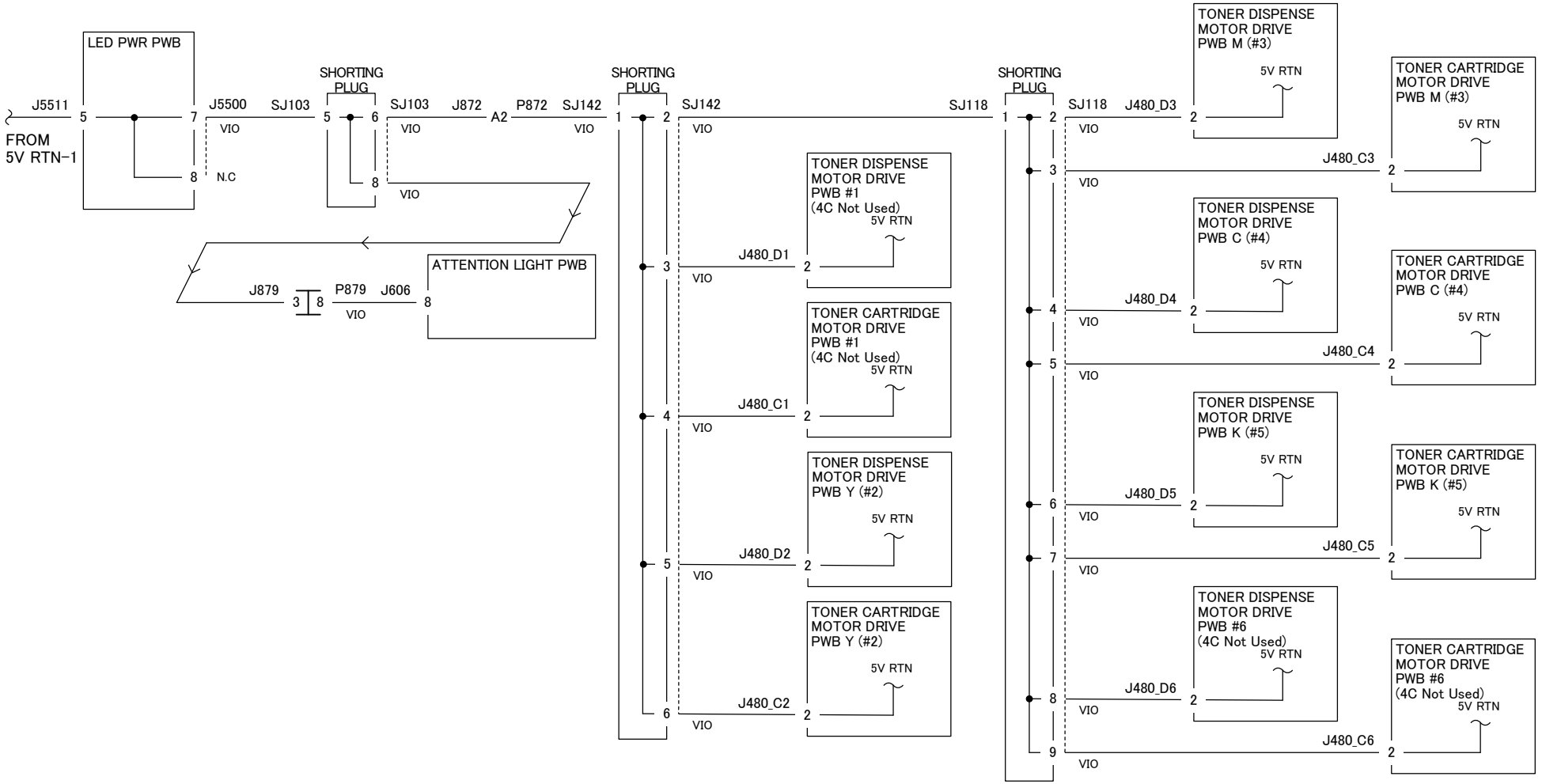
j0cx721044

7.2.1.45 DC COM (5V RTN-10)



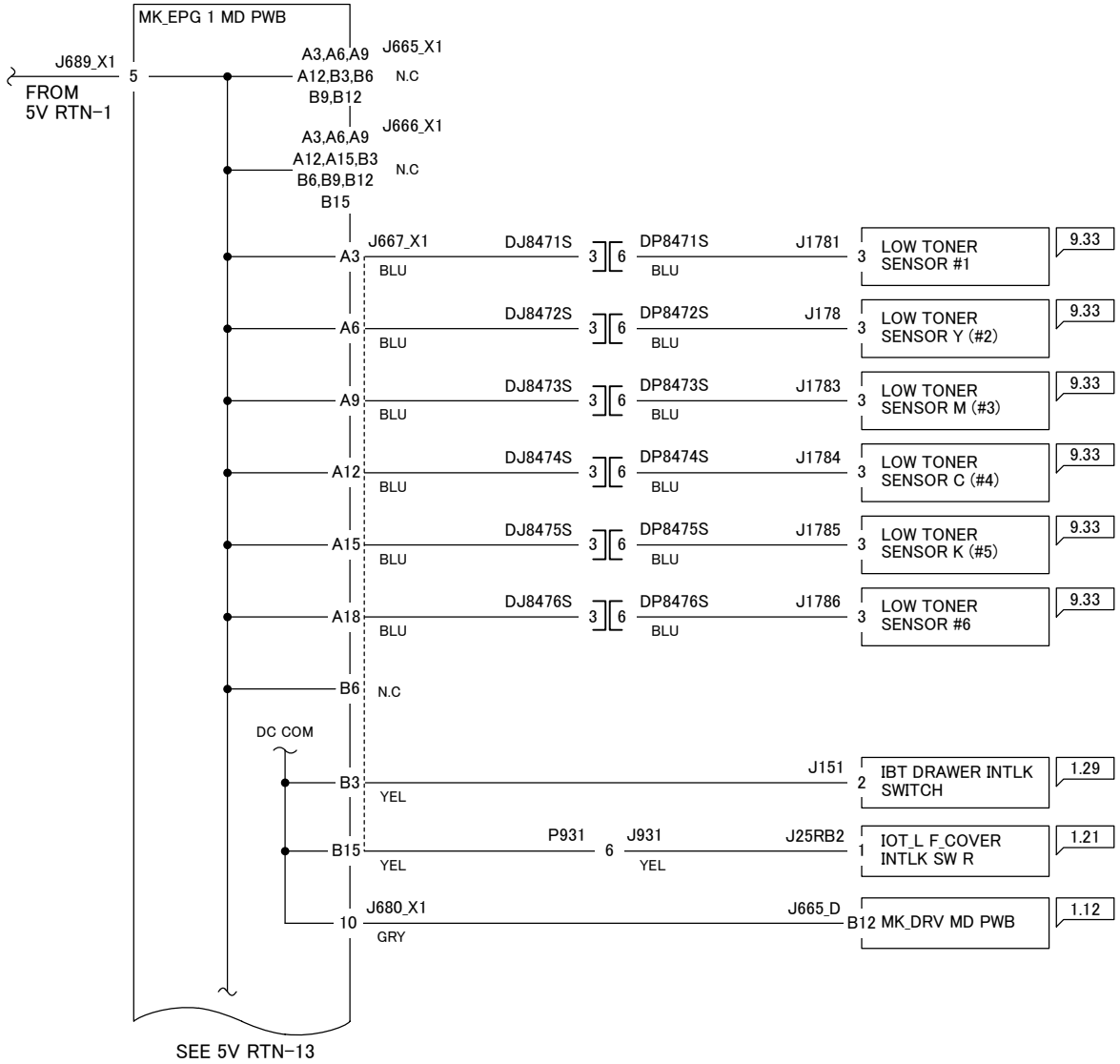
j0cx721045

7.2.1.46 DC COM (5V RTN-11)



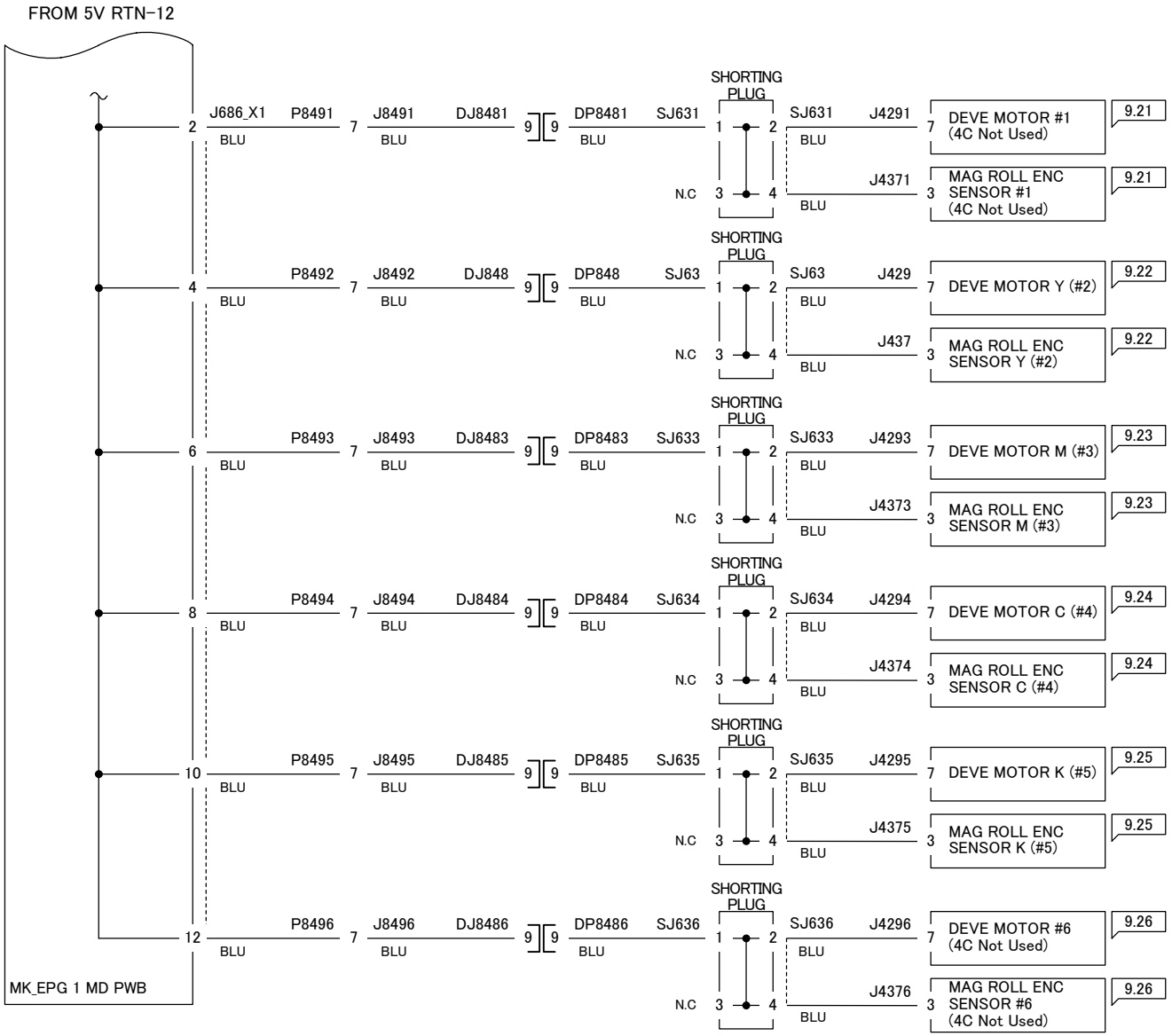
j0cx721046

7.2.1.47 DC COM (5V RTN-12)



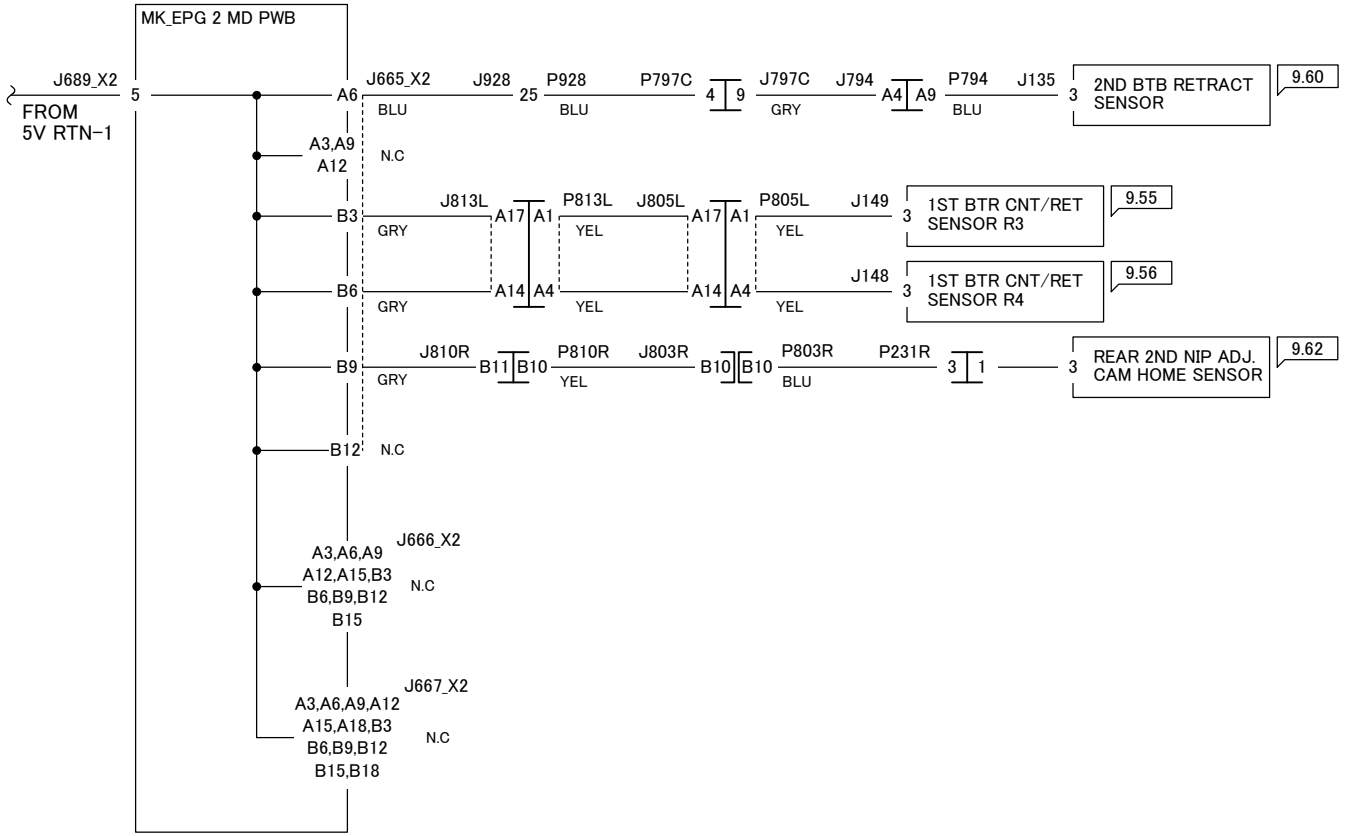
j0cx721047

7.2.1.48 DC COM (5V RTN-13)


FROM 5V RTN-12
MK_EPG 1 MD PWB
SHORTING PLUG
2 J686_X1 P8491 7 J8491 DJ8481 9 9 DP8481 SJ631 1 2 SJ631 J4291 7 DEVE MOTOR #1 (4C Not Used) 9.21
BLU BLU BLU BLU
N.C 3 4 J4371 3 MAG ROLL ENC SENSOR #1 (4C Not Used) 9.21
BLU
SHORTING PLUG
4 P8492 J8492 DJ848 DP848 SJ63 SJ63 J429 7 DEVE MOTOR Y (#2) 9.22
BLU BLU BLU BLU
N.C J437 3 MAG ROLL ENC SENSOR Y (#2) 9.22
BLU
SHORTING PLUG
6 P8493 J8493 DJ8483 DP8483 SJ633 SJ633 J4293 7 DEVE MOTOR M (#3) 9.23
BLU BLU BLU BLU
N.C J4373 3 MAG ROLL ENC SENSOR M (#3) 9.23
BLU
SHORTING PLUG
8 P8494 J8494 DJ8484 DP8484 SJ634 SJ634 J4294 7 DEVE MOTOR C (#4) 9.24
BLU BLU BLU BLU
N.C J4374 3 MAG ROLL ENC SENSOR C (#4) 9.24
BLU
SHORTING PLUG
10 P8495 J8495 DJ8485 DP8485 SJ635 SJ635 J4295 7 DEVE MOTOR K (#5) 9.25
BLU BLU BLU BLU
N.C J4375 3 MAG ROLL ENC SENSOR K (#5) 9.25
BLU
SHORTING PLUG
12 P8496 J8496 DJ8486 DP8486 SJ636 SJ636 J4296 7 DEVE MOTOR #6 (4C Not Used) 9.26
BLU BLU BLU BLU
N.C J4376 3 MAG ROLL ENC SENSOR #6 (4C Not Used) 9.26
BLU

j0cx721048

7.2.1.49 DC COM (5V RTN-14)



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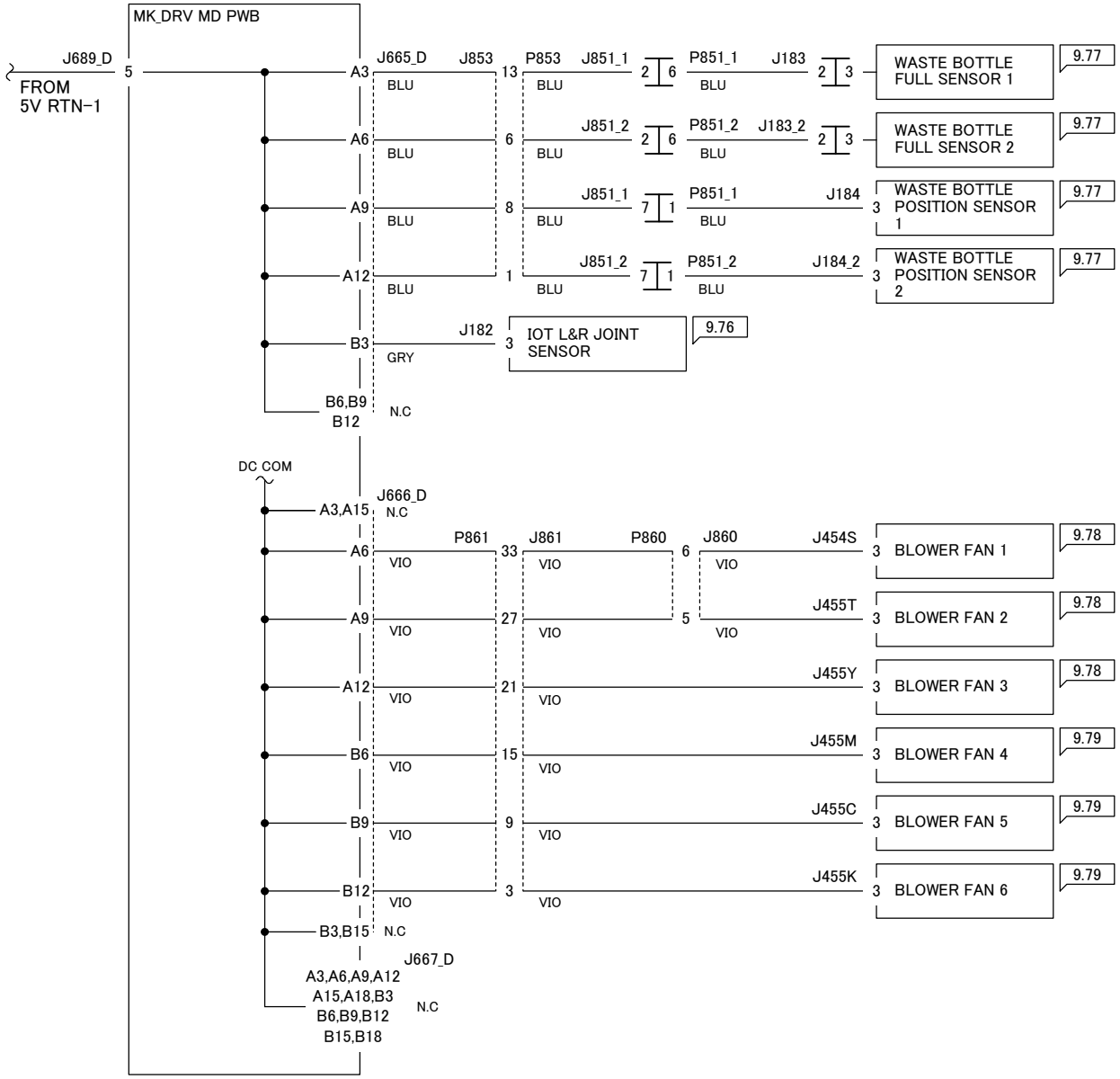
7.2.1.50 DC COM (5V RTN-15)



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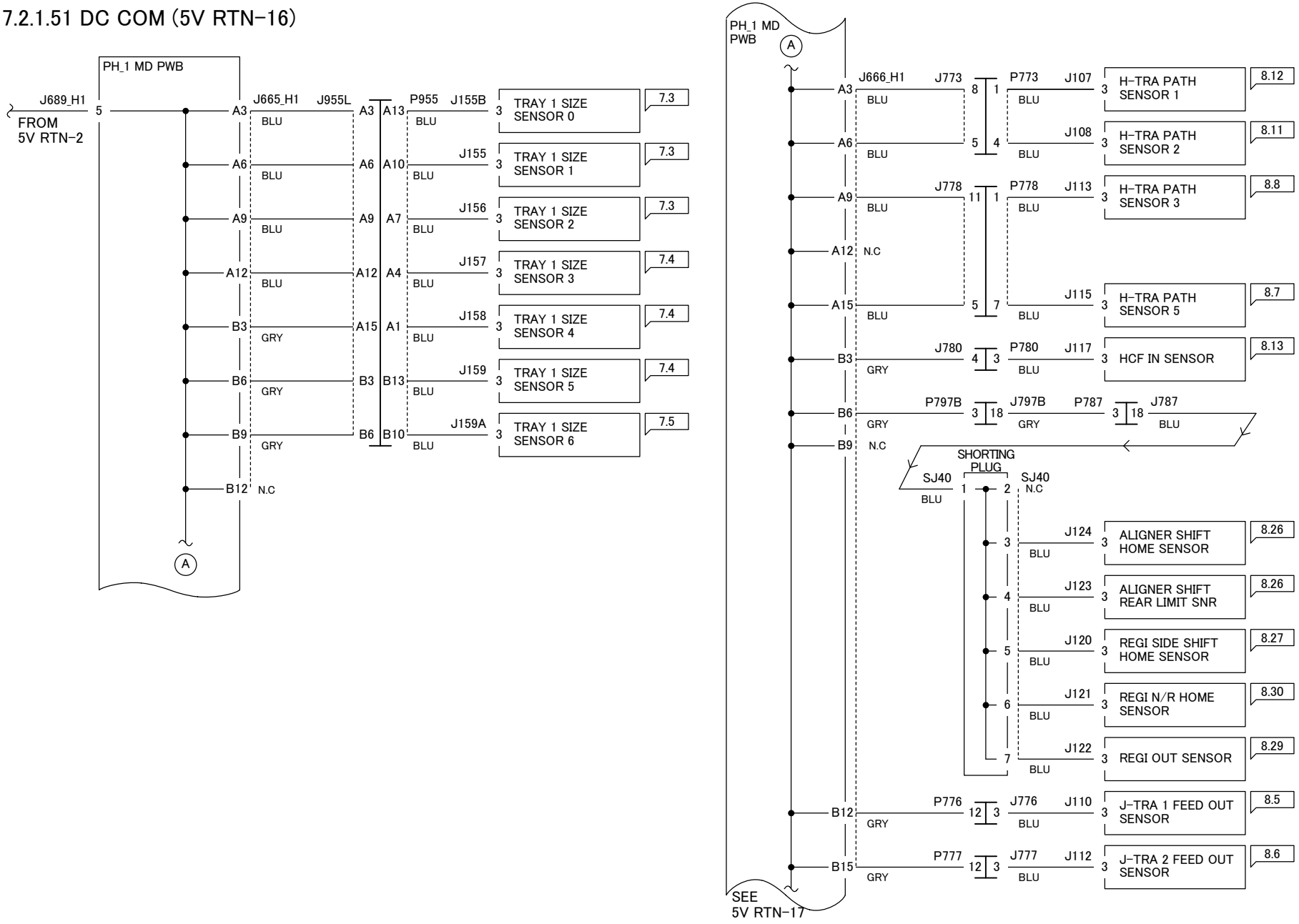
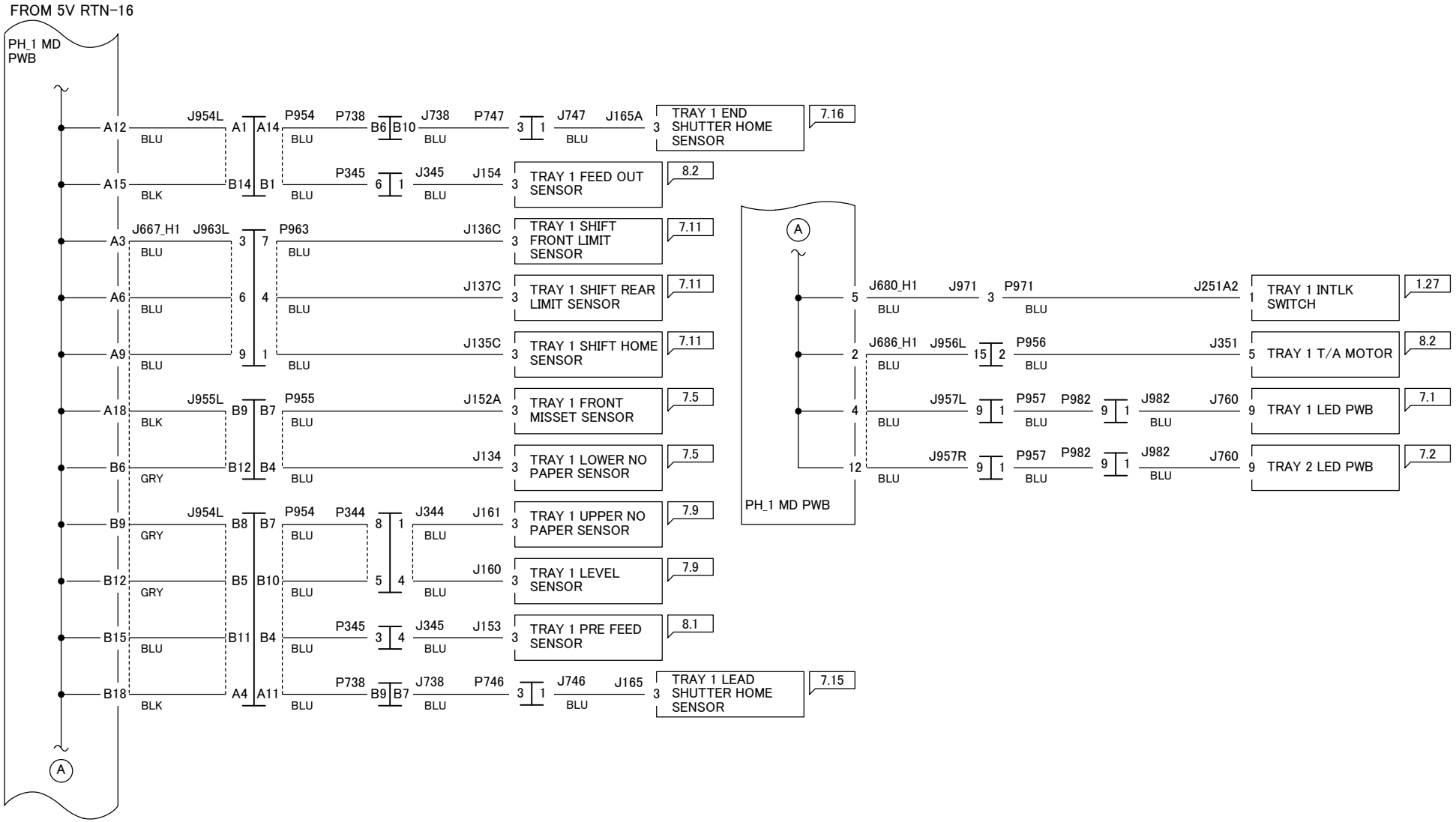
7.2.1.51 DC COM (5V RTN-16)



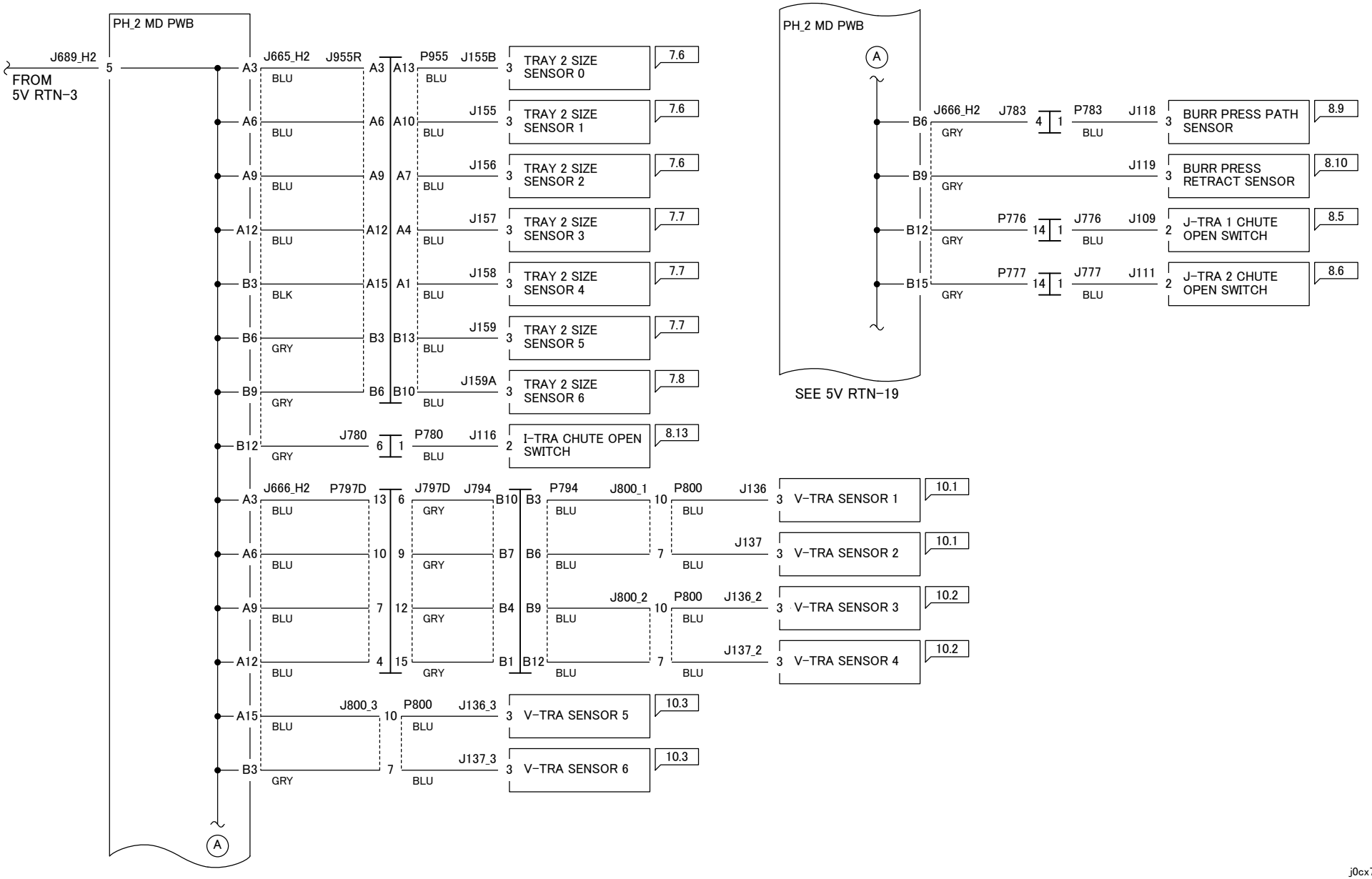
j0cx721051

7.2.1.52 DC COM (5V RTN-17)



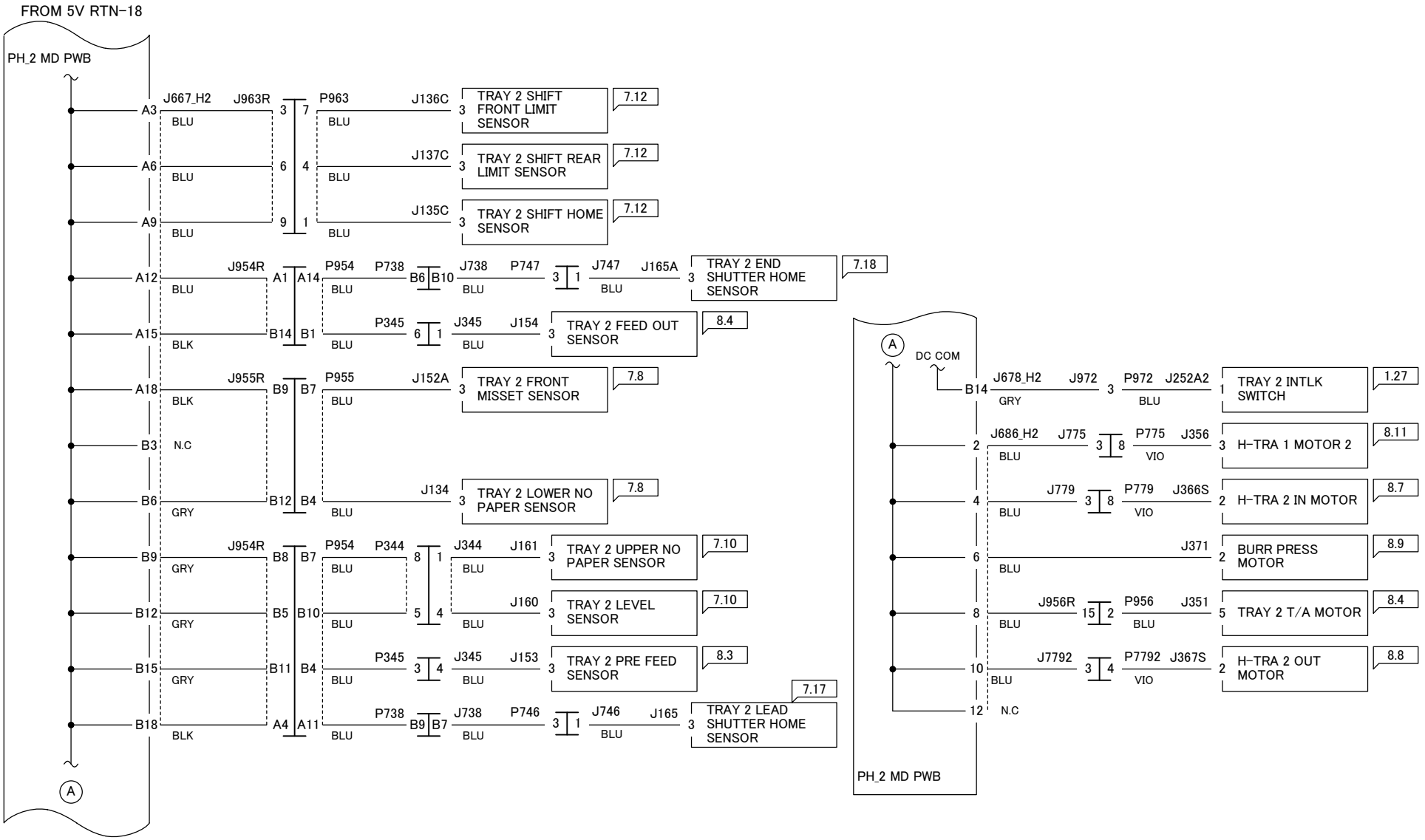
j0cx721052

7.2.1.53 DC COM (5V RTN-18)



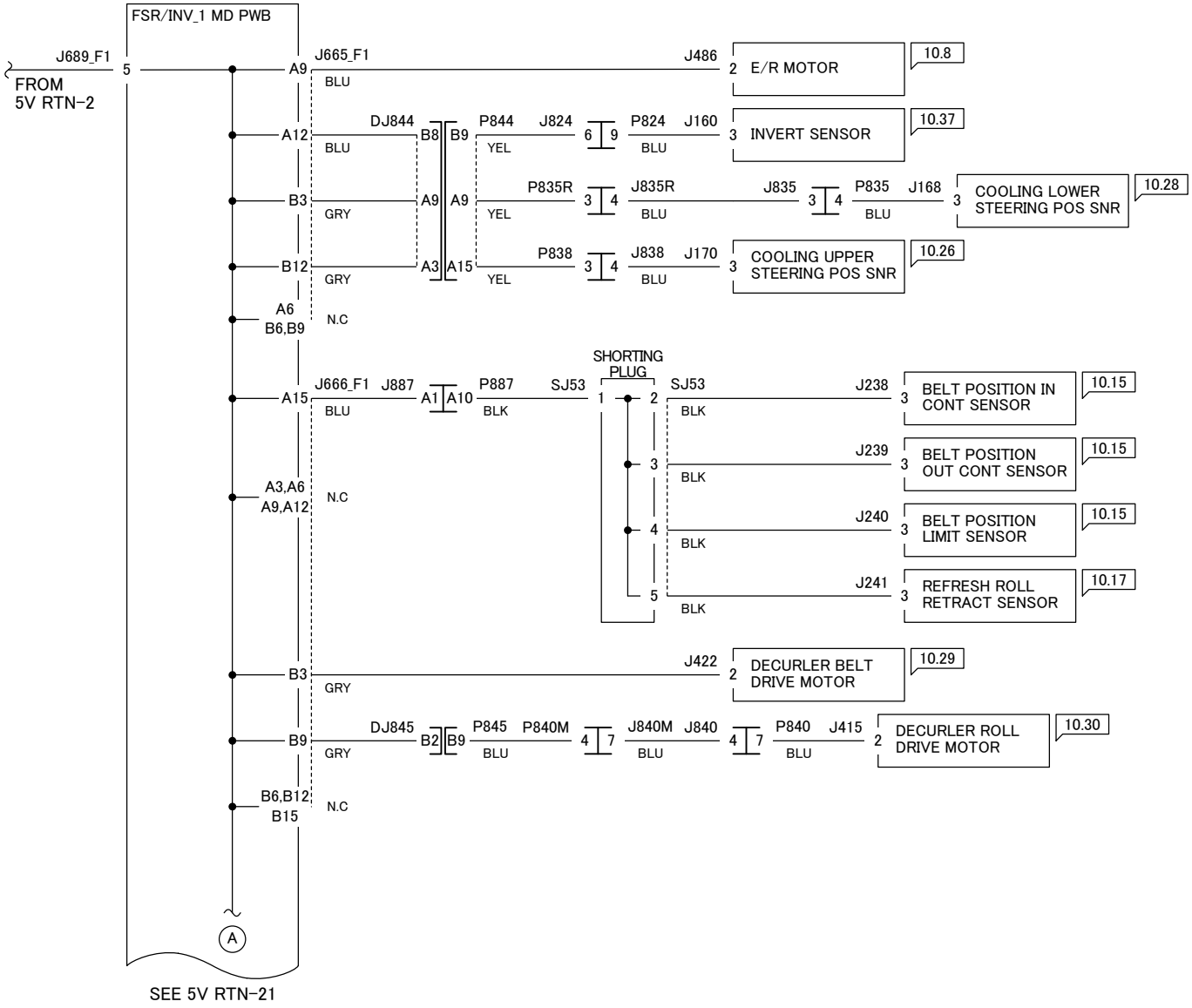
j0cx721053

7.2.1.54 DC COM (5V RTN-19)



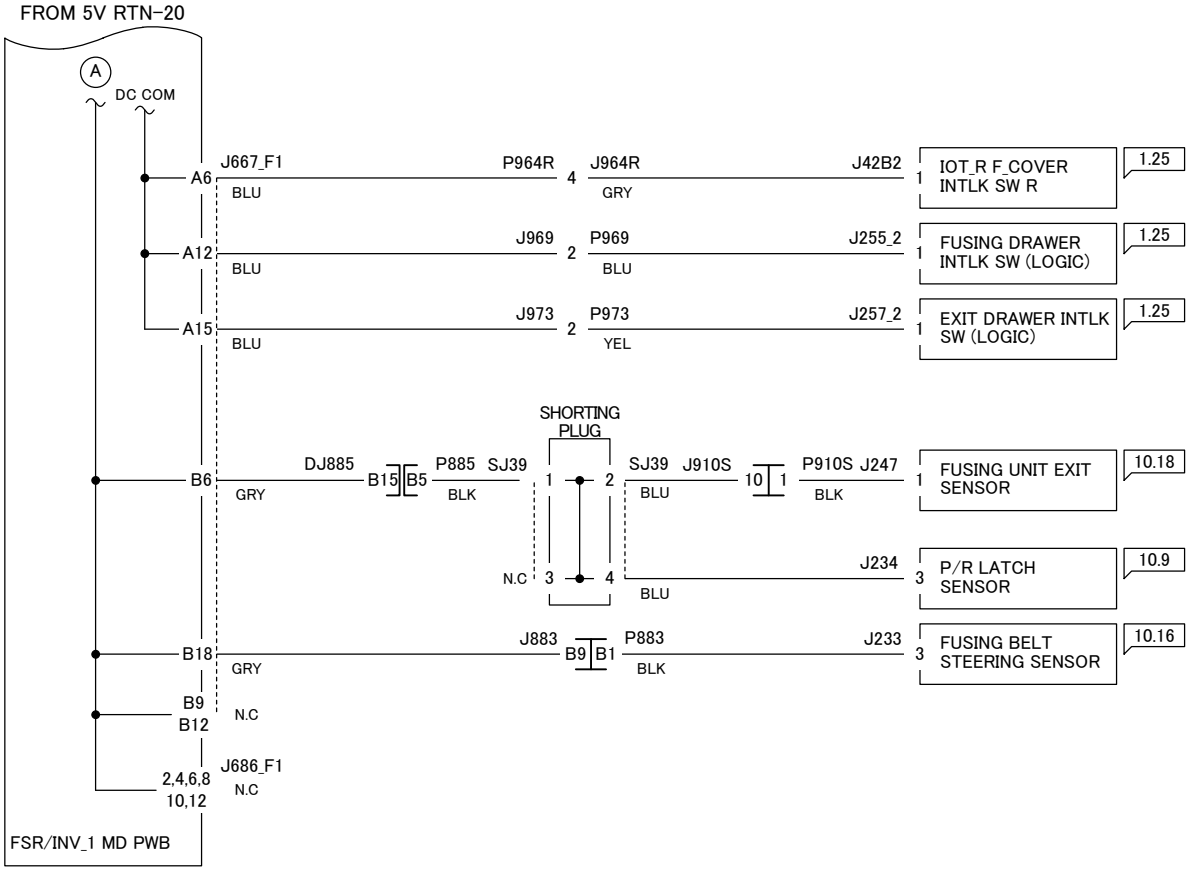
j0cx721054

7.2.1.55 DC COM (5V RTN-20)

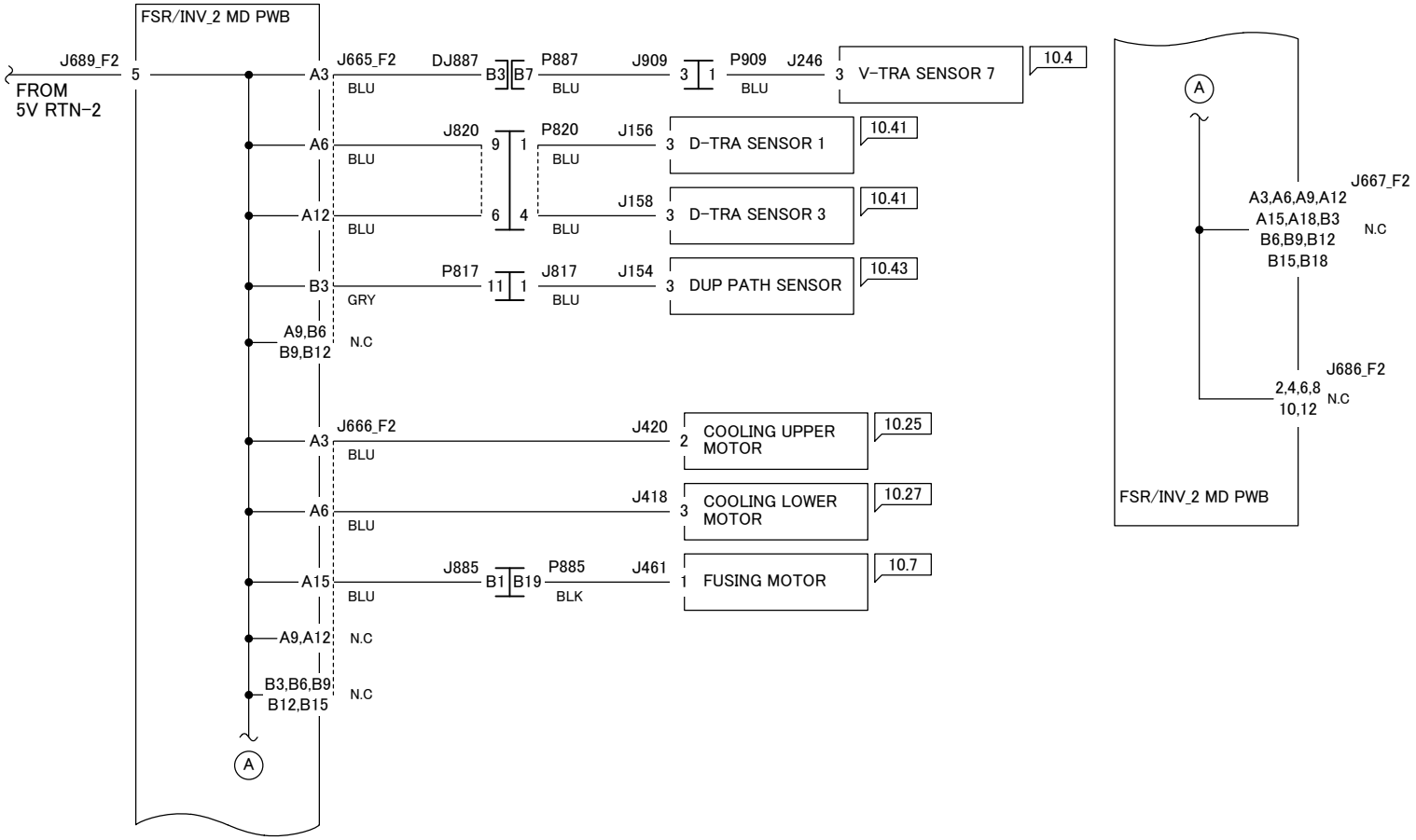


j0cx721055

7.2.1.56 DC COM (5V RTN-21)

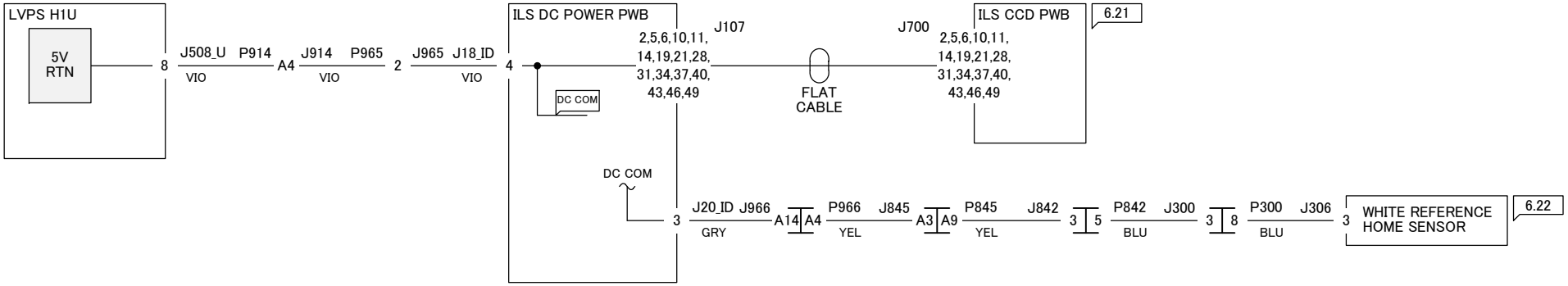


7.2.1.57 DC COM (5V RTN-22)



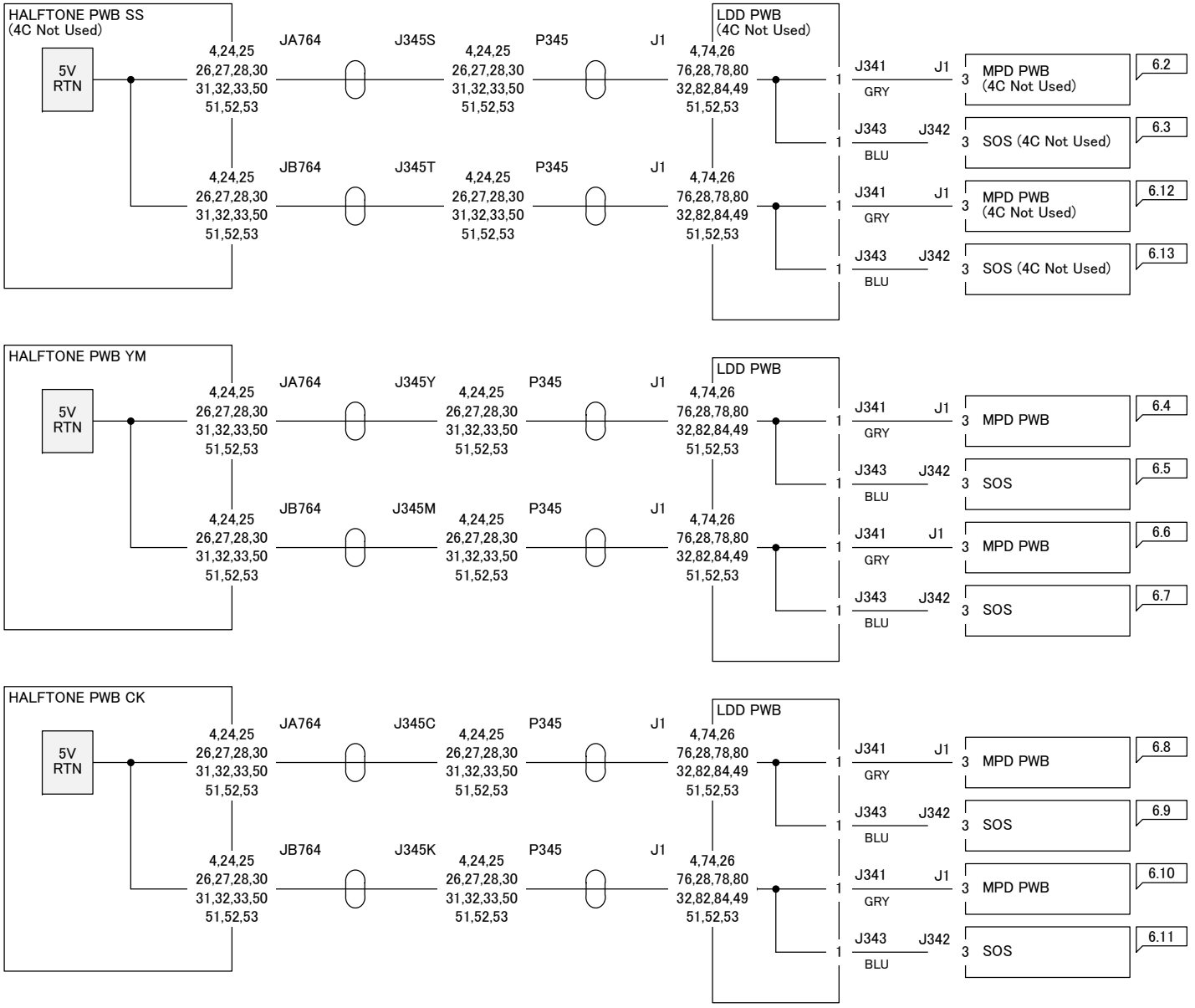
j0cx721057

7.2.1.58 DC COM (5V RTN-23)



j0cx721058

7.2.1.59 DC COM (5V RTN-24)



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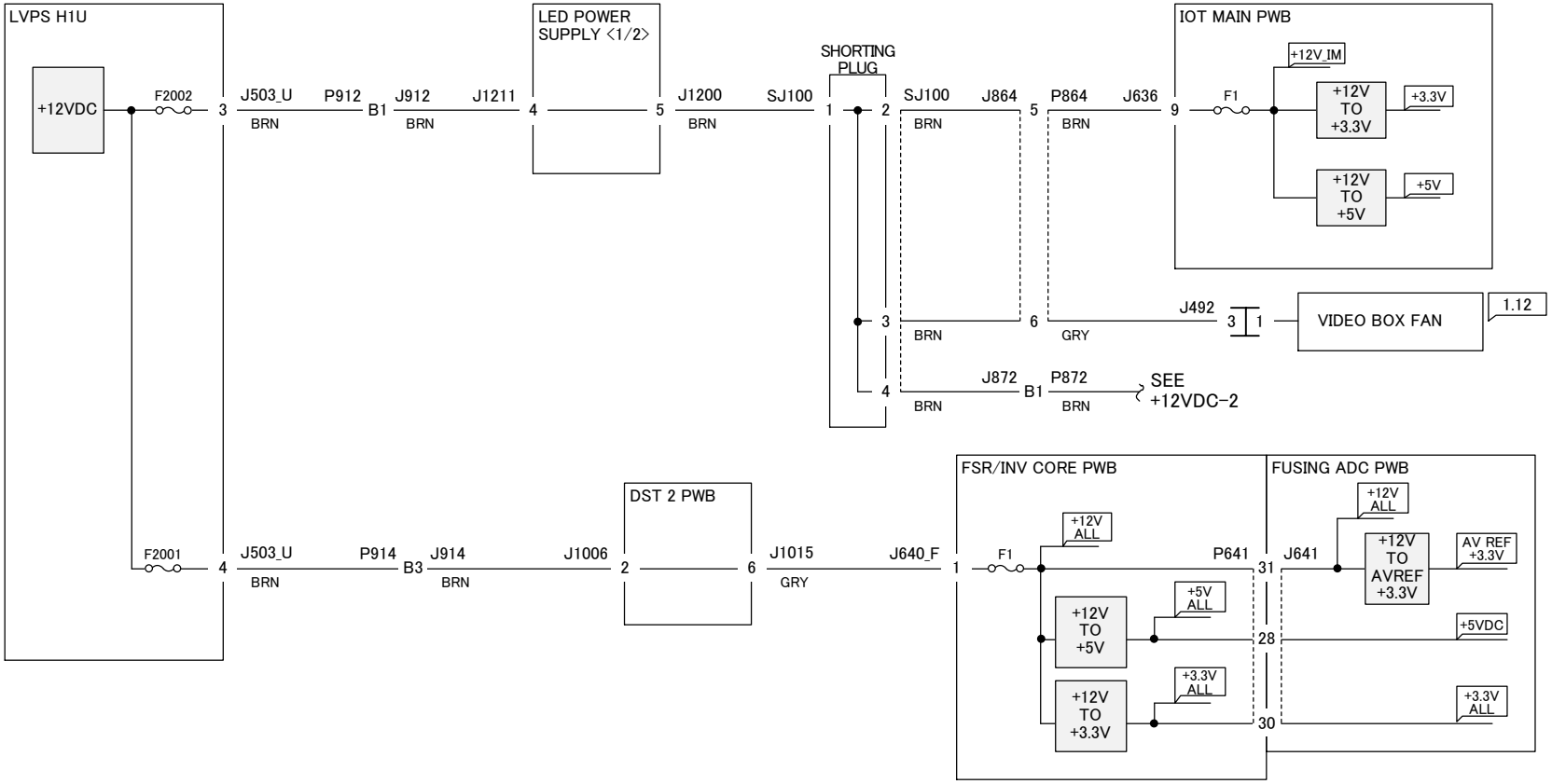
7.2.1.60 +12VDC-1



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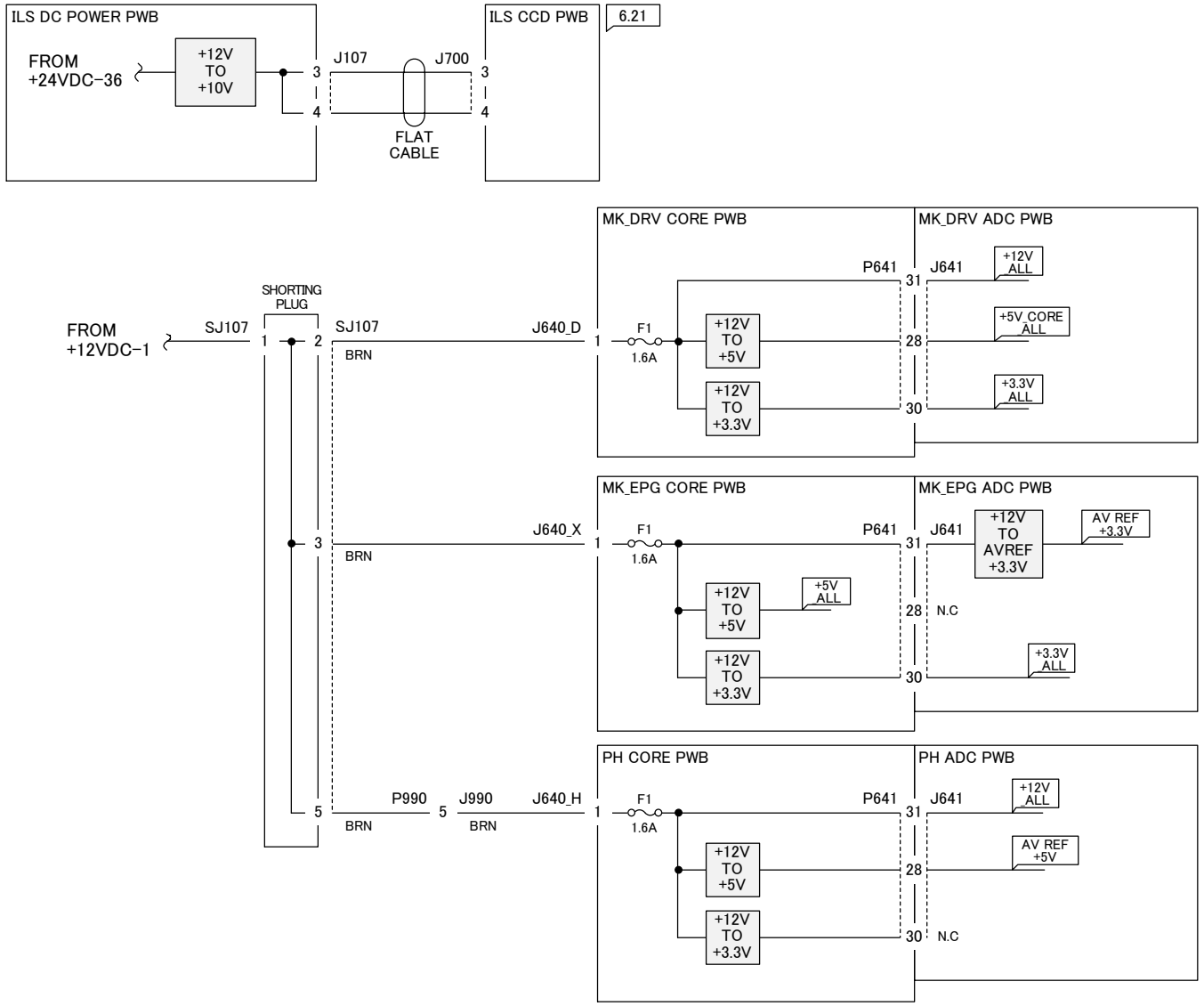
7.2.1.61 +12VDC-2



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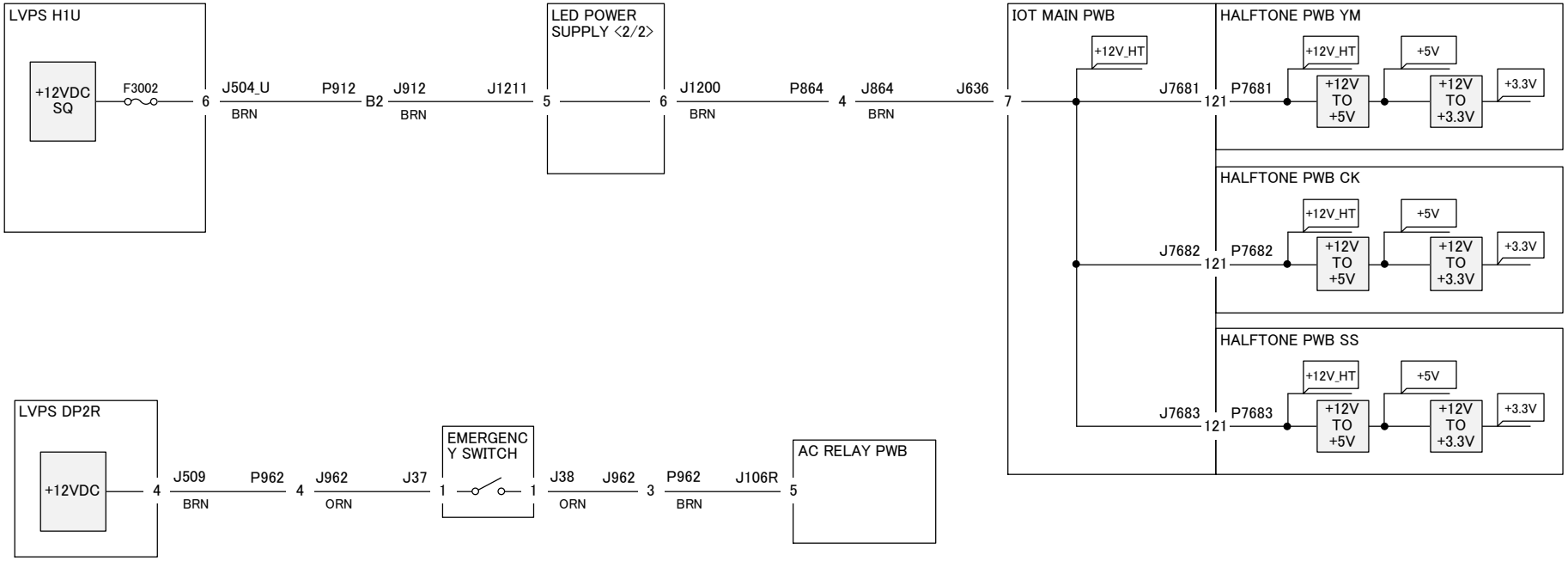
7.2.1.62 +12VDC-3



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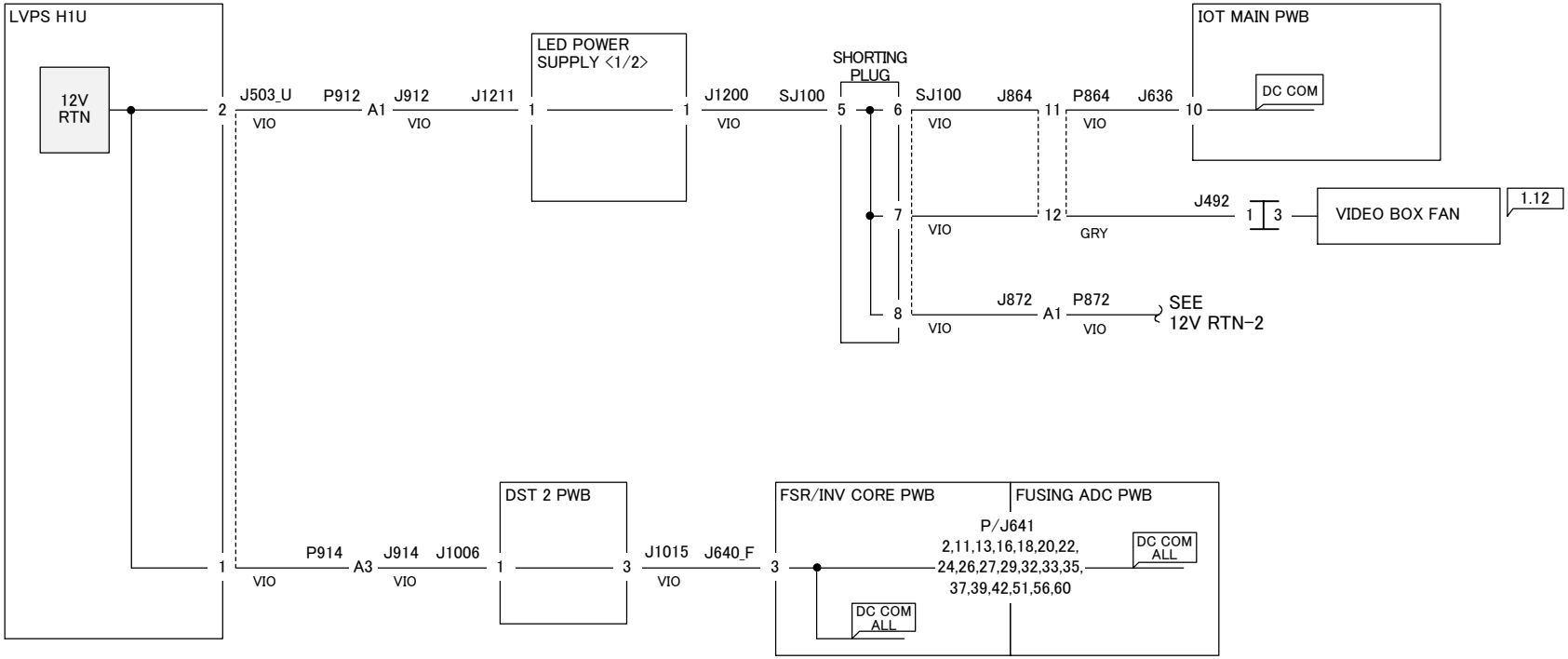
7.2.1.63 DC COM (12V RTN-1)



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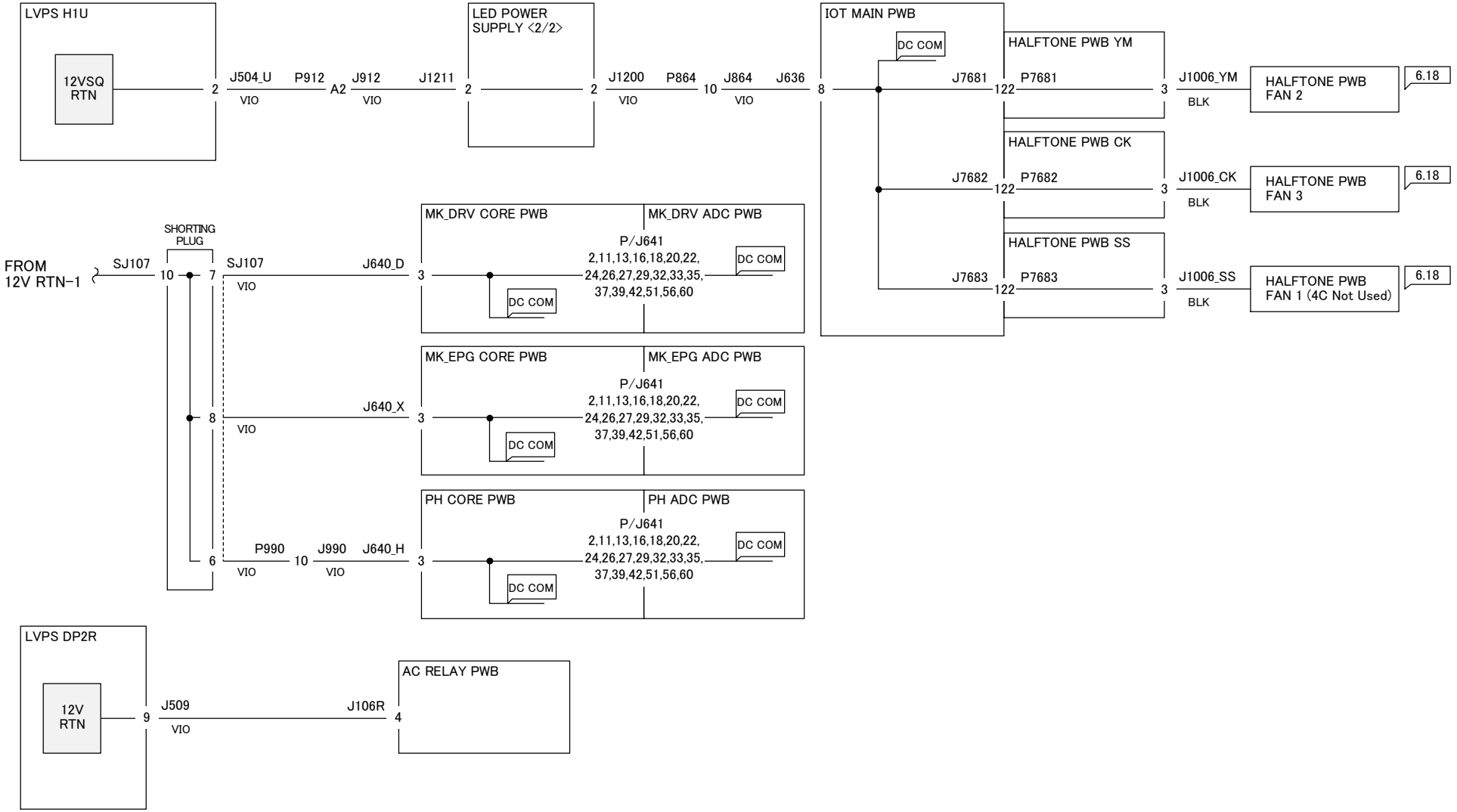
7.2.1.64 DC COM (12V RTN-2)



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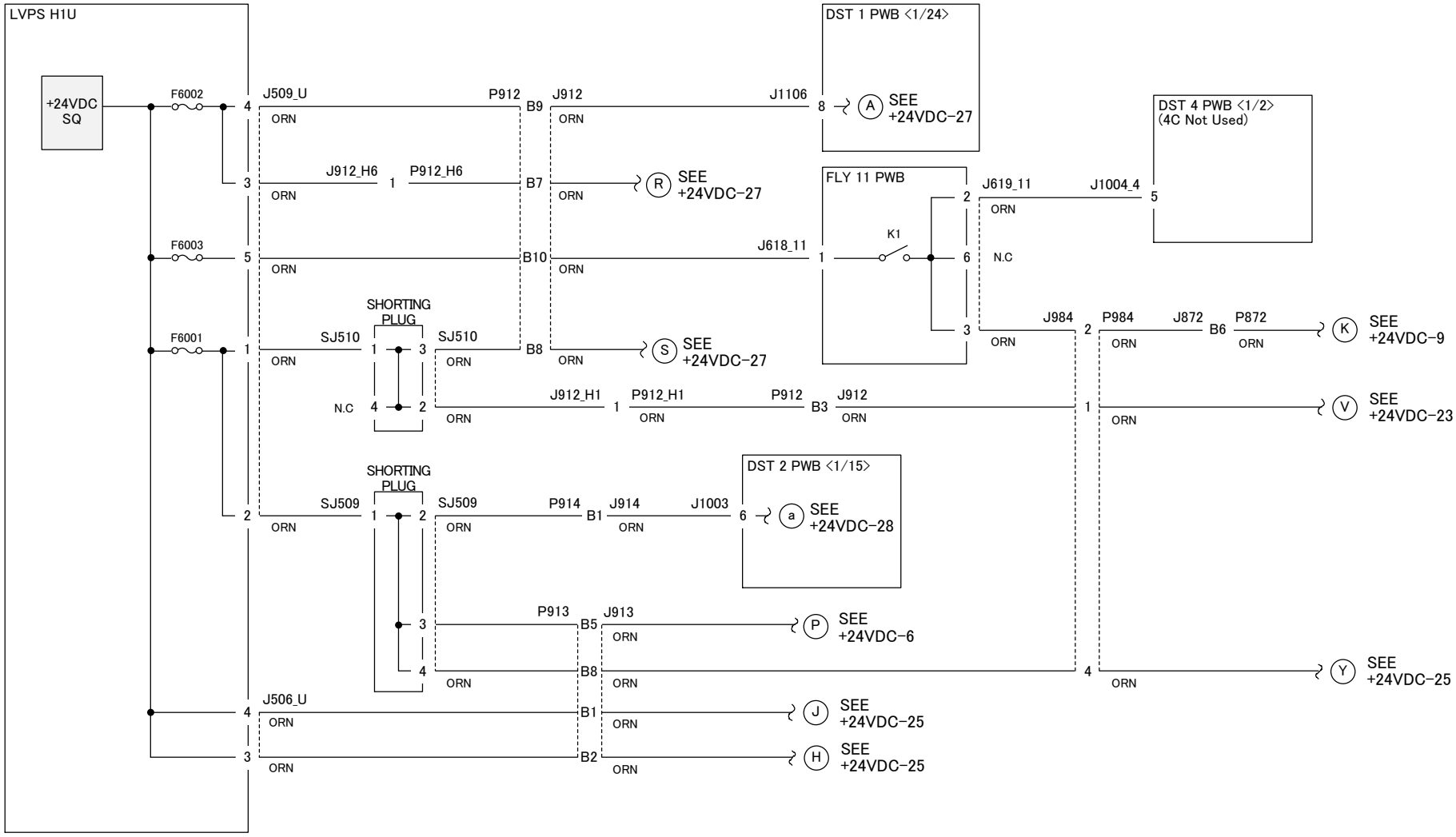
7.2.1.65 +24VDC-1



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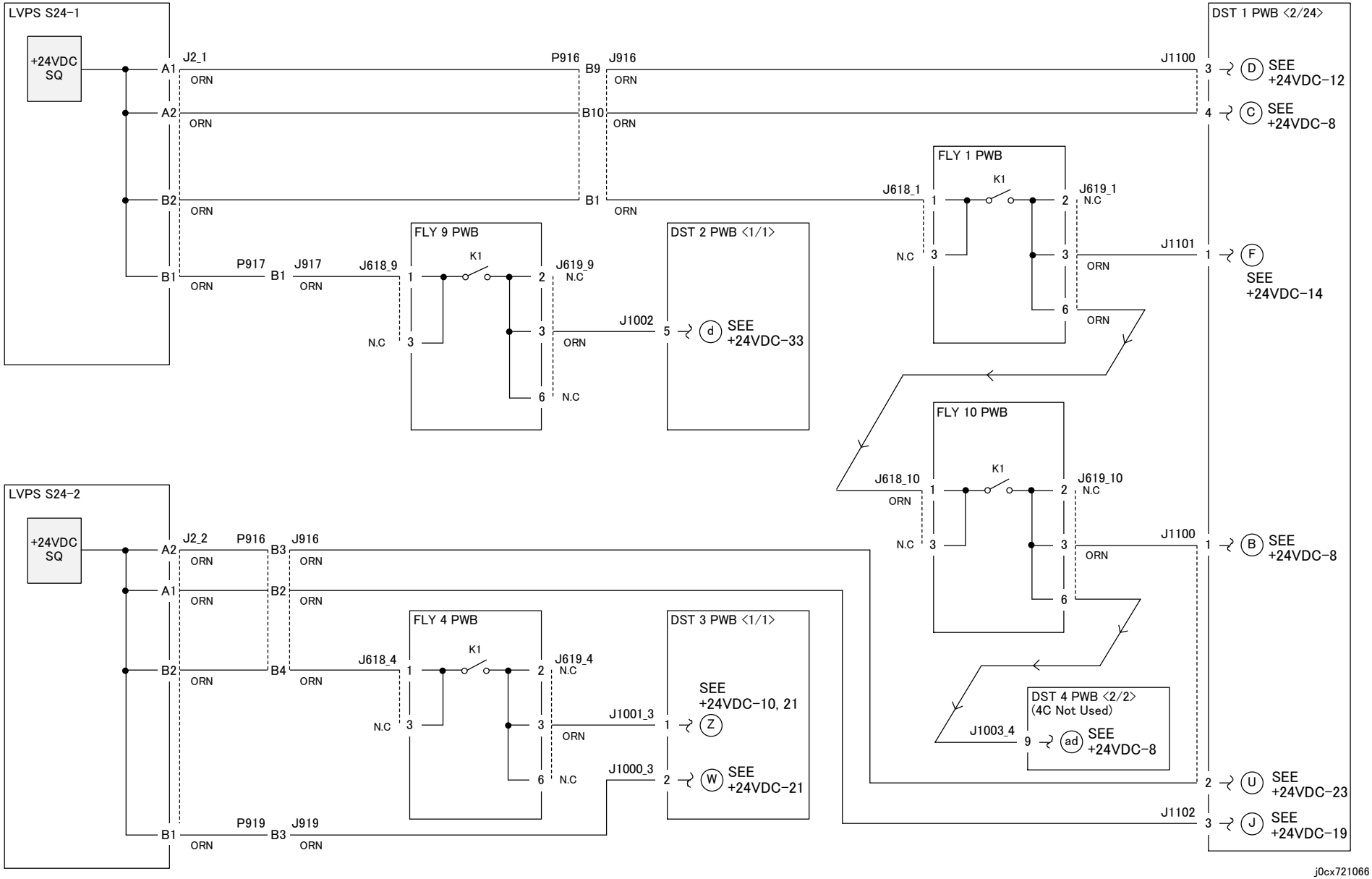
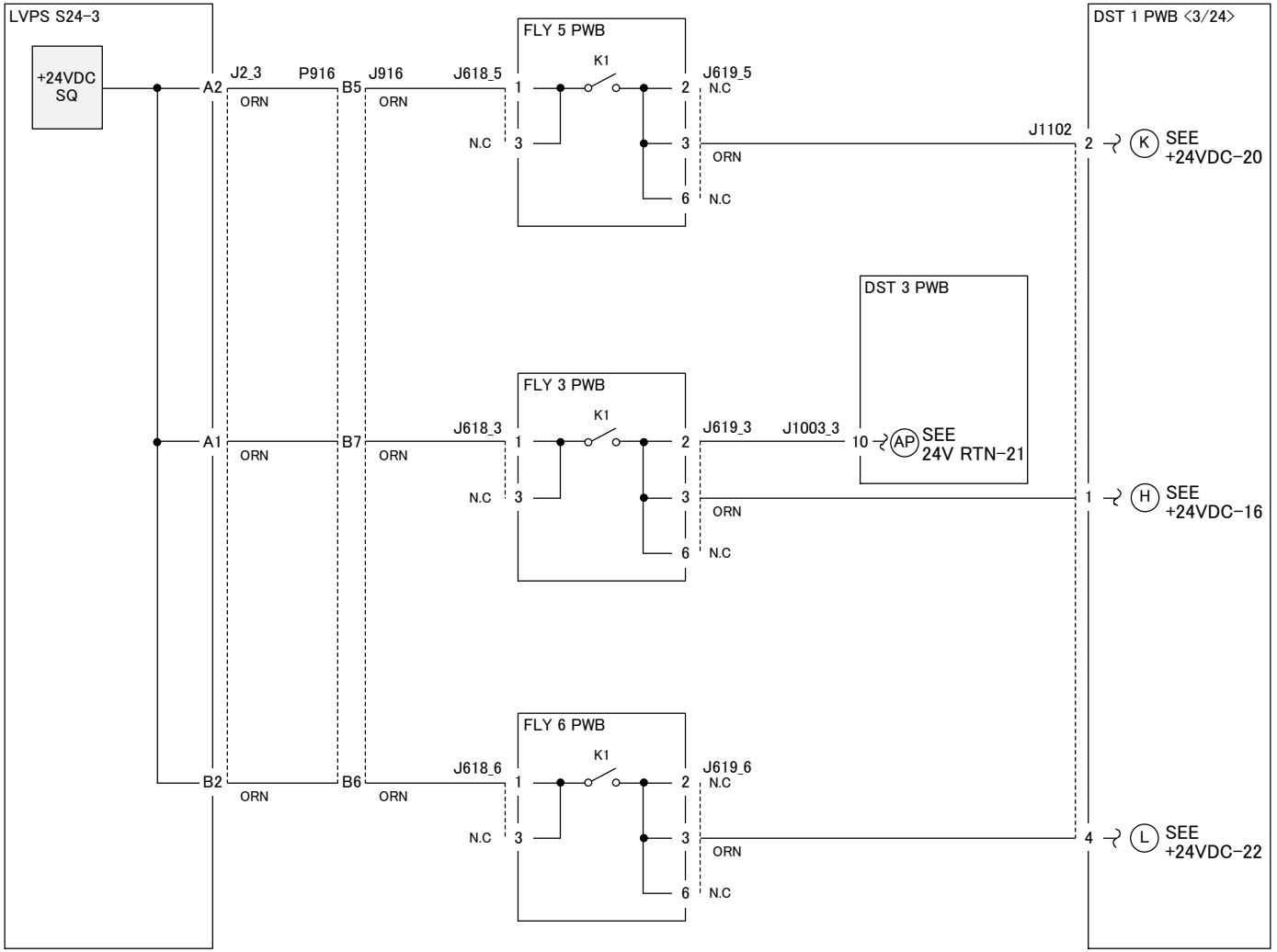
7.2.1.66 +24VDC-2



7.2.1.67 +24VDC-3



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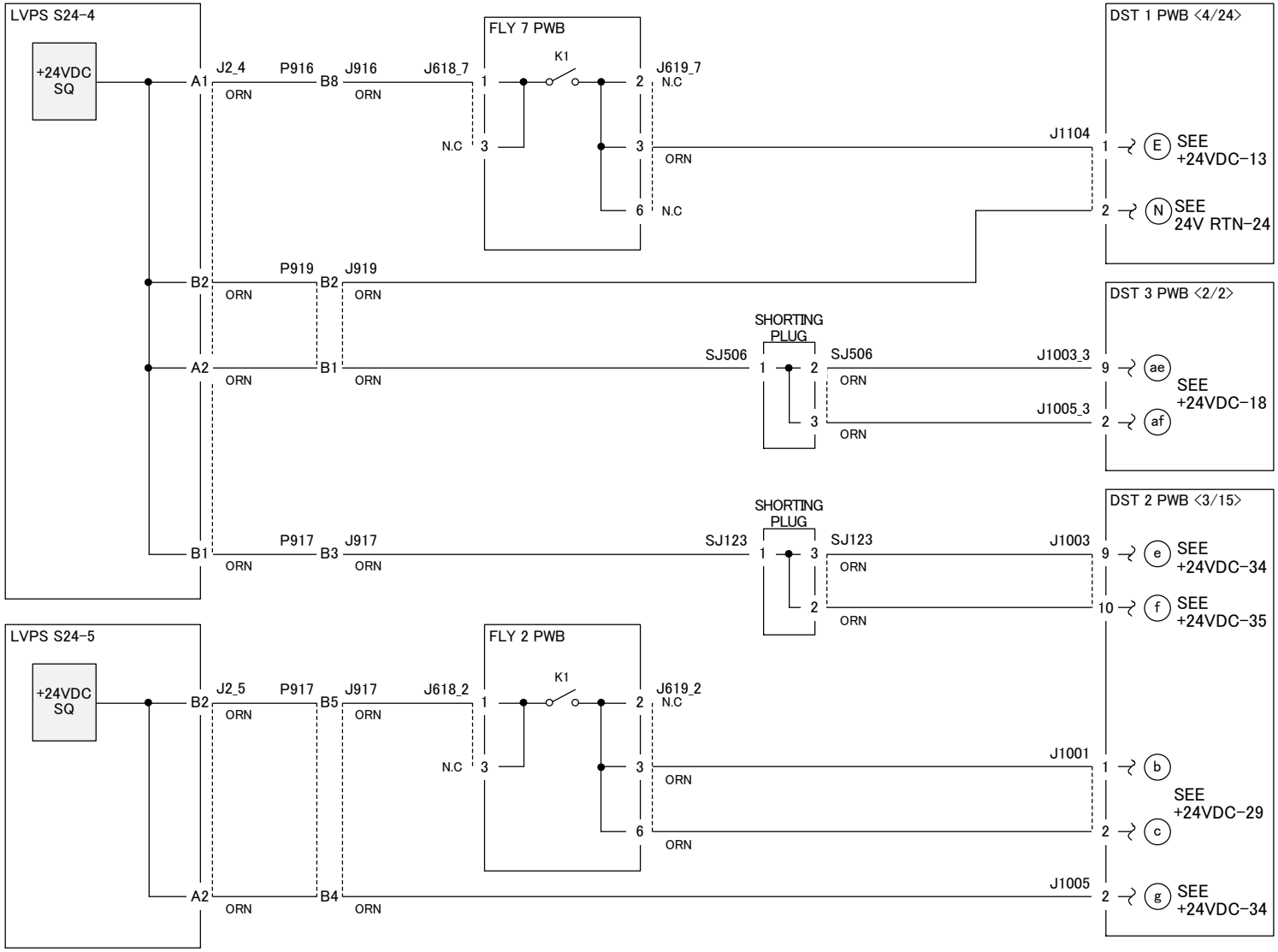
7.2.1.68 +24VDC-4



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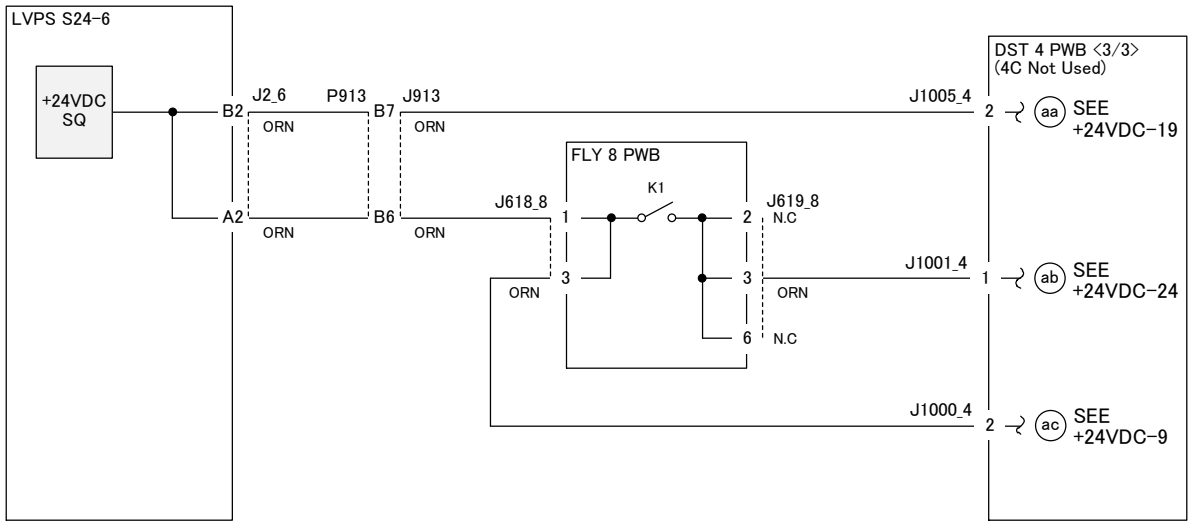
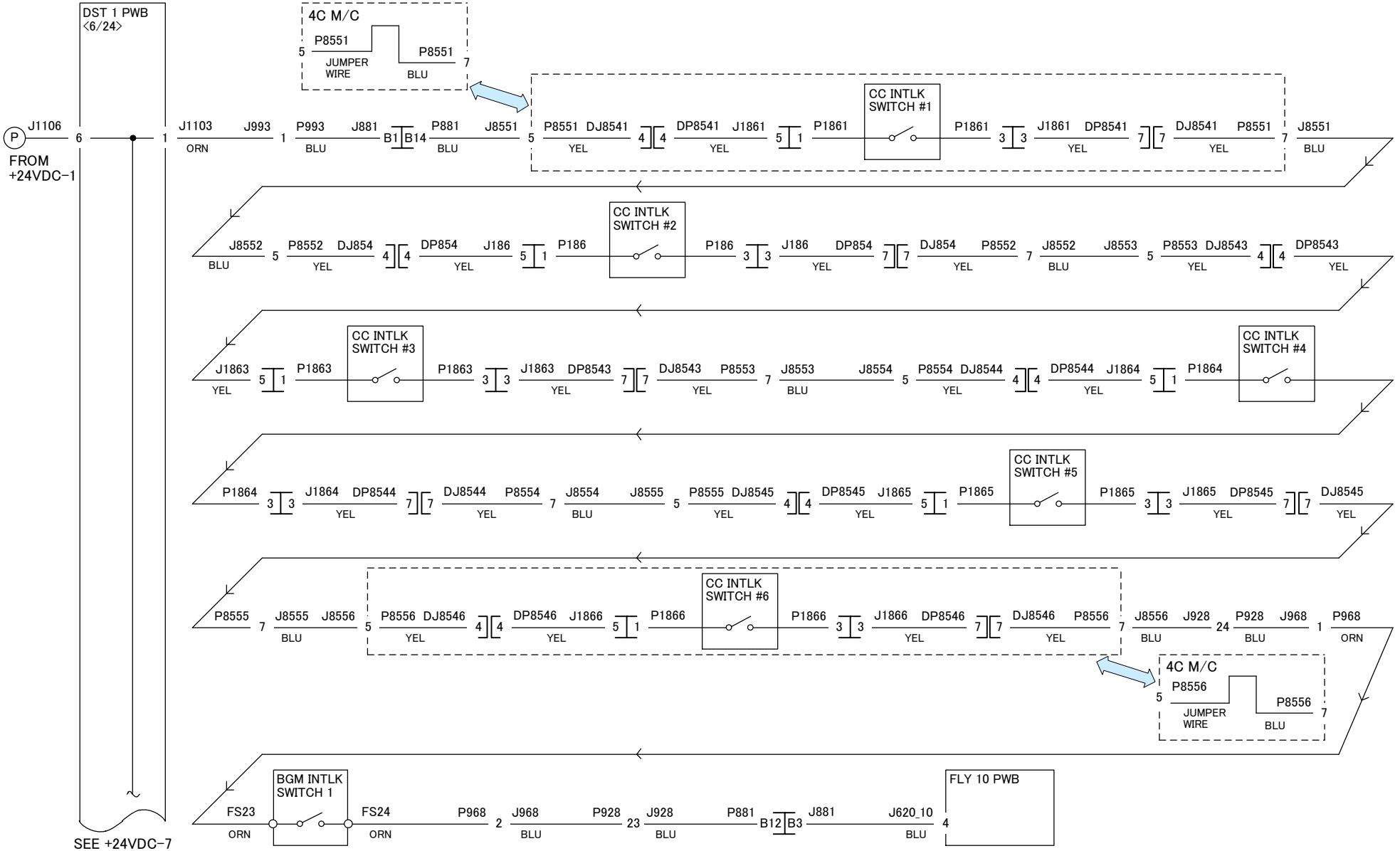
7.2.1.69 +24VDC-5

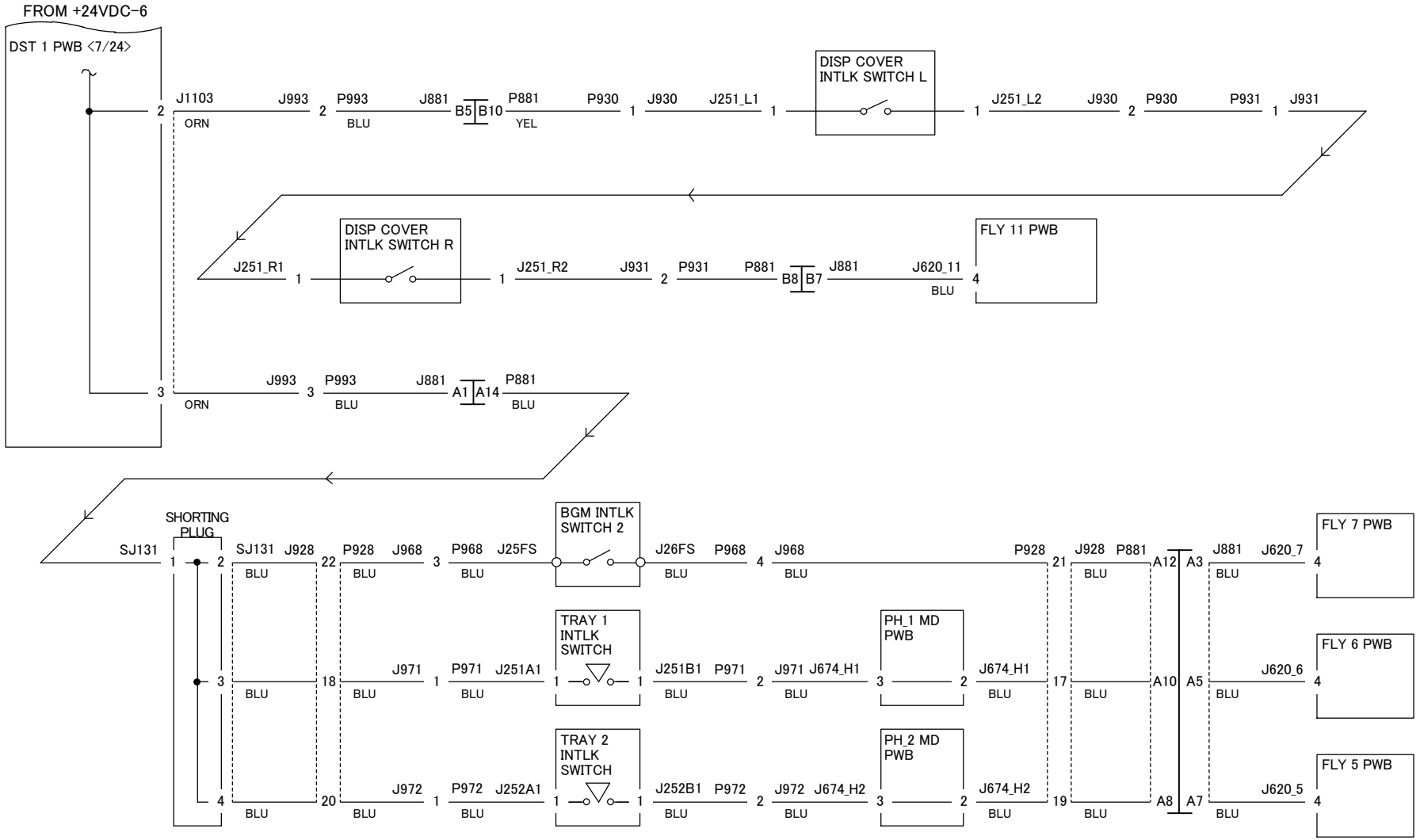


j0cx721069

7.2.1.70 +24VDC-6

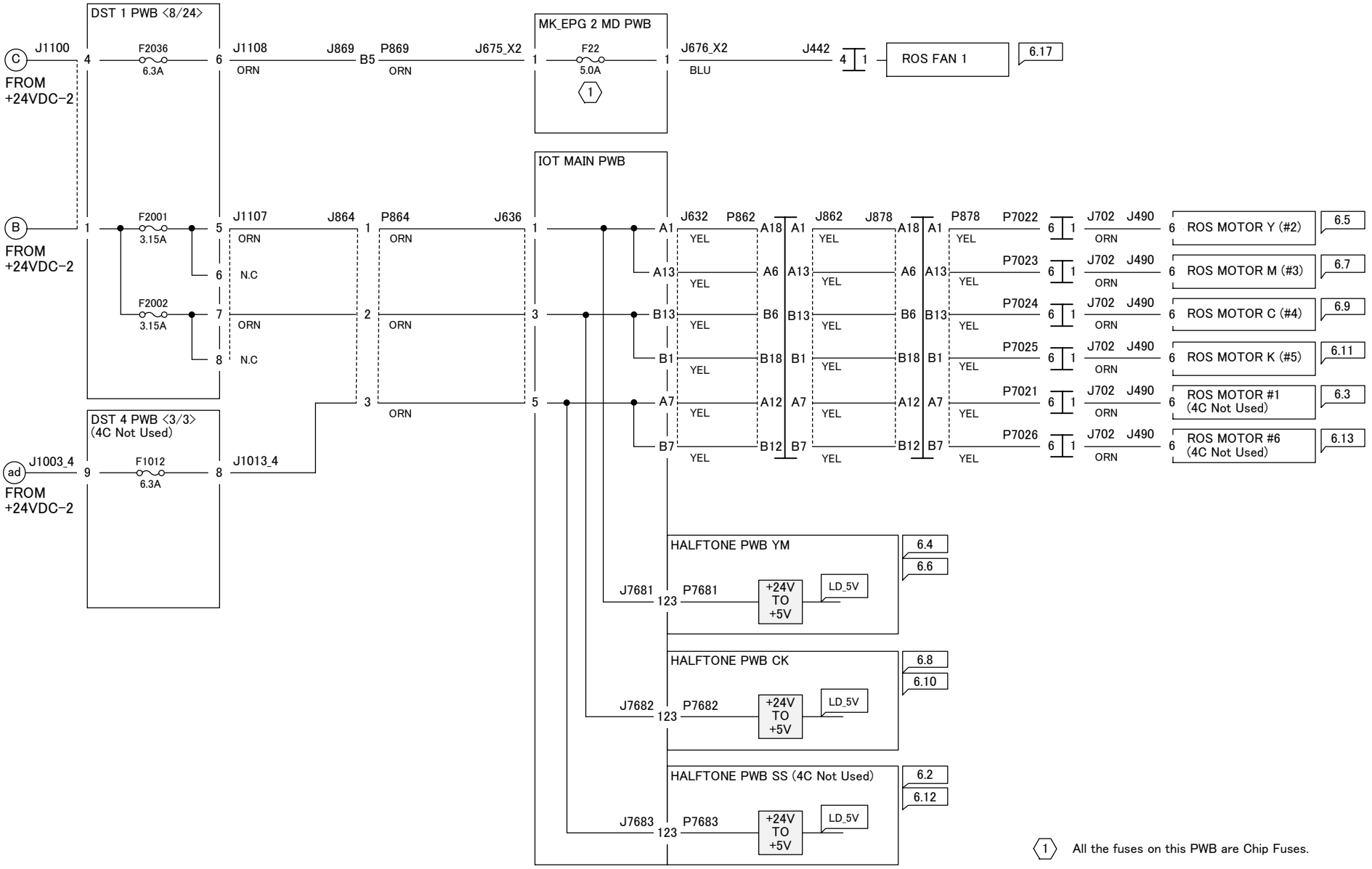


7.2.1.71 +24VDC-7



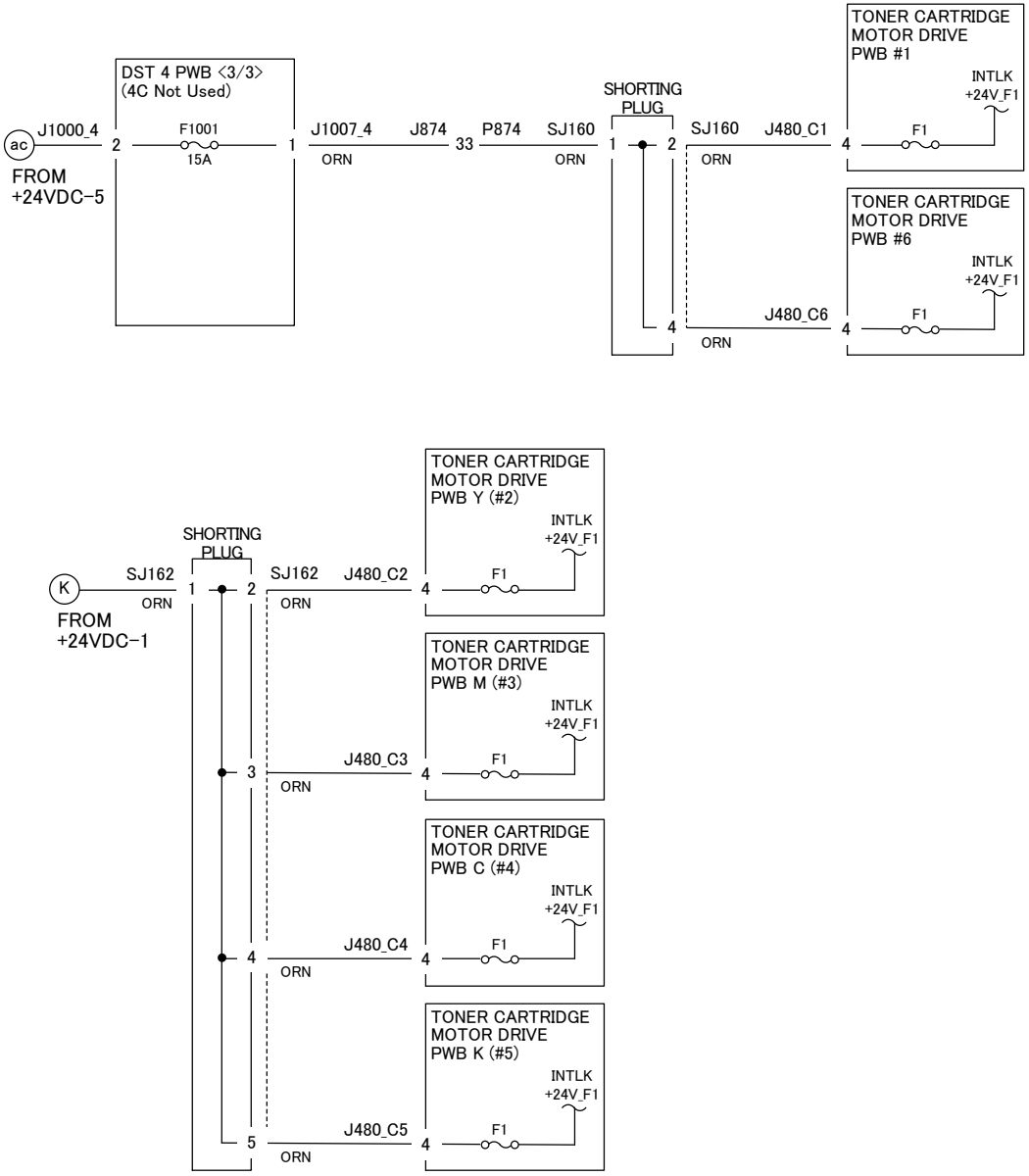
j0cx721071

7.2.1.72 +24VDC-8



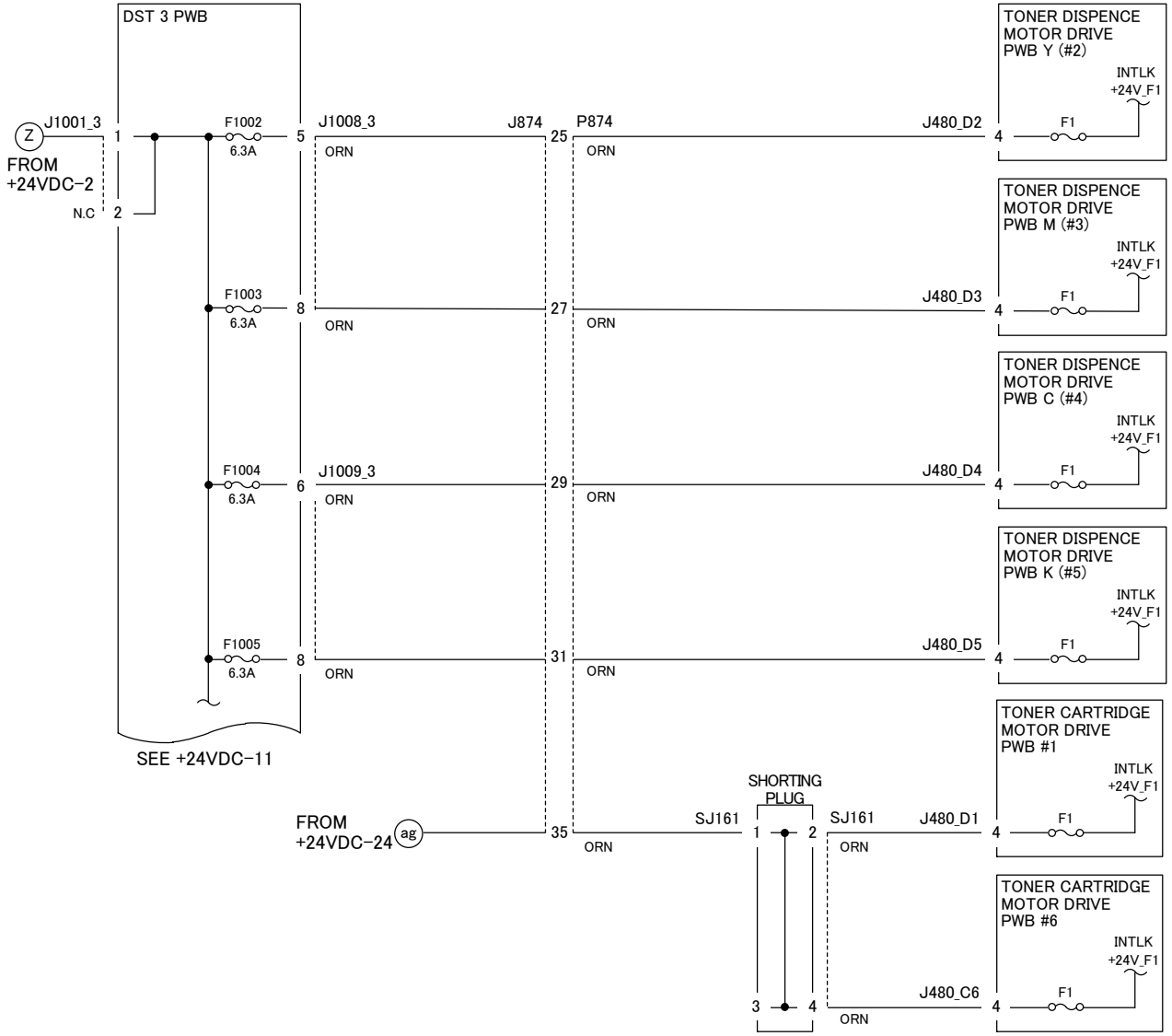
j0cx721072

7.2.1.73 +24VDC-9



j0cx721073

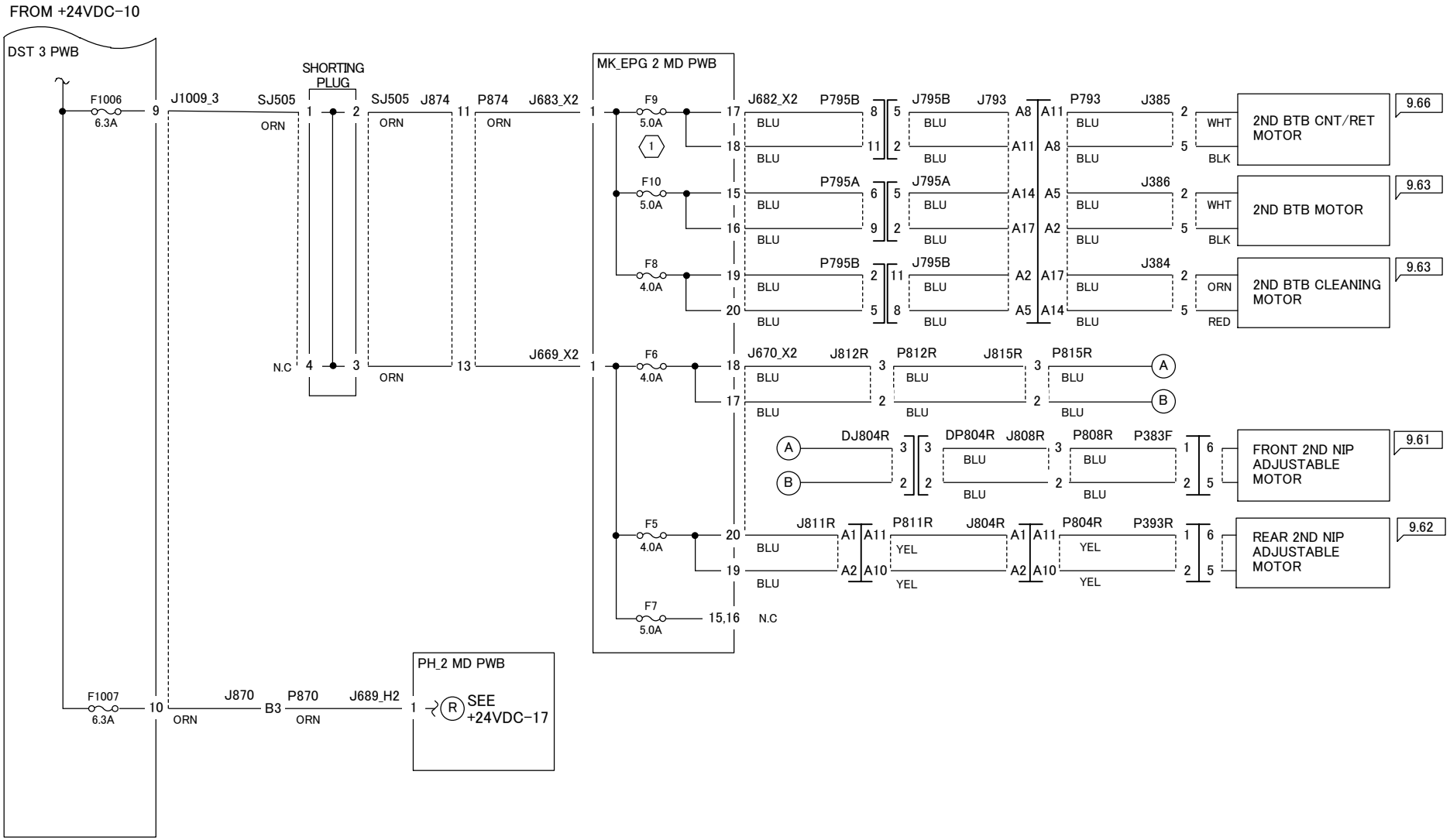
7.2.1.74 +24VDC-10



(1) All the fuses on this PWB are Chip Fuses.

j0cx721074

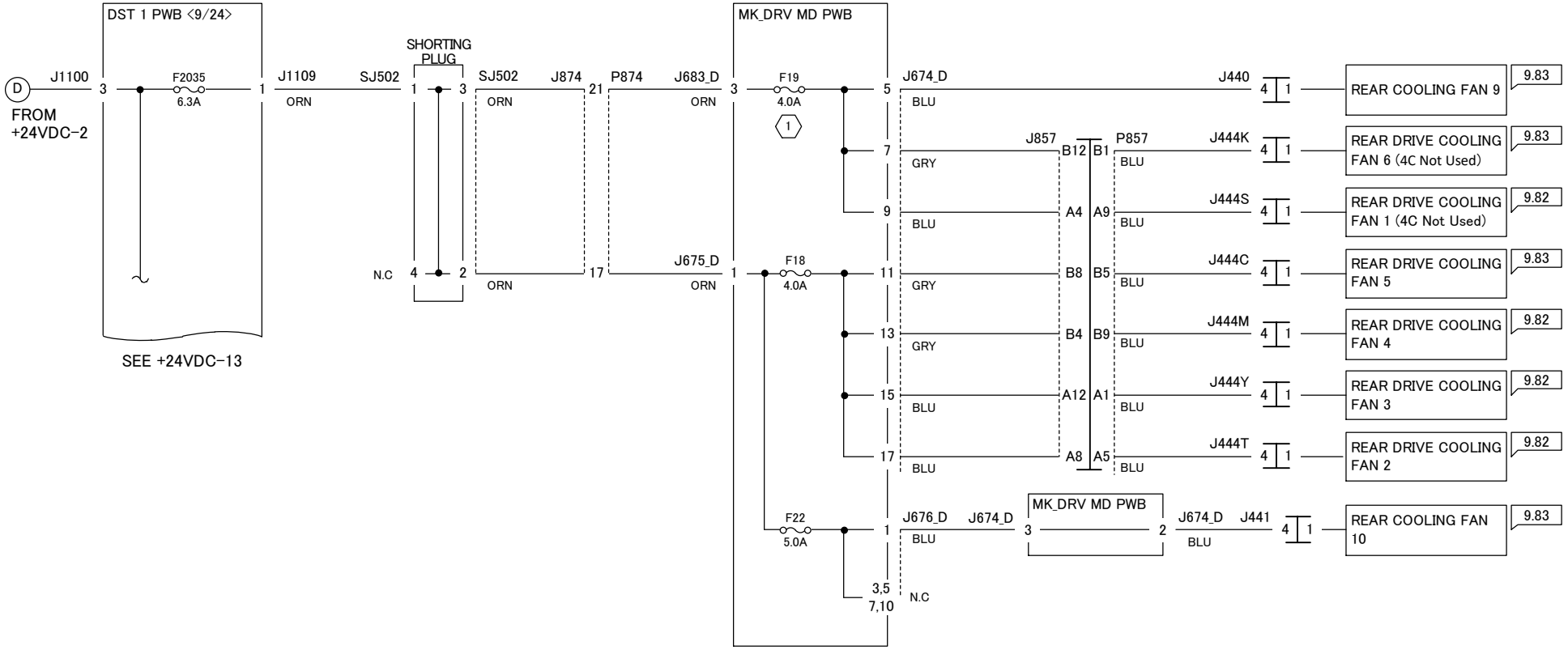
7.2.1.75 +24VDC-11



(1) All the fuses on this PWB are Chip Fuses.

j0cx721075

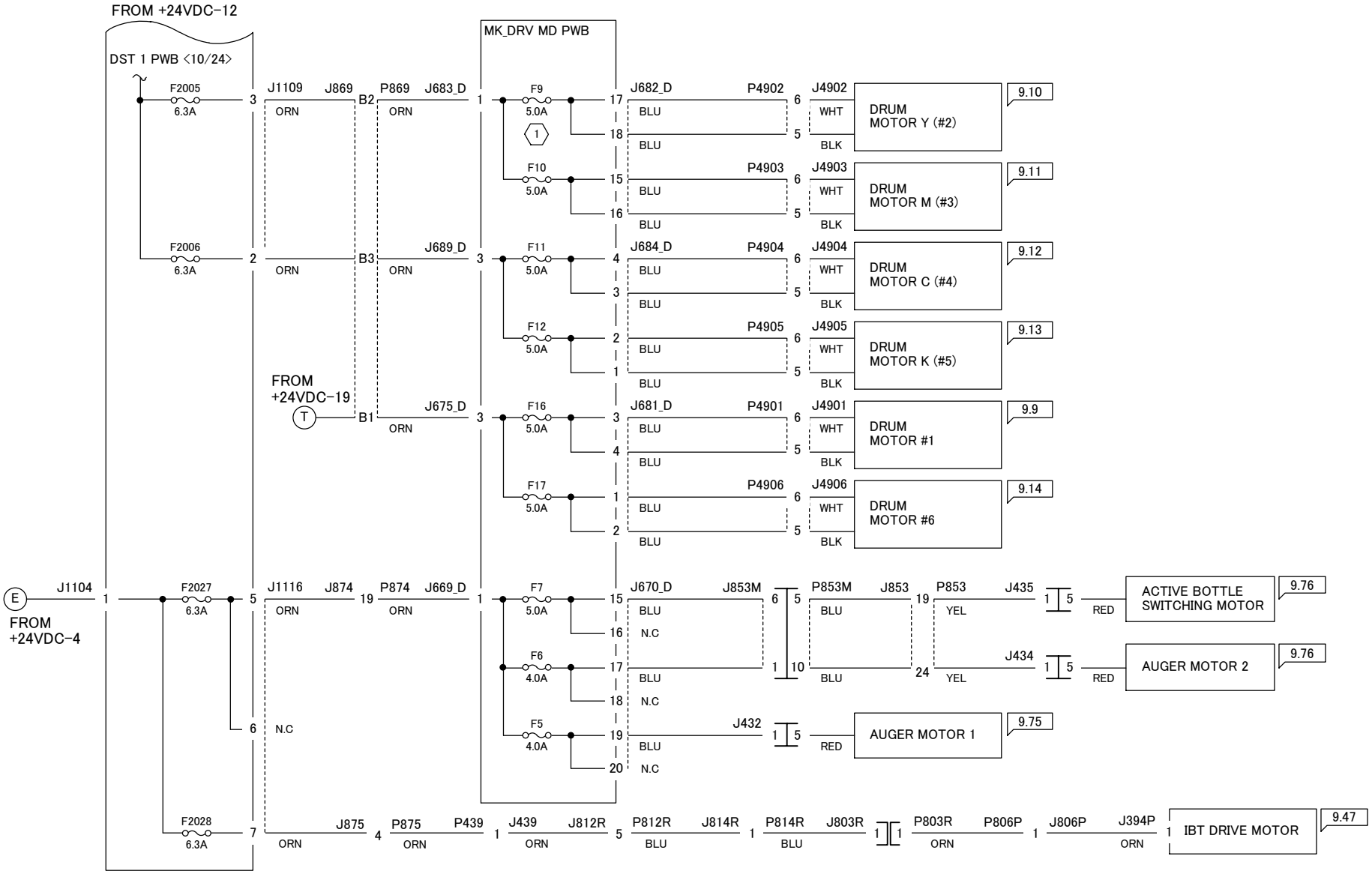
7.2.1.76 +24VDC-12



(1) All the fuses on this PWB are Chip Fuses.

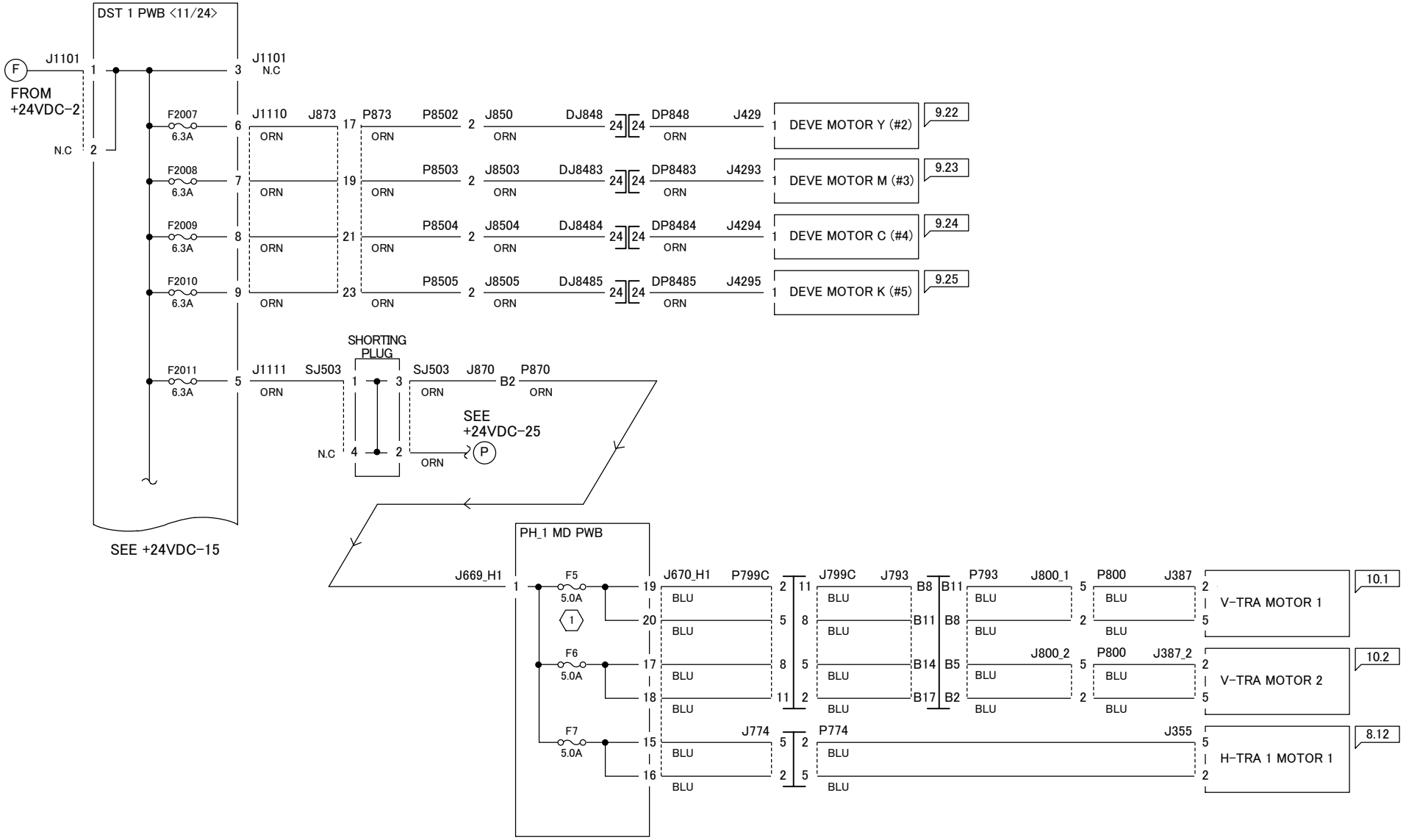
j0cx721076

7.2.1.77 +24VDC-13



j0cx721077

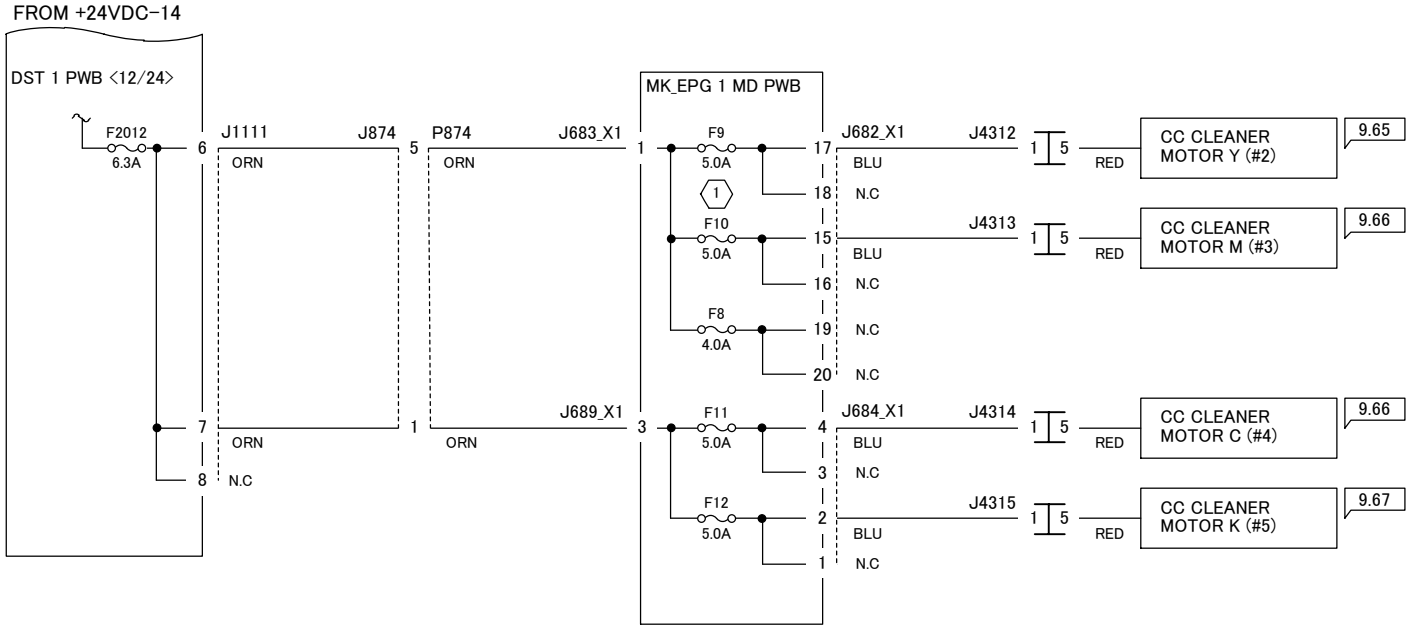
7.2.1.78 +24VDC-14



(1) All the fuses on this PWB are Chip Fuses.

j0cx721078

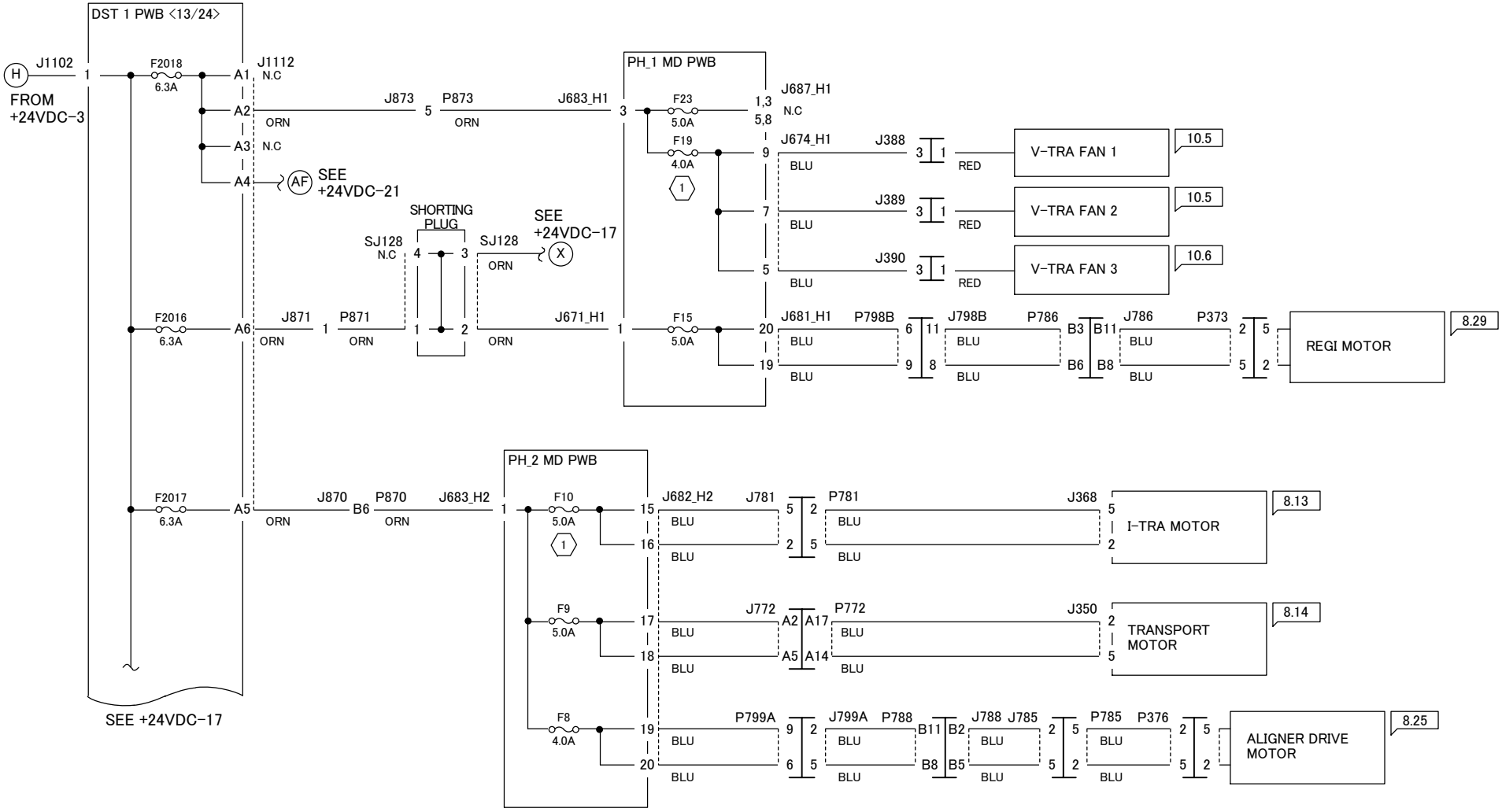
7.2.1.79 +24VDC-15



(1) All the fuses on this PWB are Chip Fuses.

j0cx721079

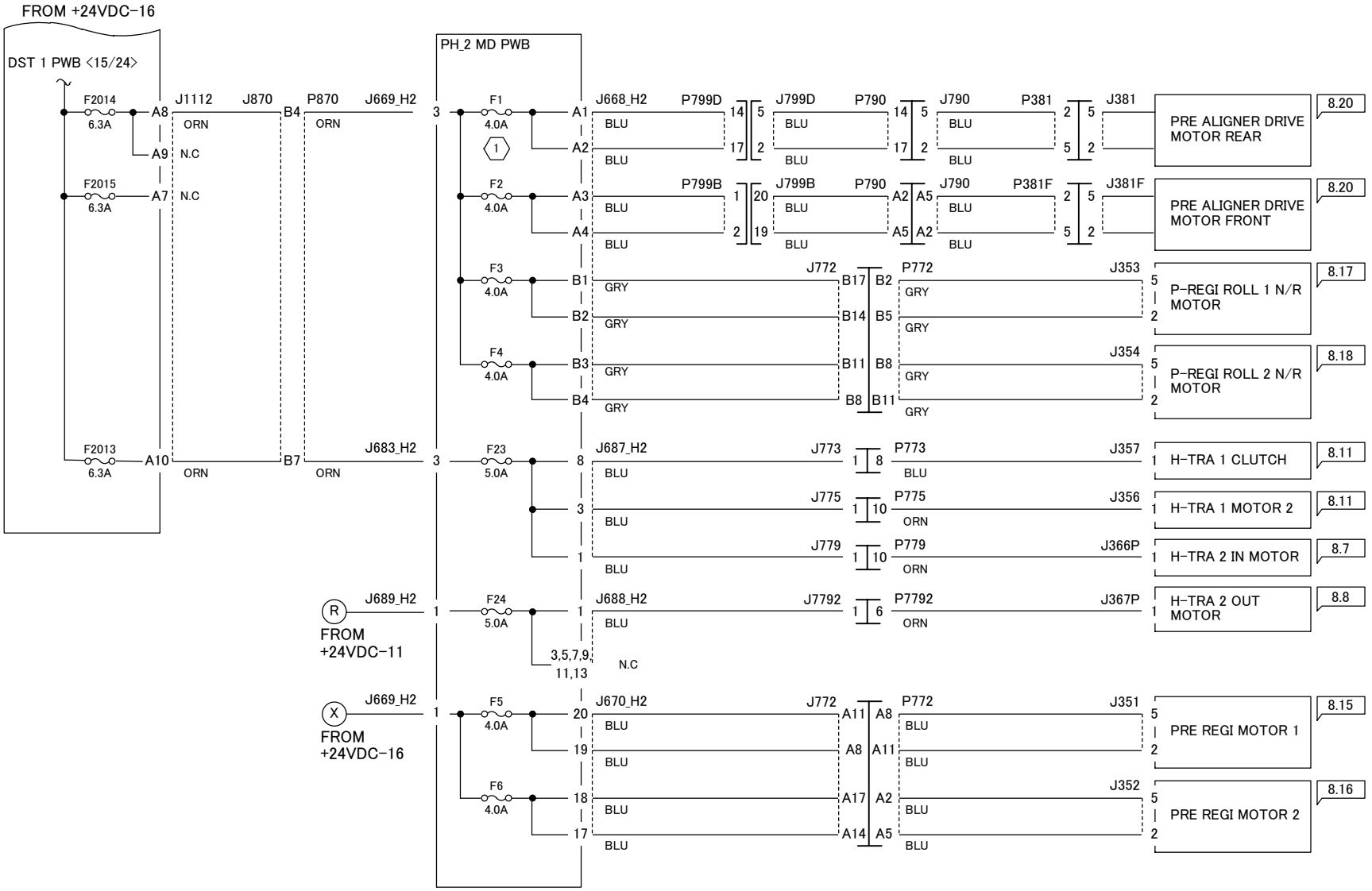
7.2.1.80 +24VDC-16



1 All the fuses on this PWB are Chip Fuses.

j0cx721080

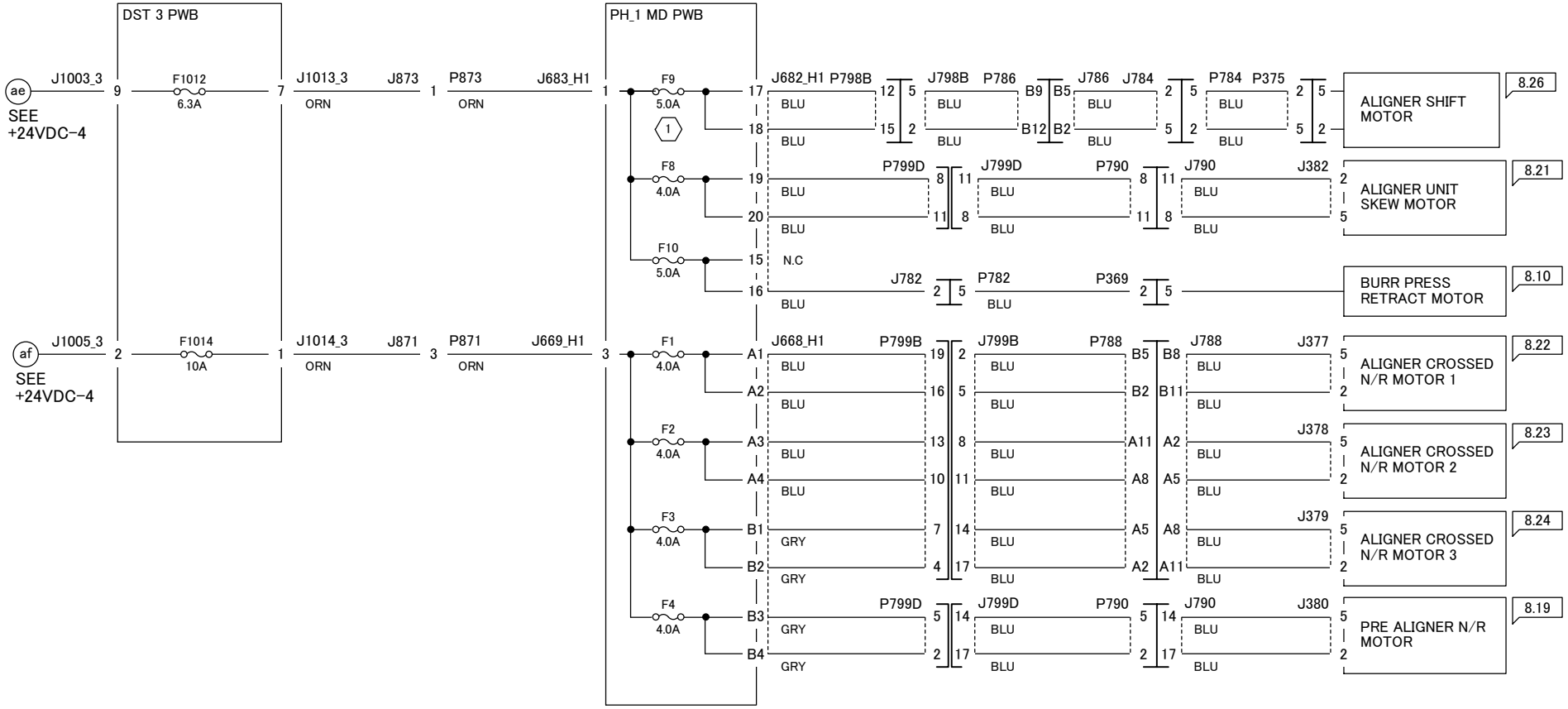
7.2.1.81 +24VDC-17



1 All the fuses on this PWB are Chip Fuses.

j0cx721081

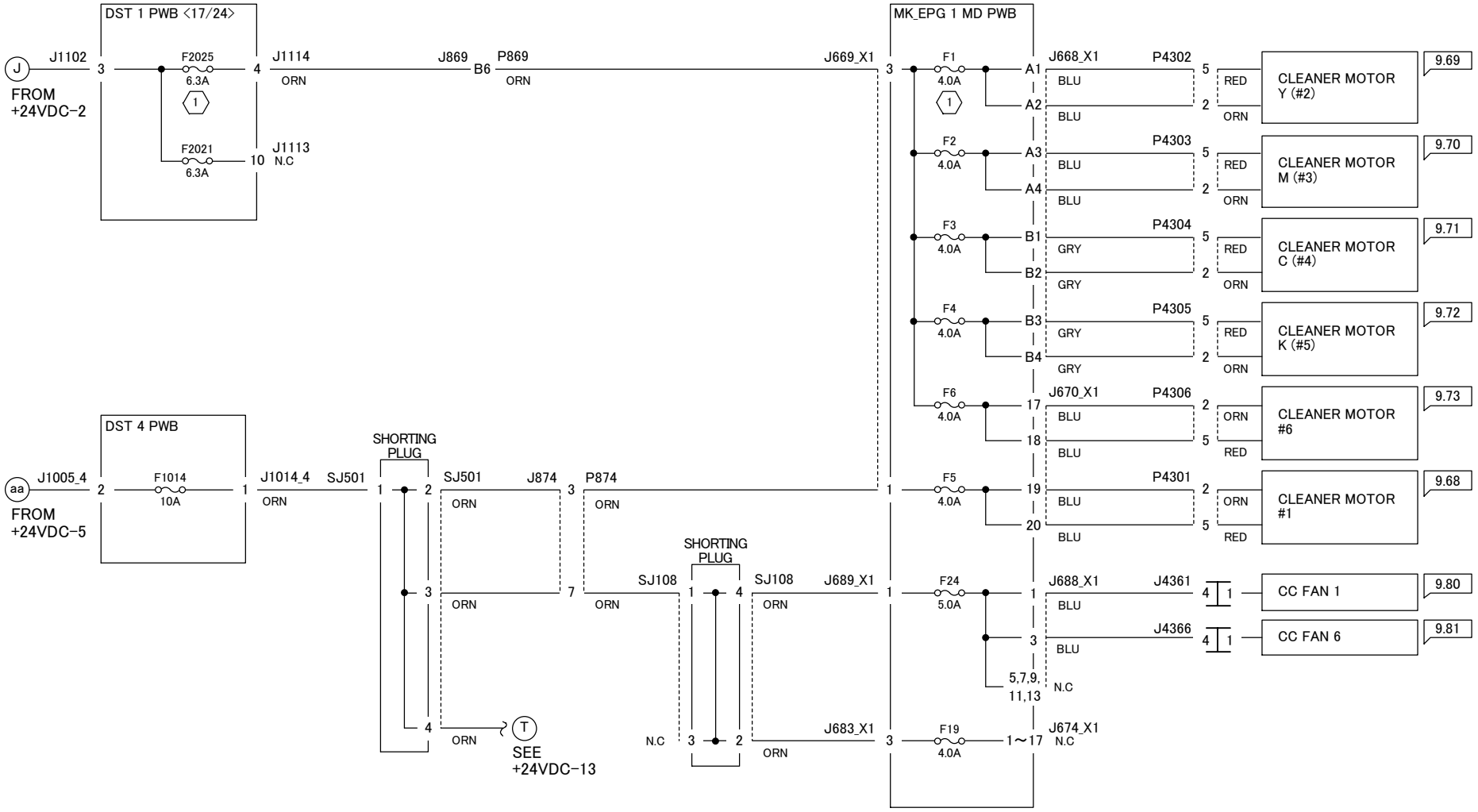
7.2.1.82 +24VDC-18



1 All the fuses on this PWB are Chip Fuses.

j0cx721082

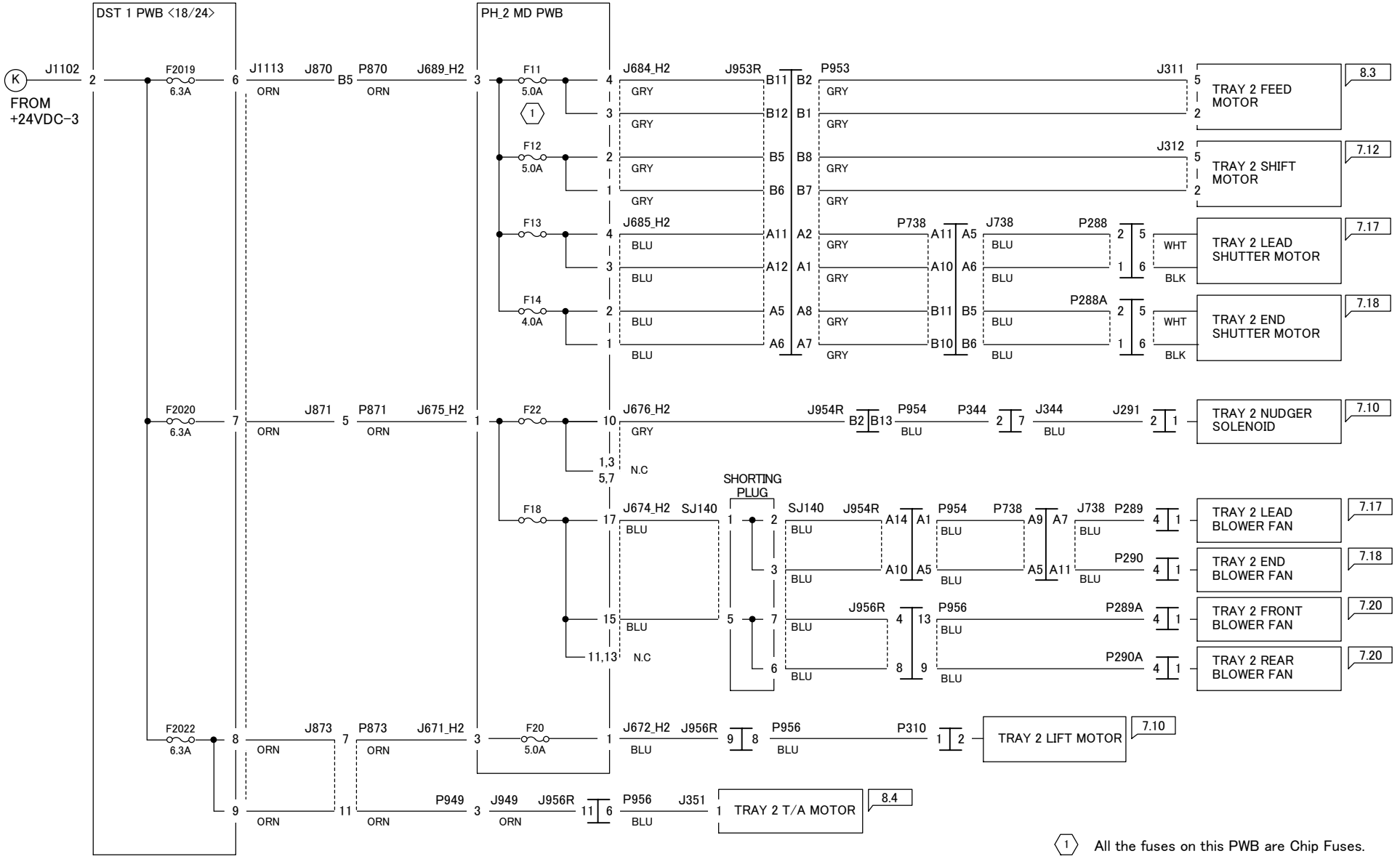
7.2.1.83 +24VDC-19



1 All the fuses on this PWB are Chip Fuses.

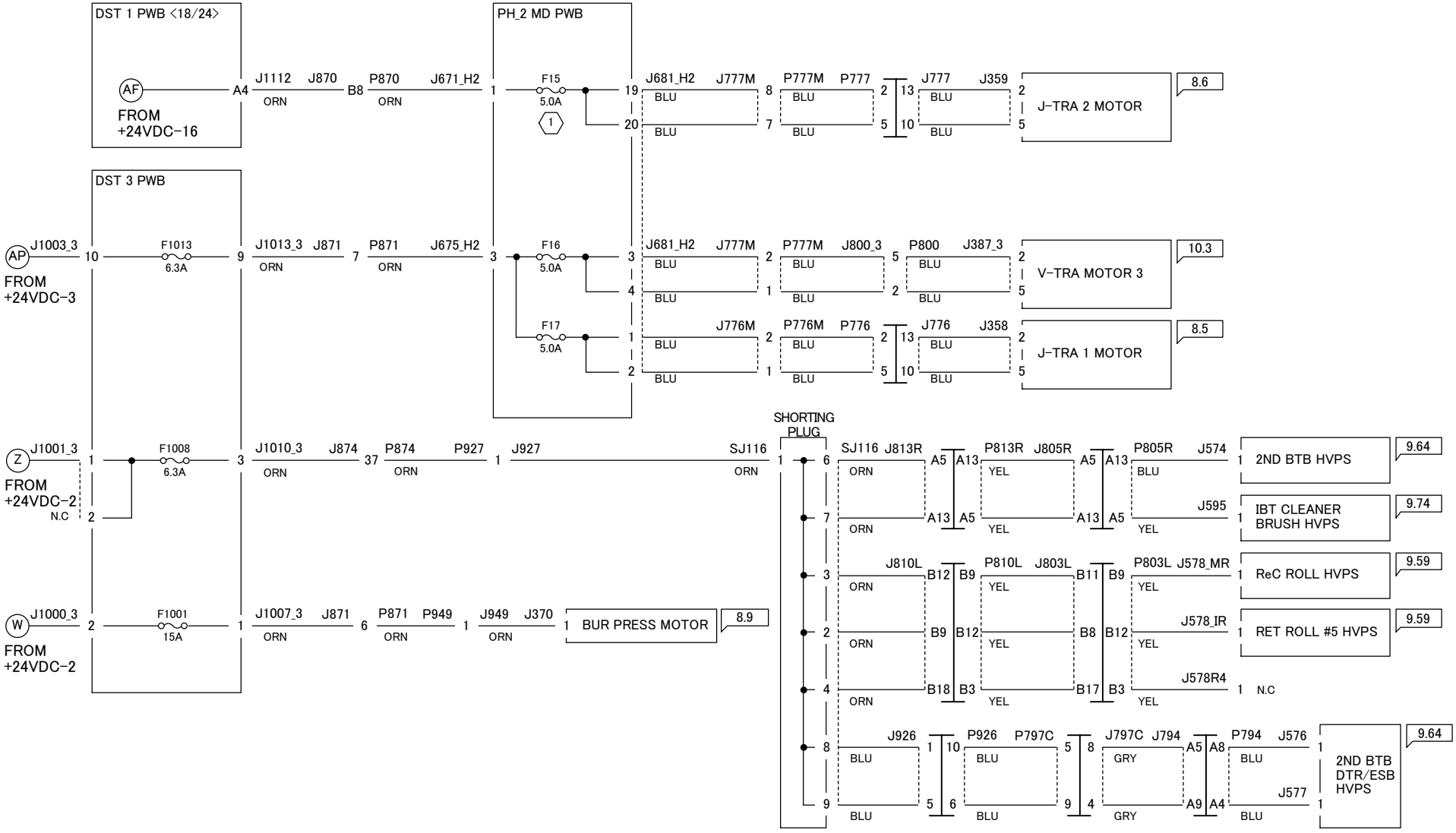
j0cx721083

7.2.1.84 +24VDC-20



j0cx721084

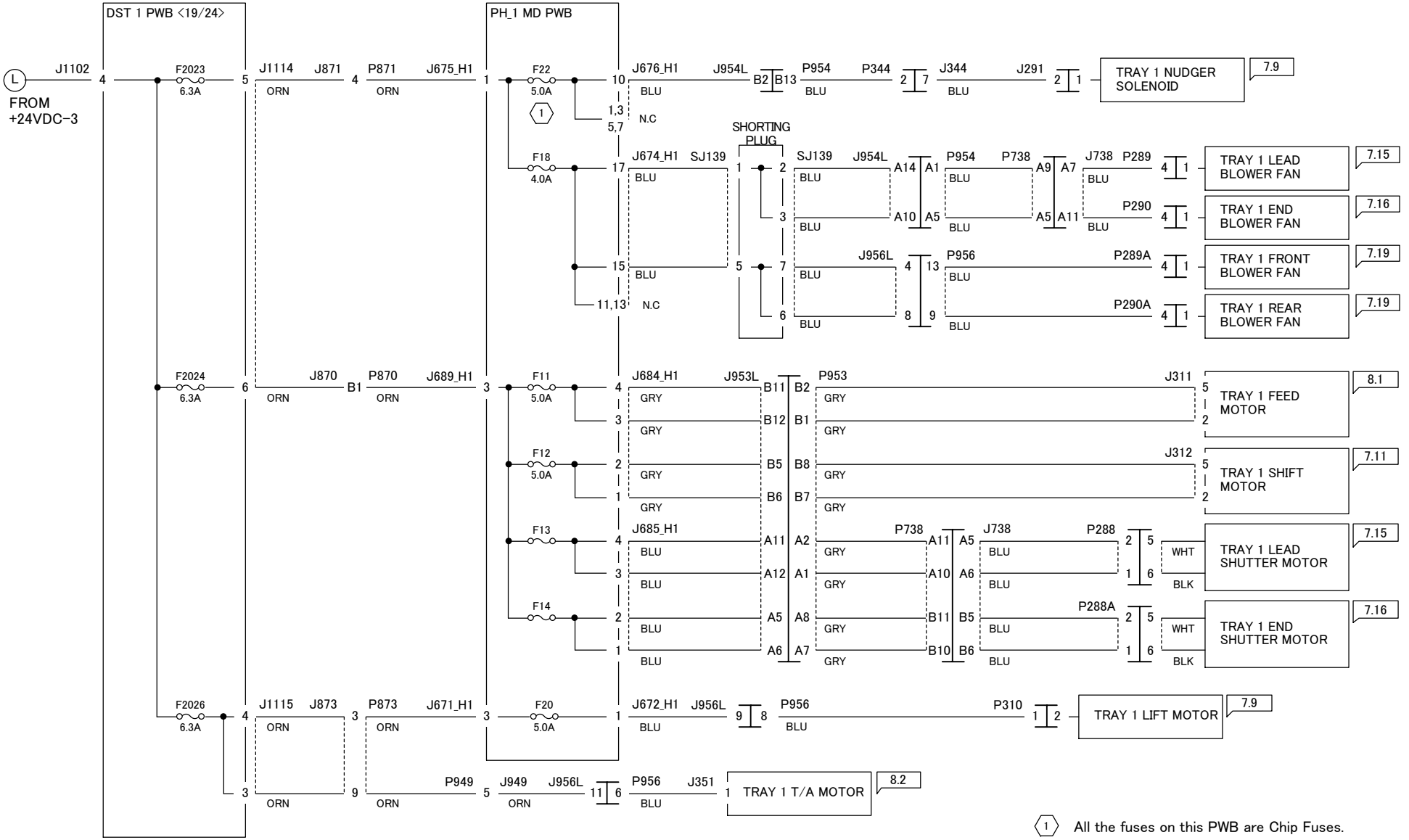
7.2.1.85 +24VDC-21



(1) All the fuses on this PWB are Chip Fuses.

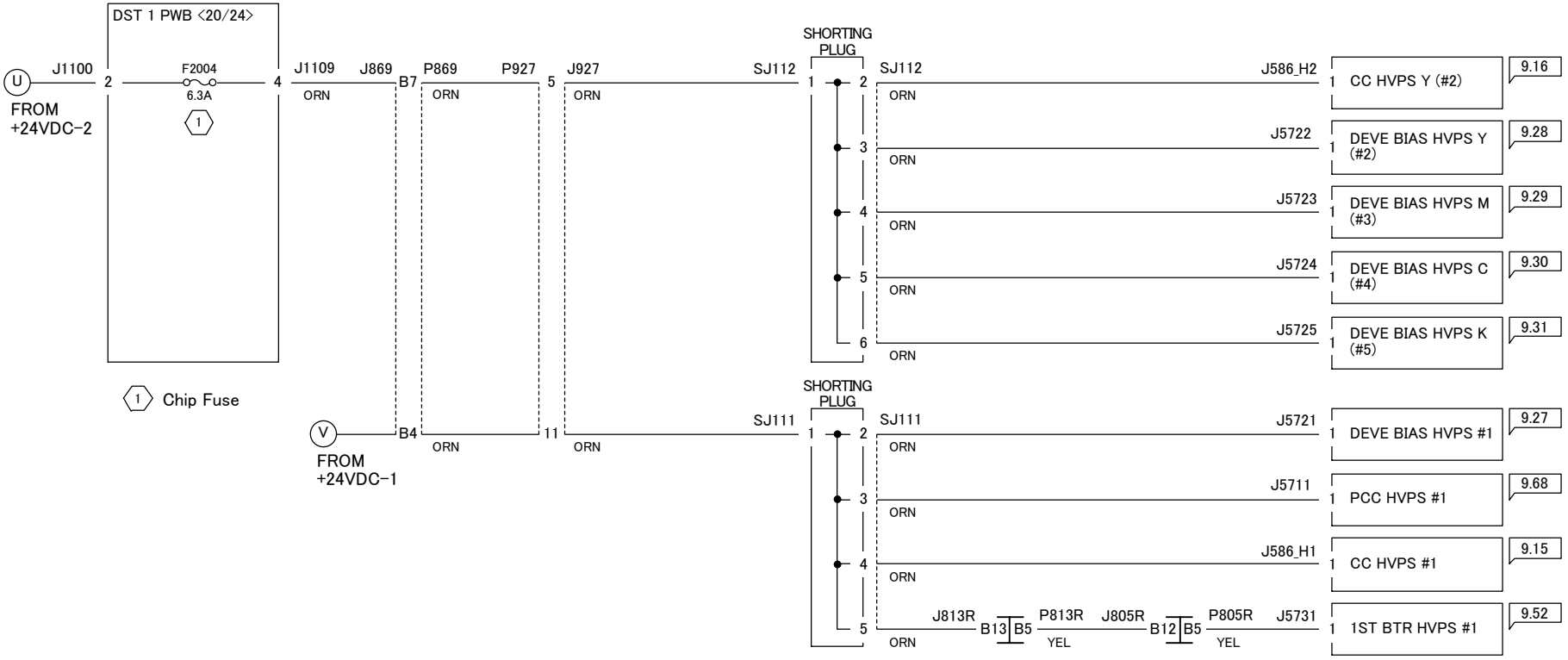
j0cx721085

7.2.1.86 +24VDC-22



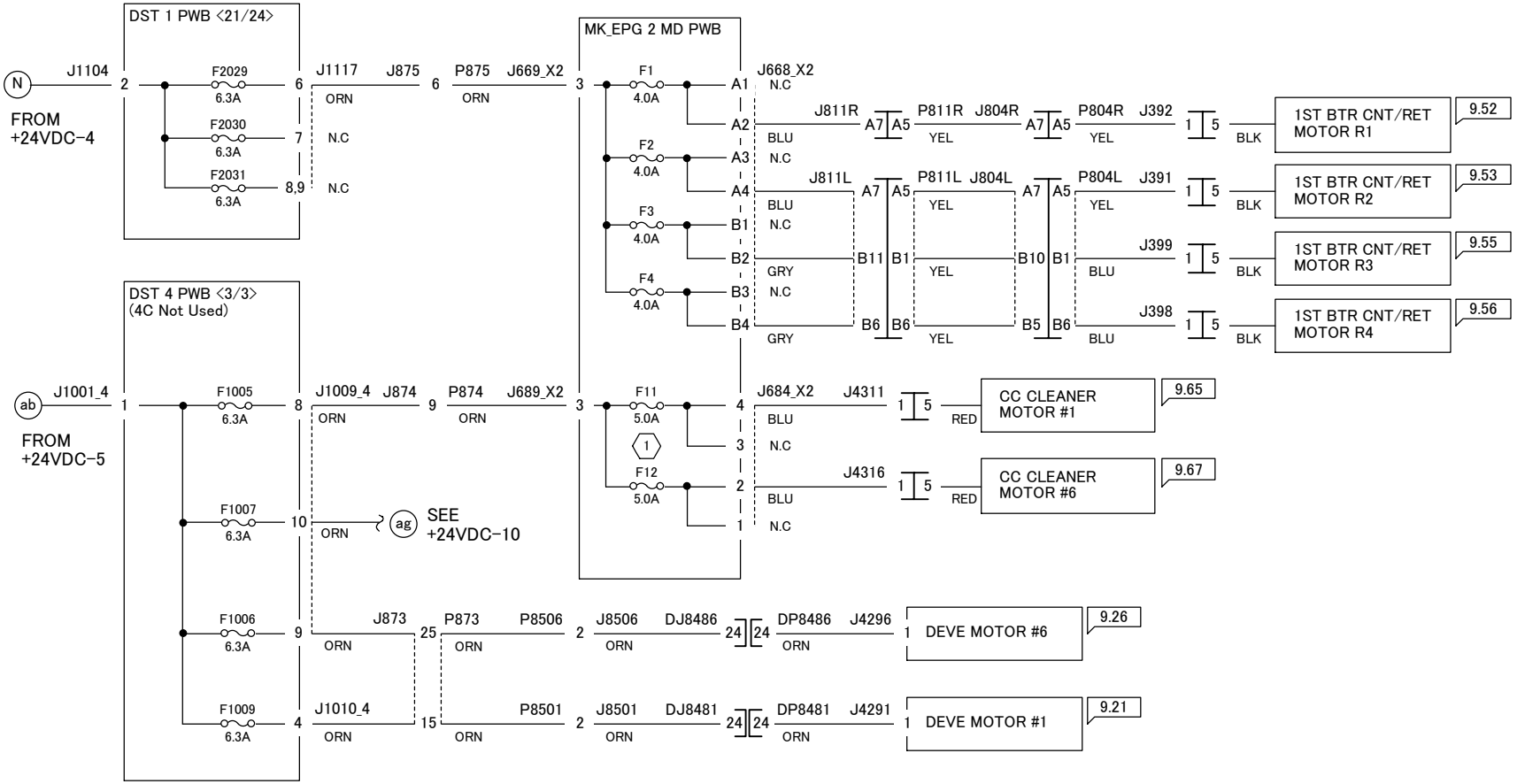
j0cx721086

7.2.1.87 +24VDC-23



j0cx721087

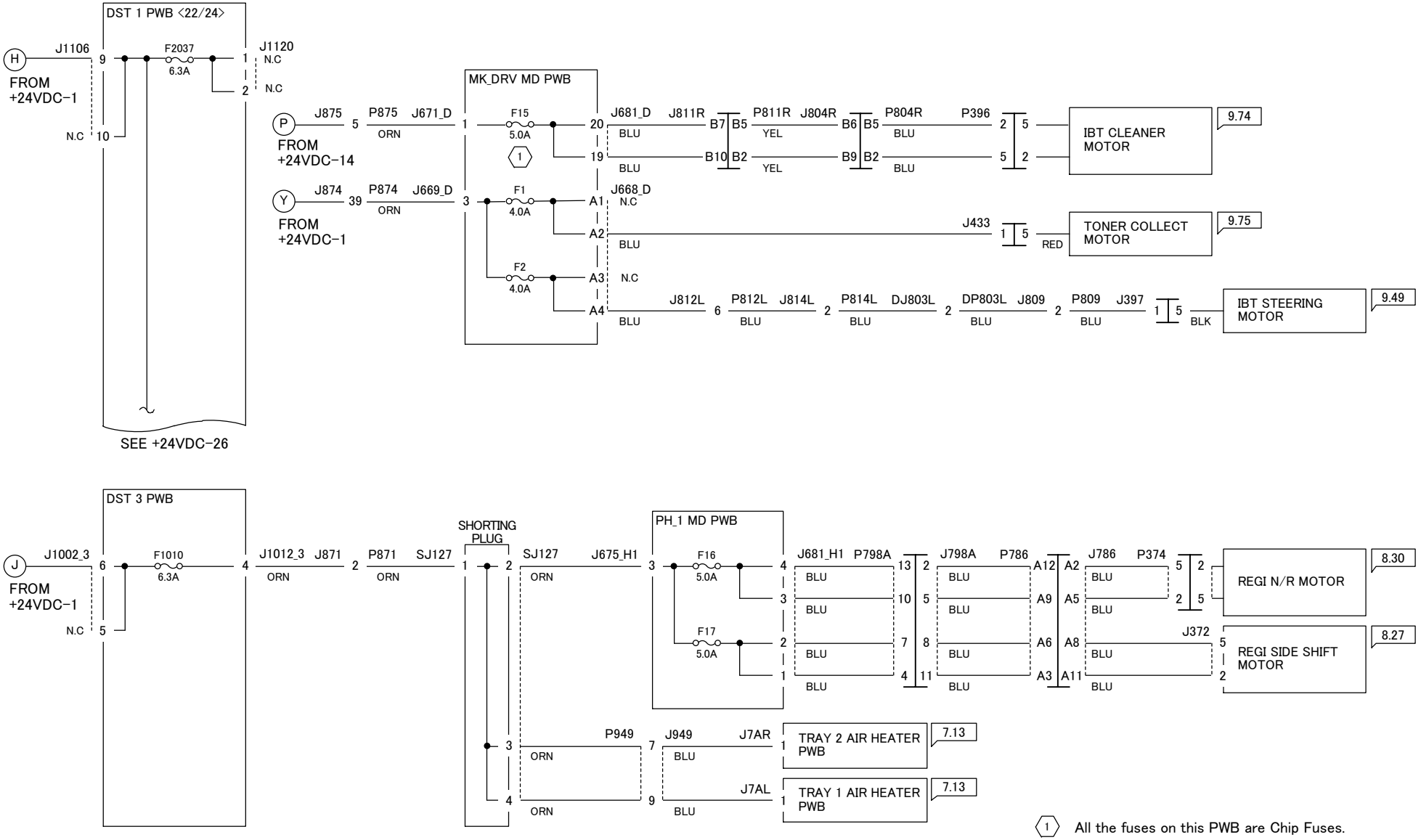
7.2.1.88 +24VDC-24



(1) All the fuses on this PWB are Chip Fuses.

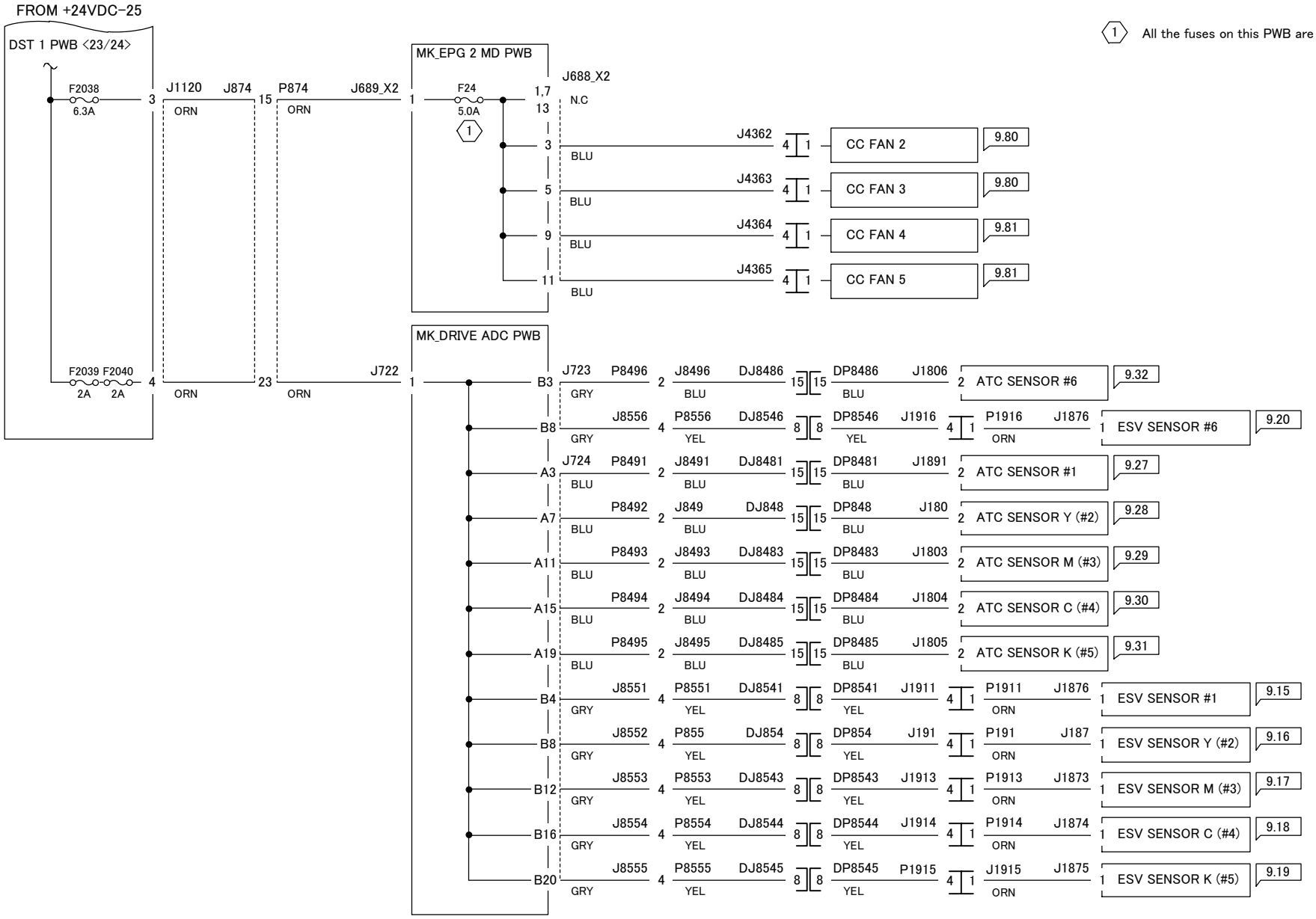
j0cx721088

7.2.1.89 +24VDC-25

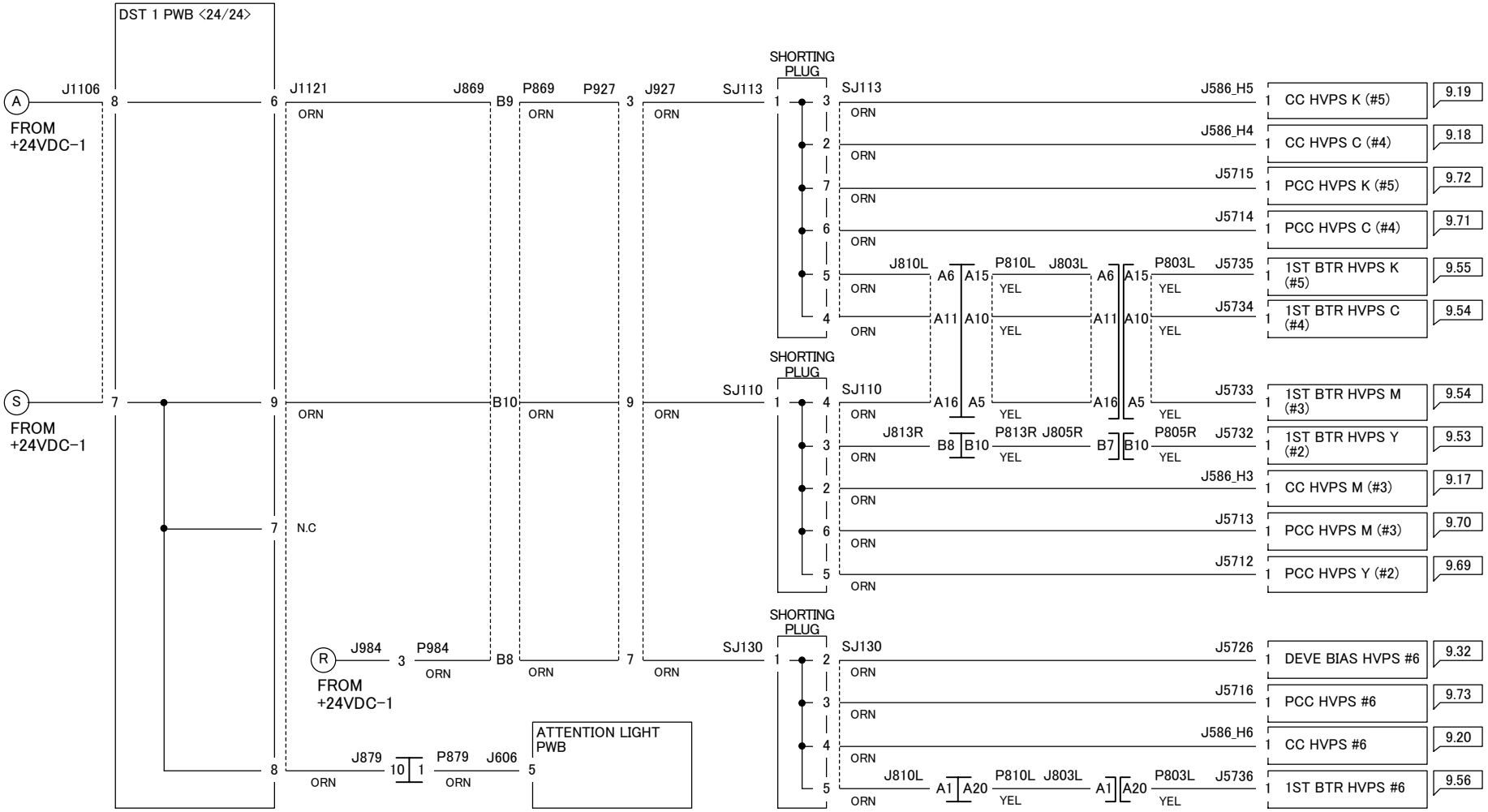


j0cx721089

7.2.1.90 +24VDC-26



7.2.1.91 +24VDC-27



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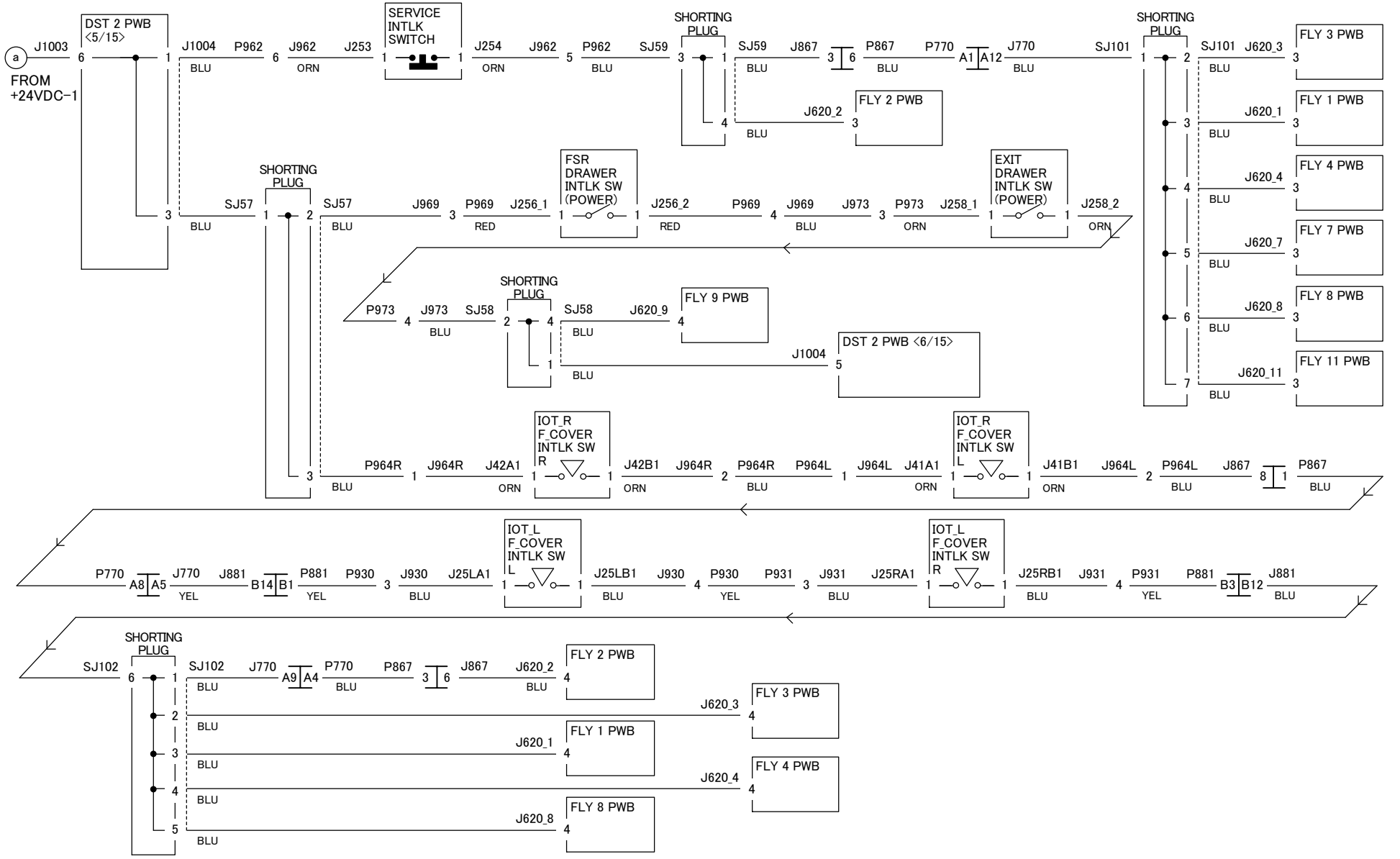

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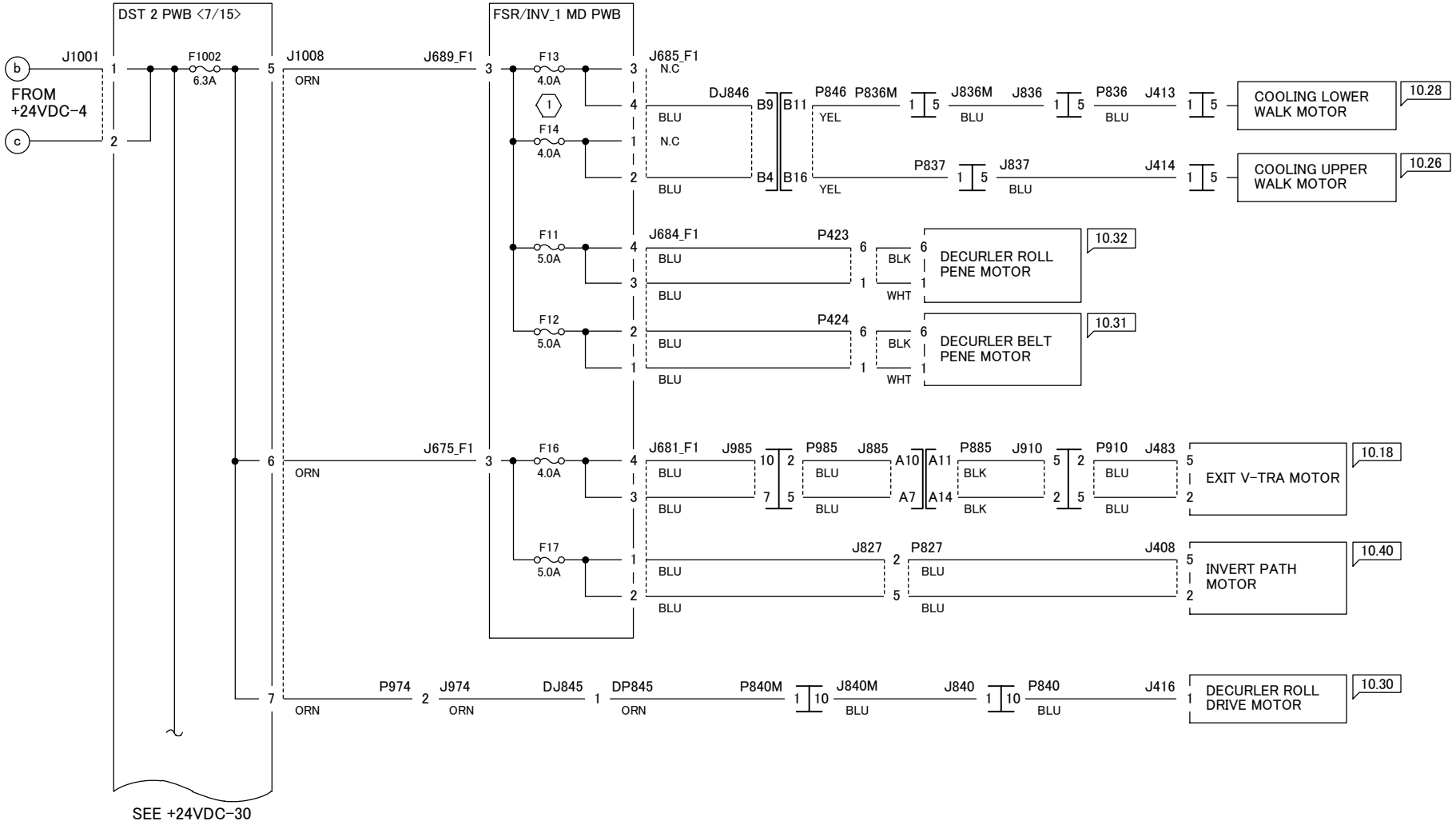
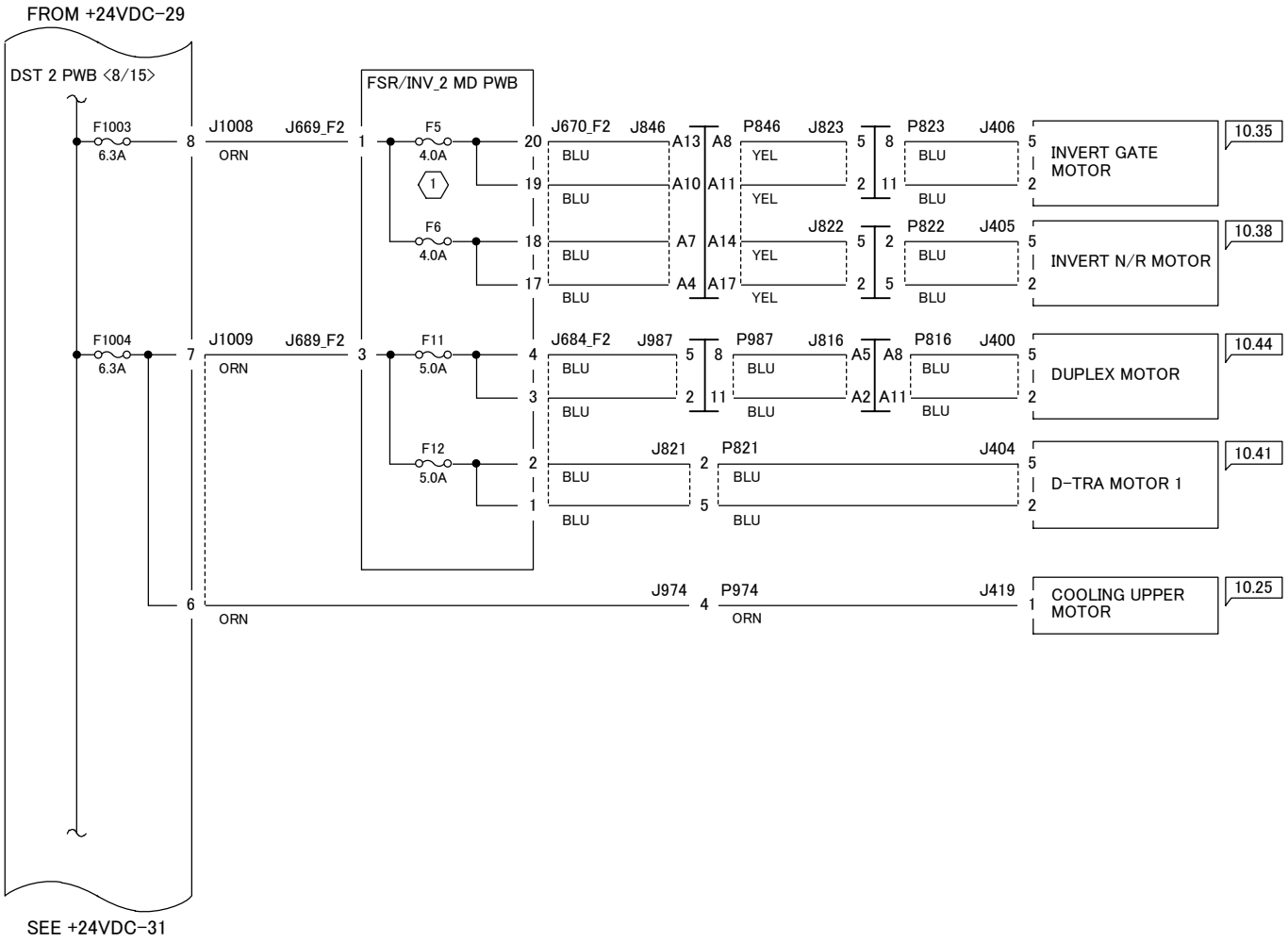
7.2.1.93 +24VDC-29



(1) All the fuses on this PWB are Chip Fuses.

j0cx721093

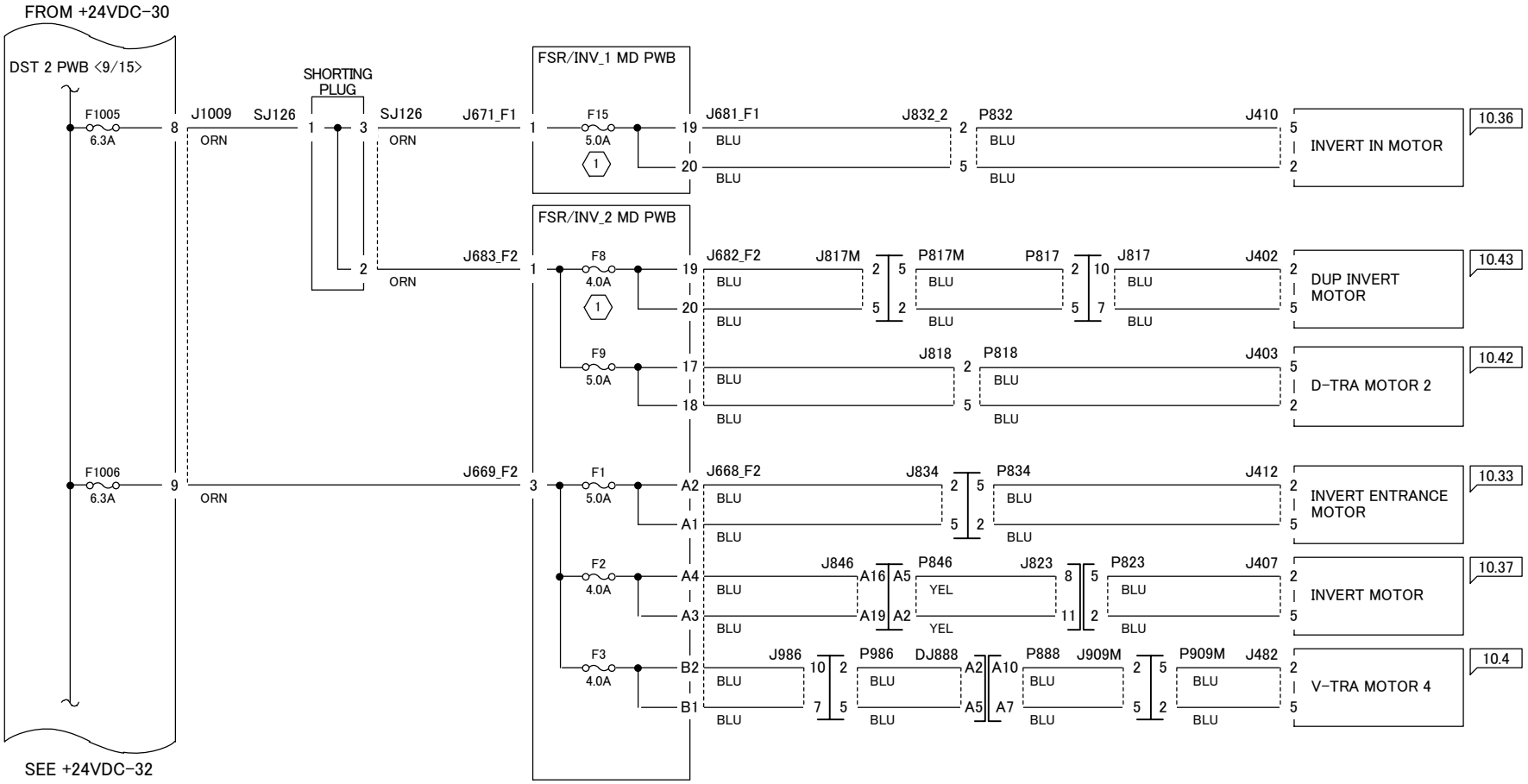
7.2.1.94 +24VDC-30



1 All the fuses on this PWB are Chip Fuses.

j0cx721094

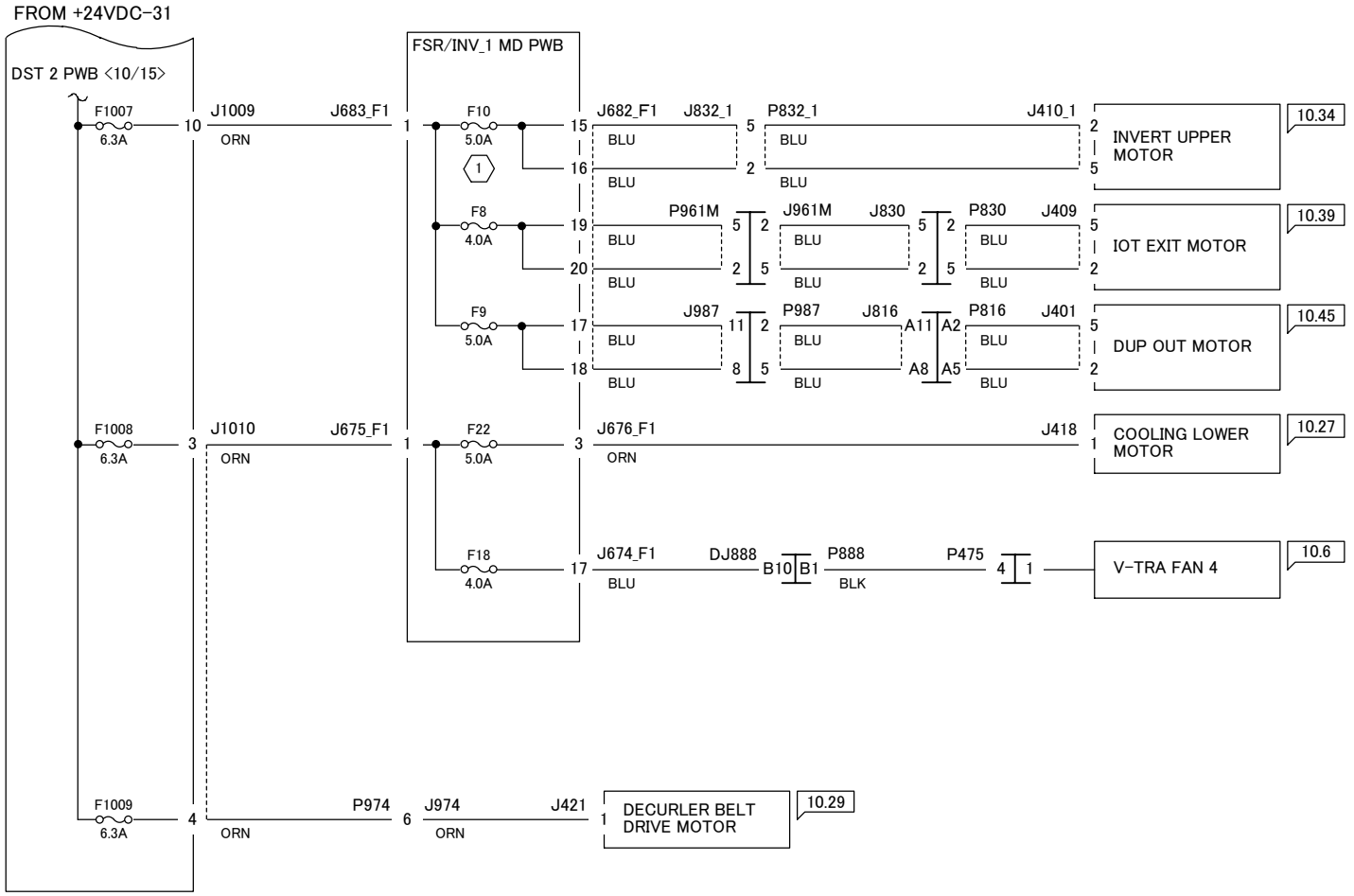
7.2.1.95 +24VDC-31



1 All the fuses on this PWB are Chip Fuses.

j0cx721095

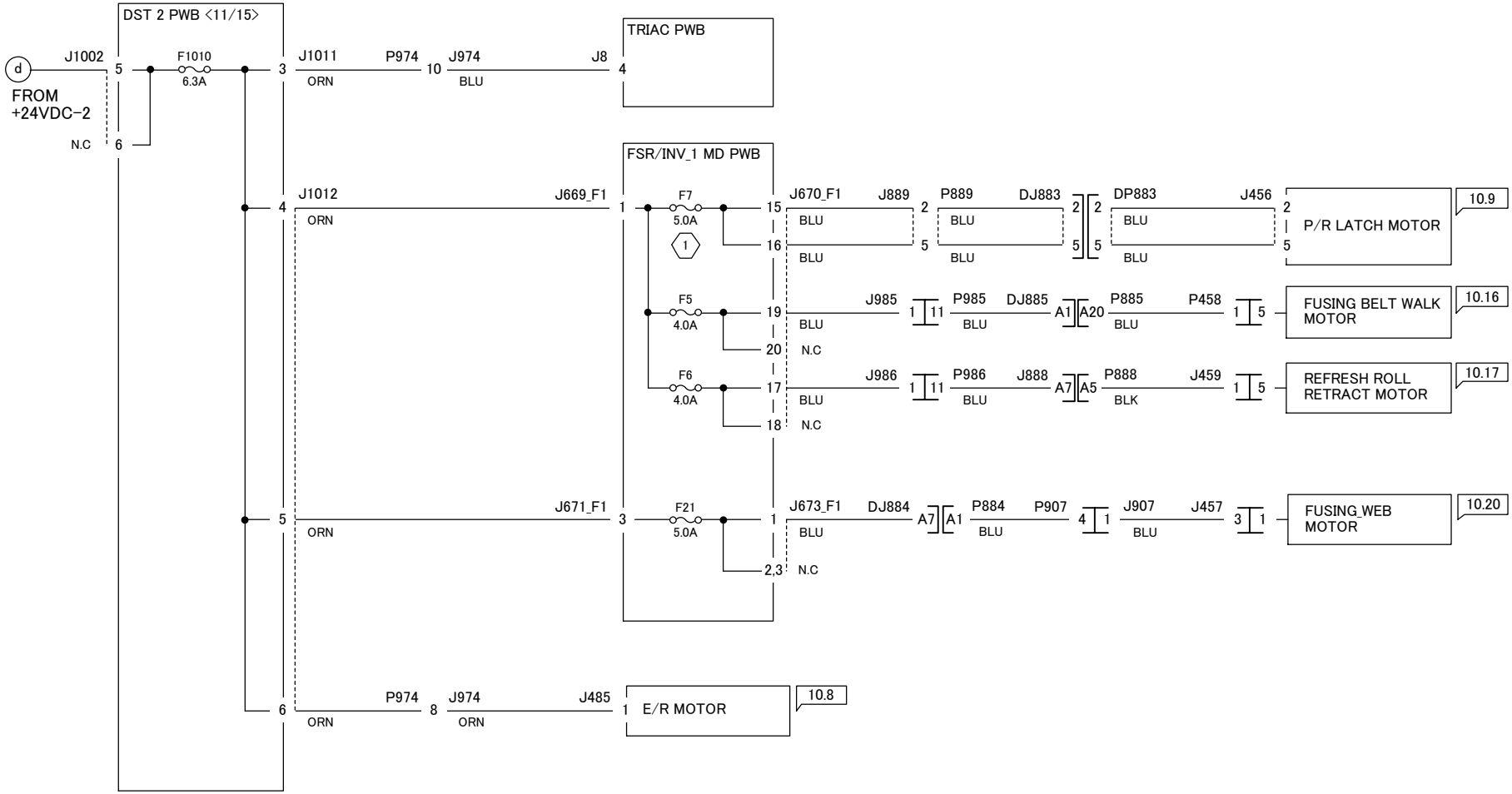
7.2.1.96 +24VDC-32



(1) All the fuses on this PWB are Chip Fuses.

j0cx721096

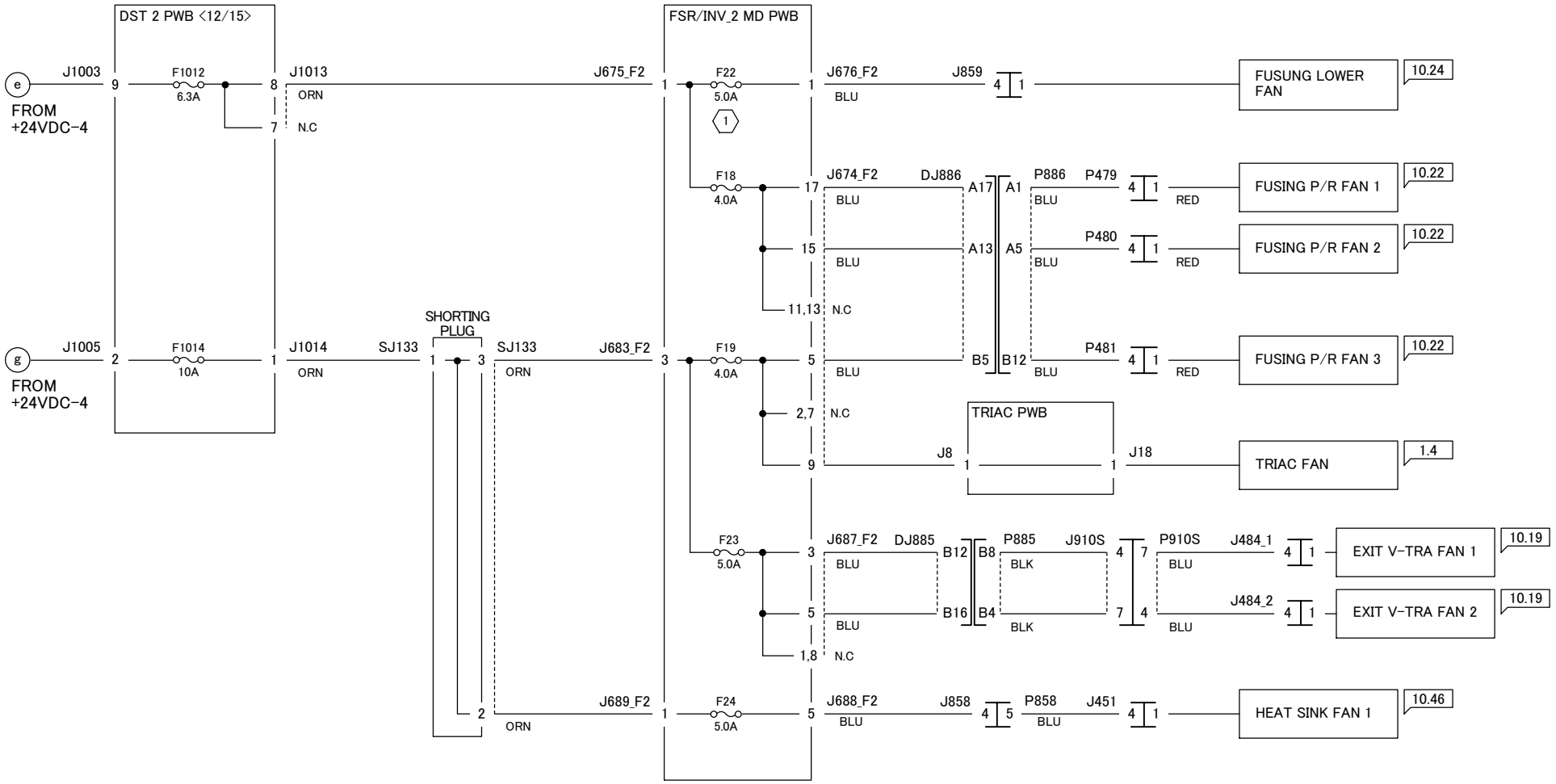
7.2.1.97 +24VDC-33



(1) All the fuses on this PWB are Chip Fuses.

j0cx721097

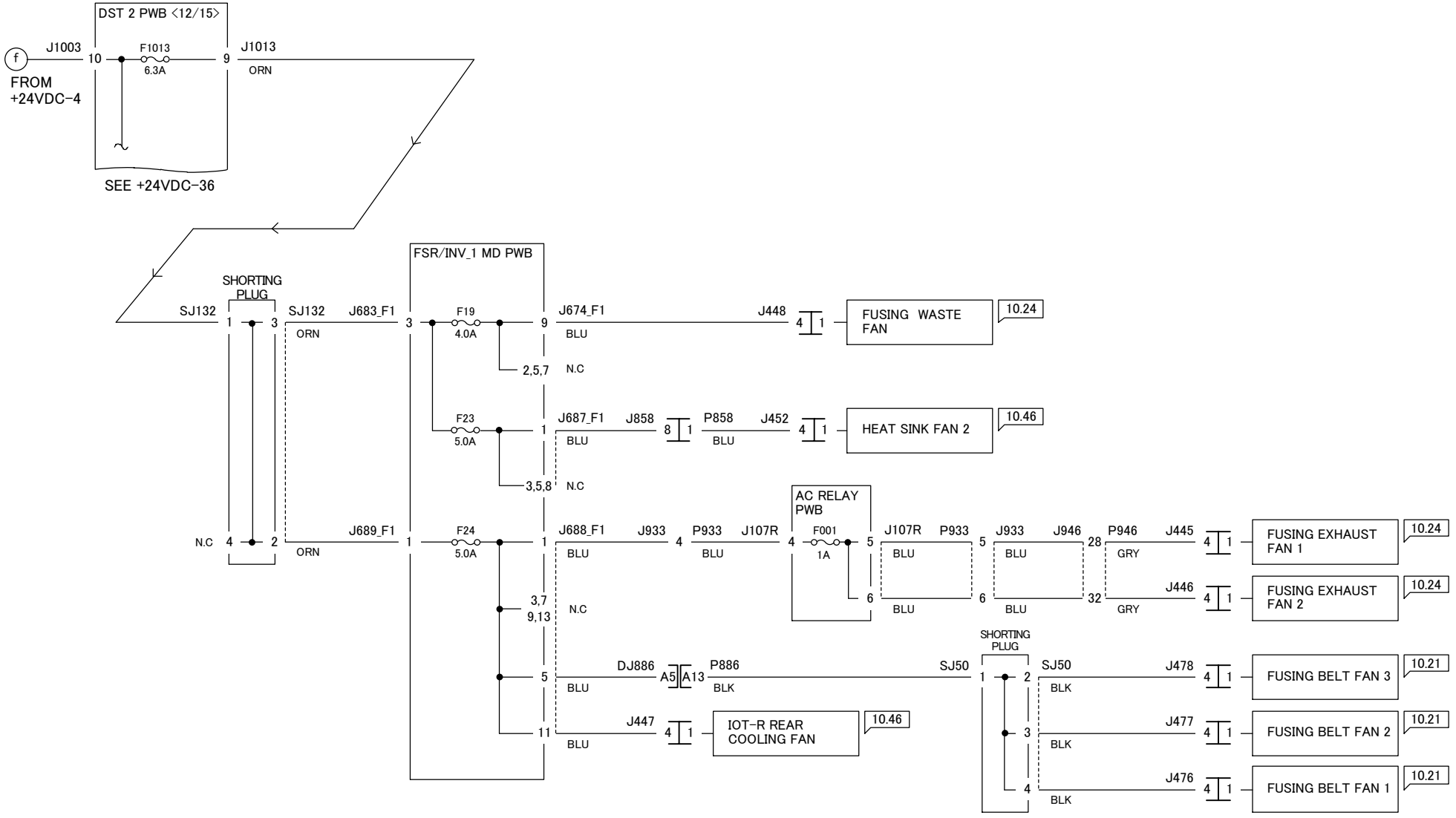
7.2.1.98 +24VDC-34



1 All the fuses on this PWB are Chip Fuses.

j0cx721098

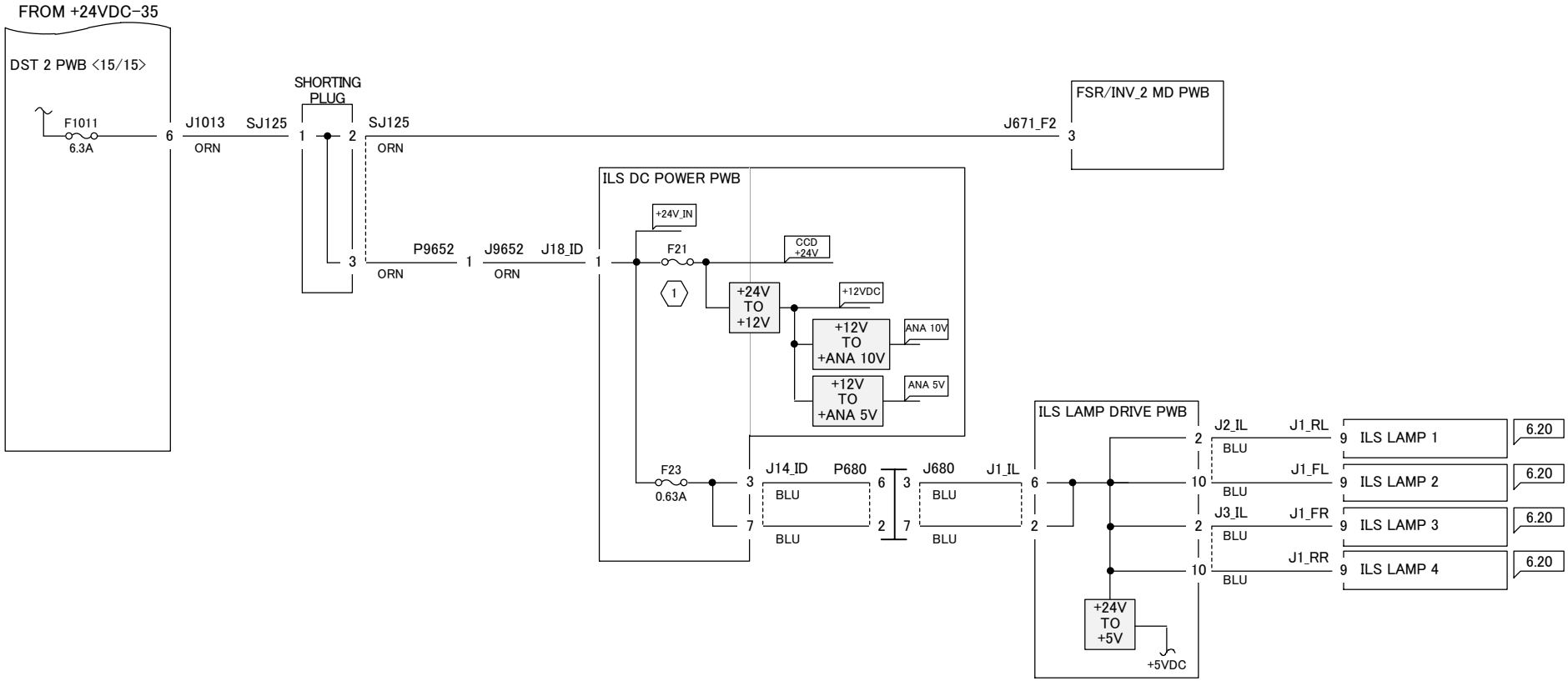
7.2.1.99 +24VDC-35



(1) All the fuses on this PWB are Chip Fuses.

j0cx721099

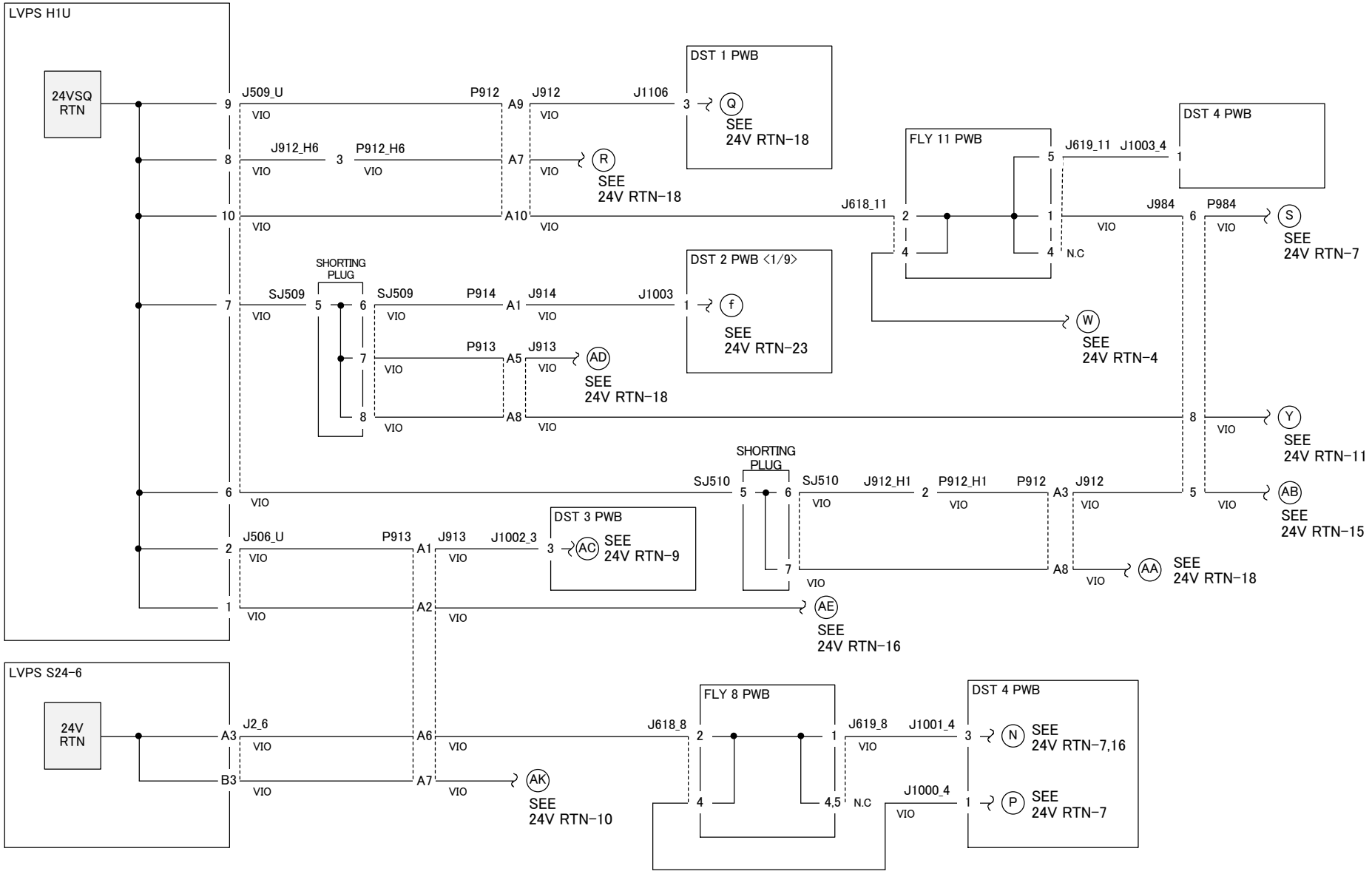
7.2.1.100 +24VDC-36



1 All the fuses on this PWB are Chip Fuses.

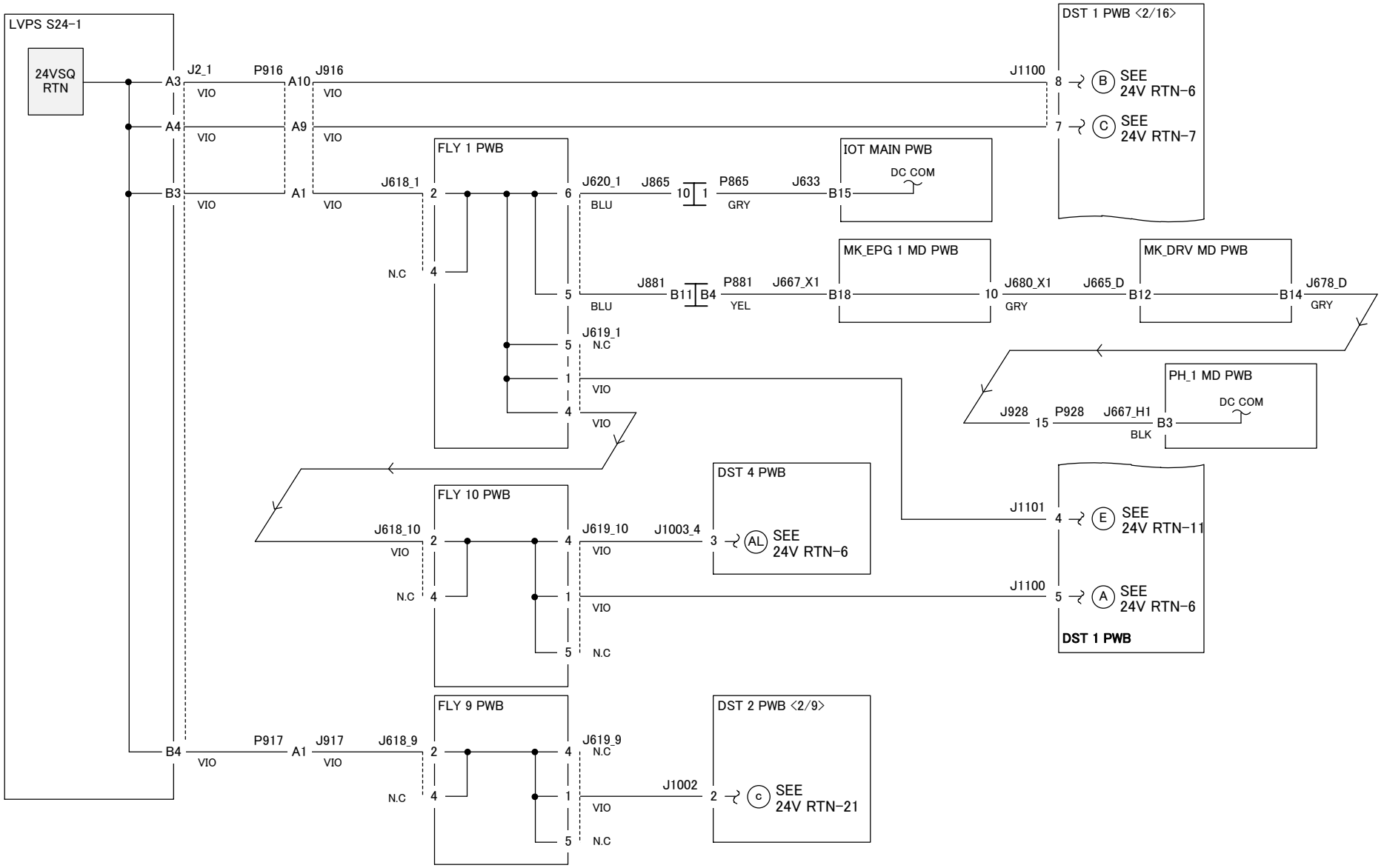
j0cx721100

7.2.1.101 DC COM (24V RTN-1)



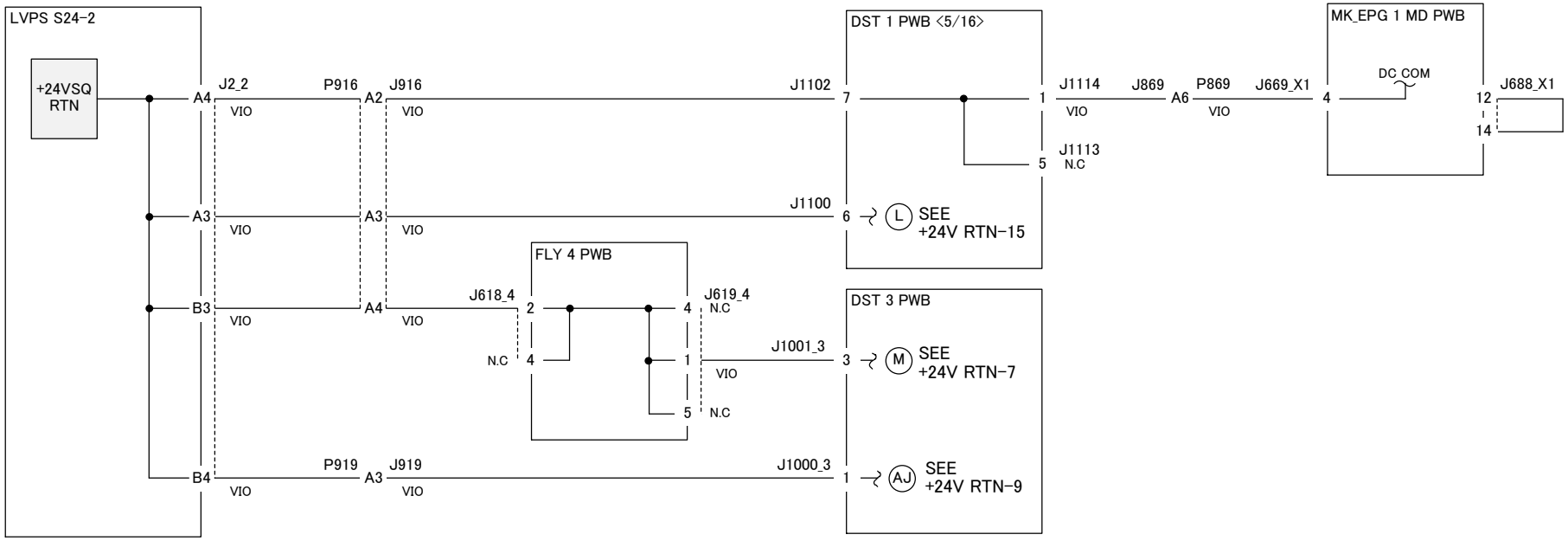
j0cx721101

7.2.1.102 DC COM (24V RTN-2)



j0cx721102

7.2.1.103 DC COM (24V RTN-3)



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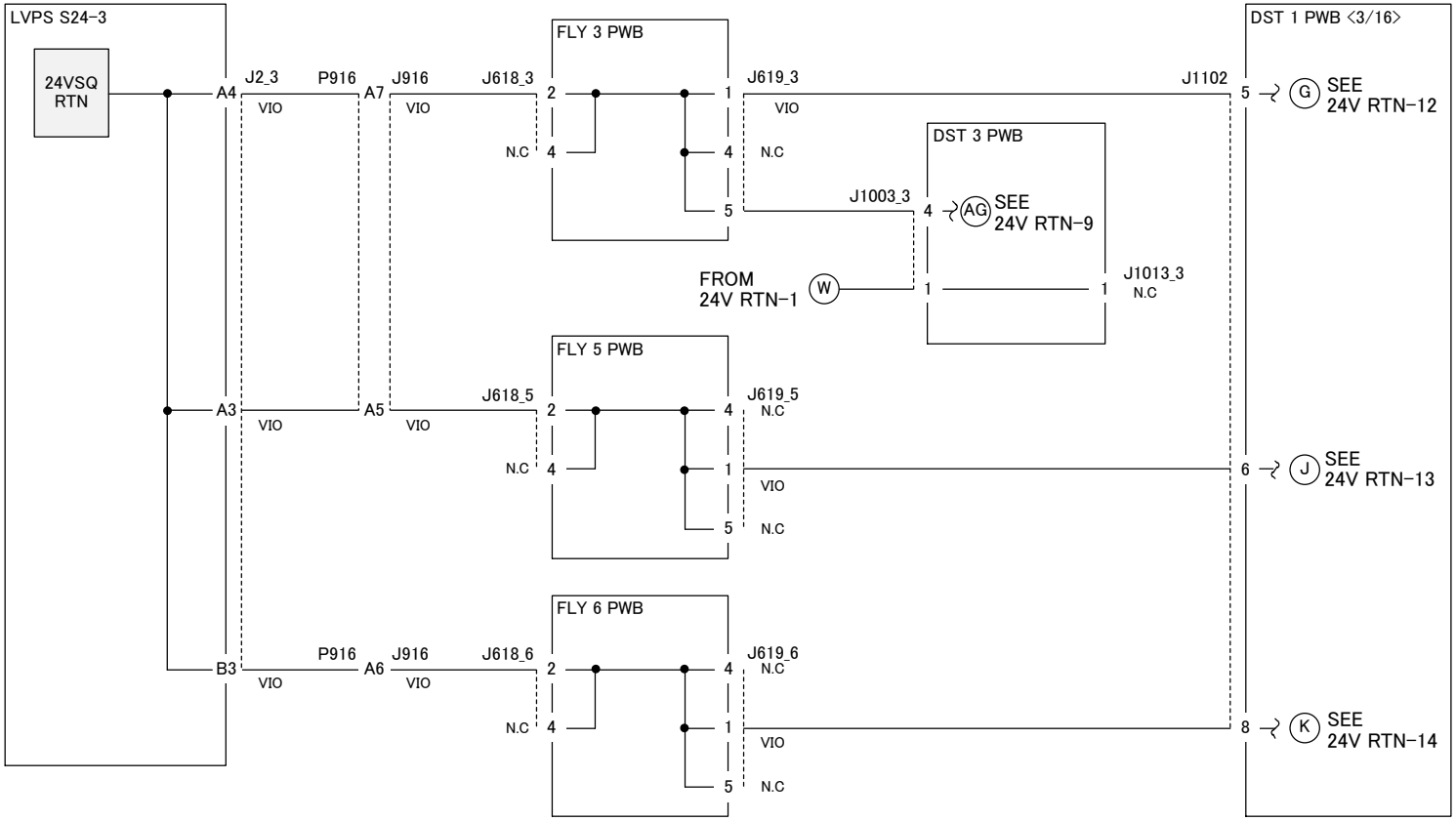

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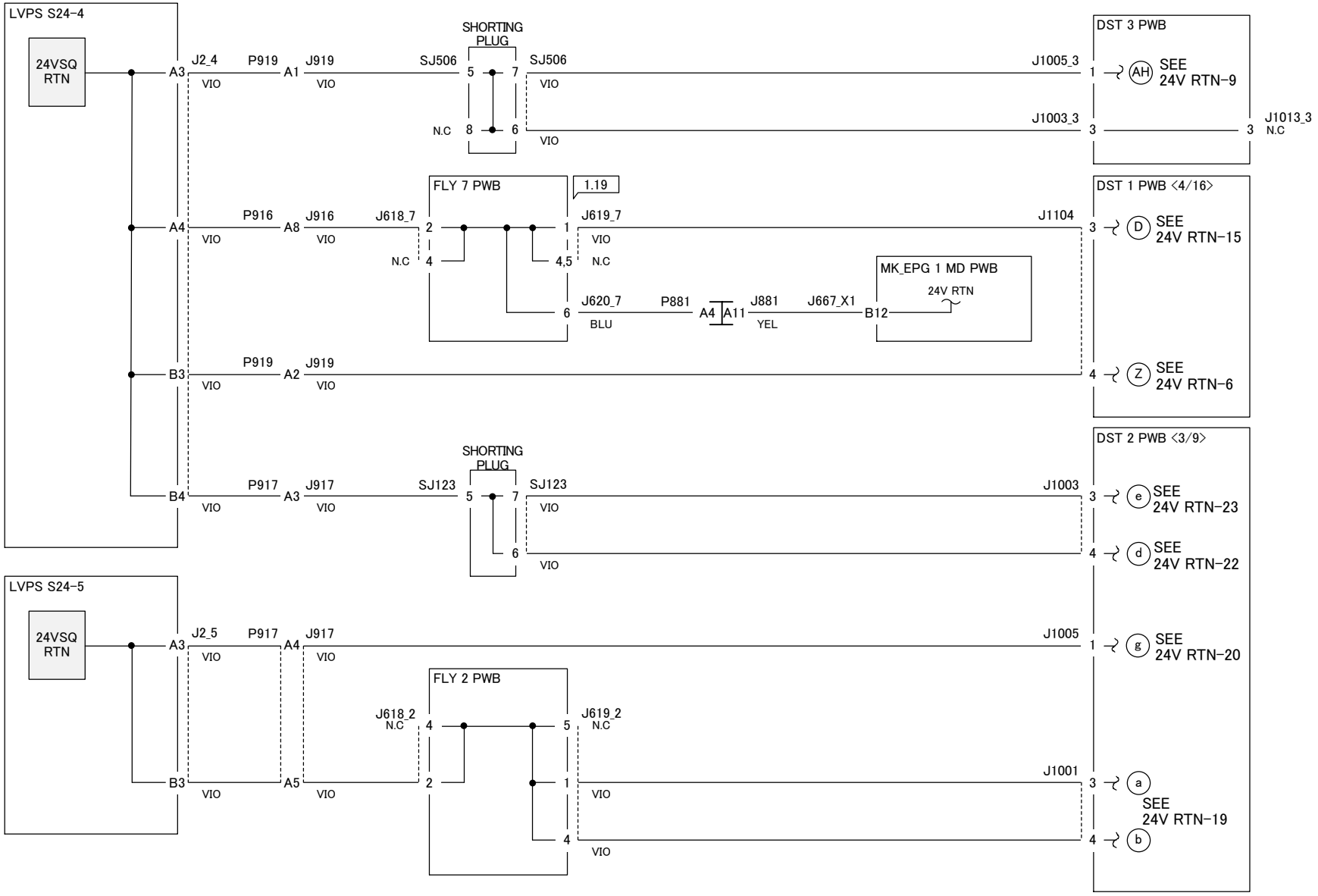

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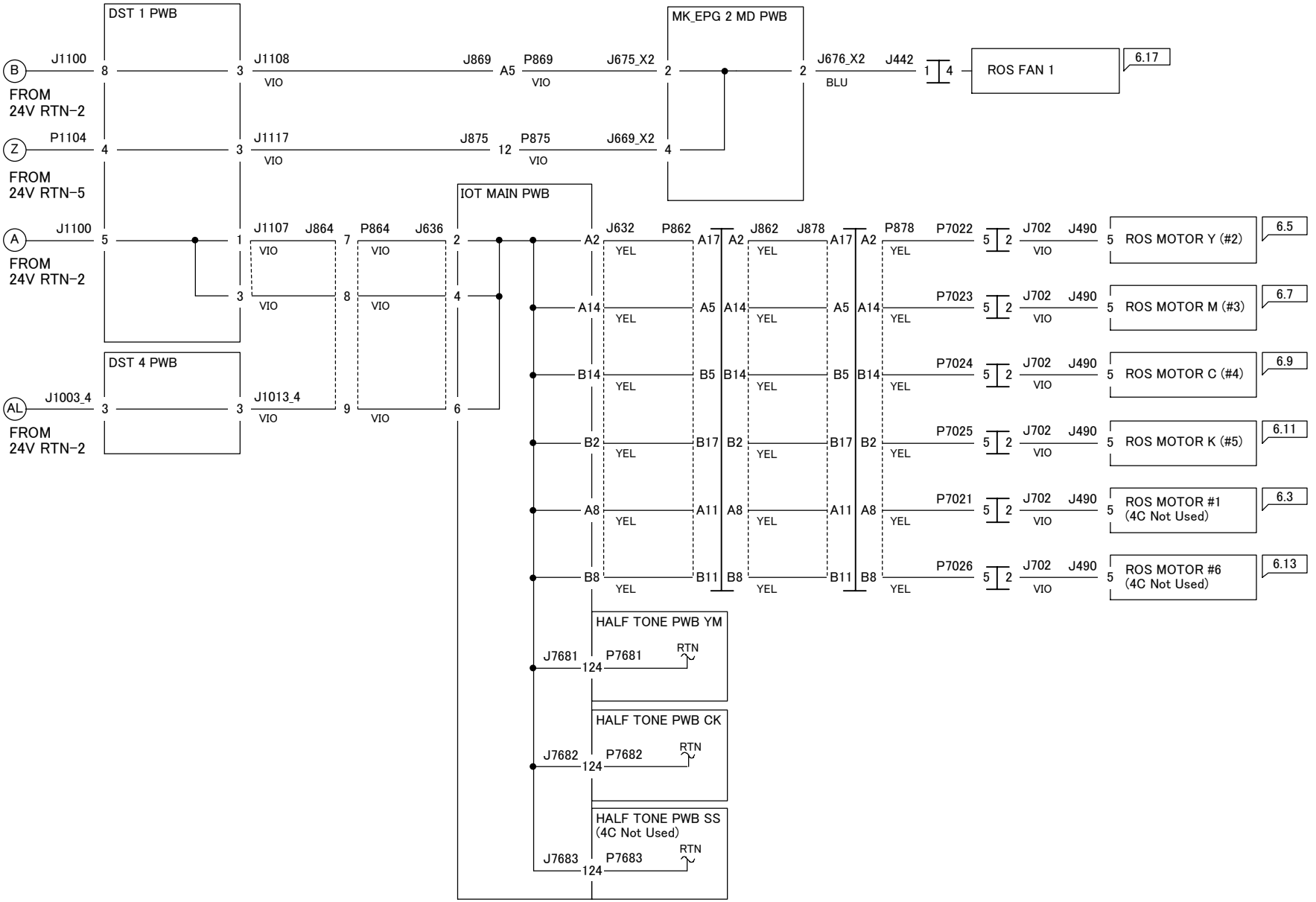

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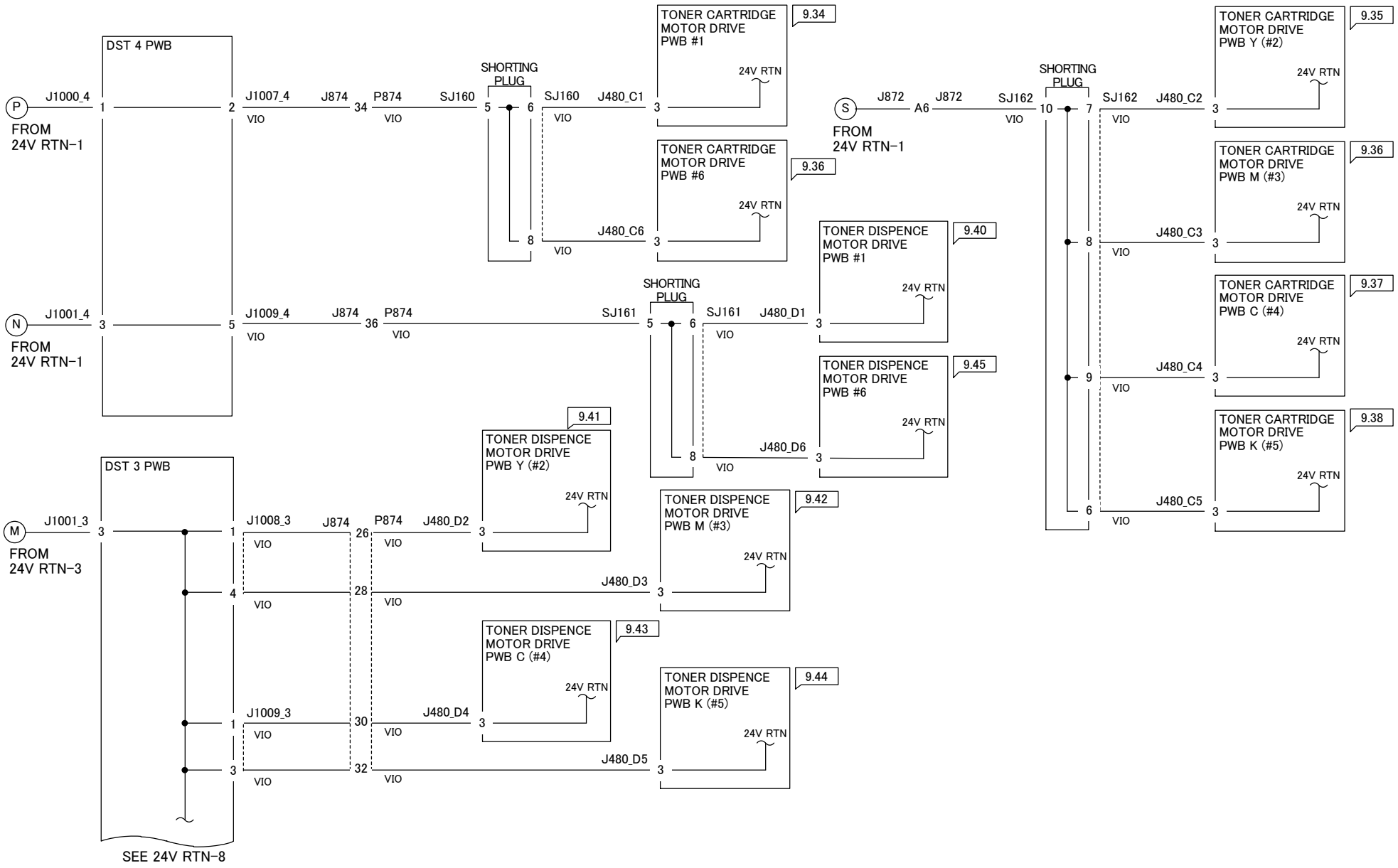

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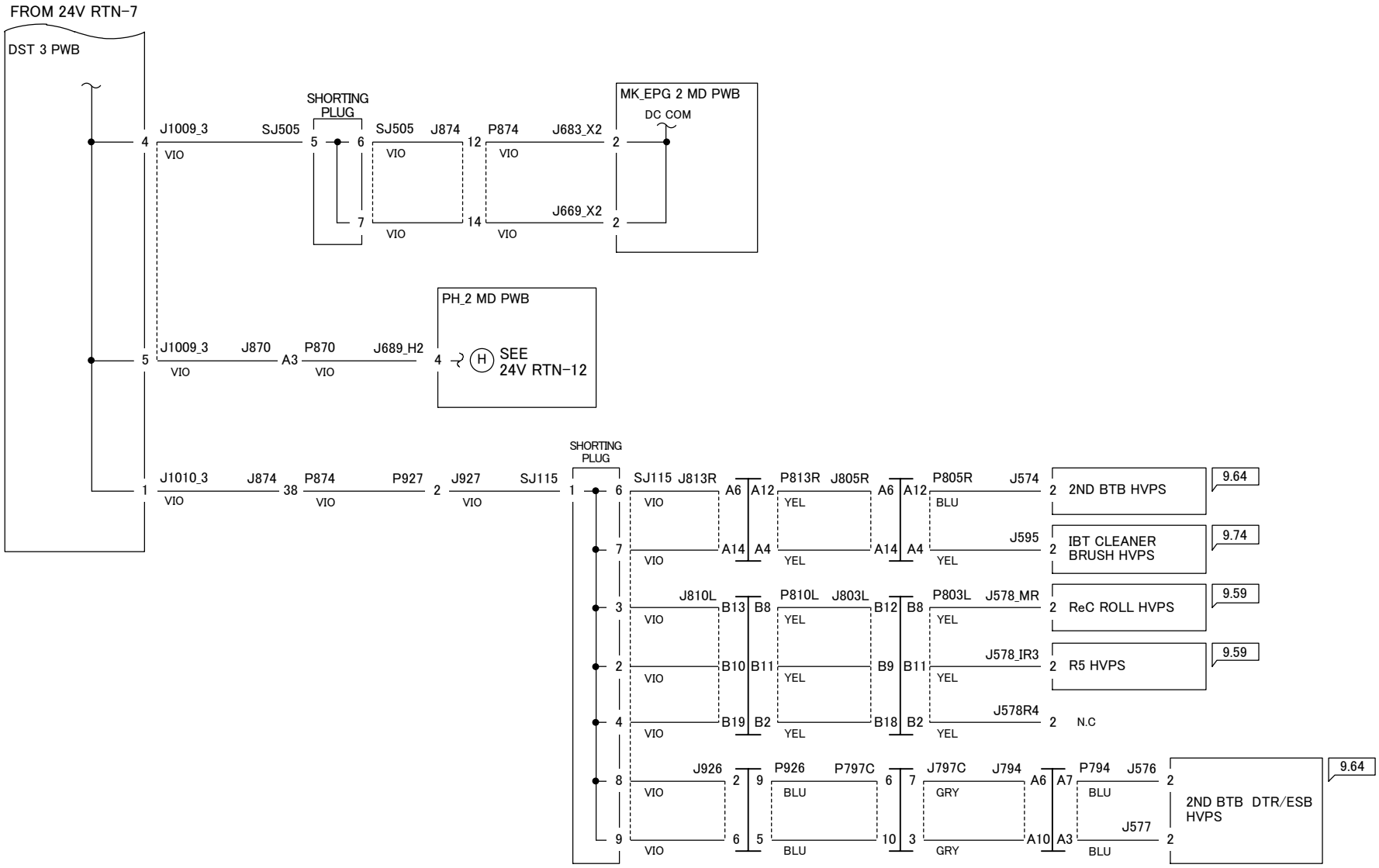

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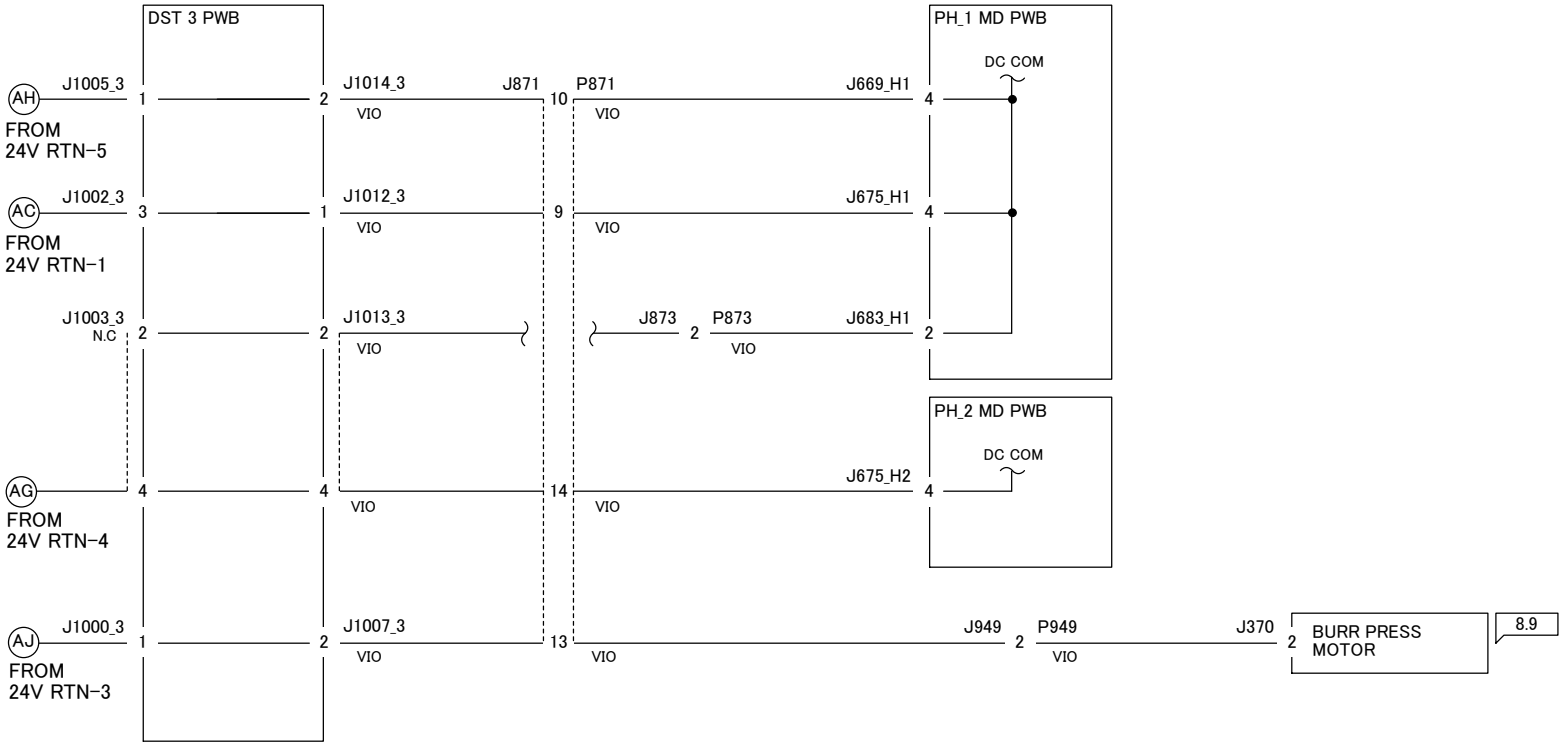

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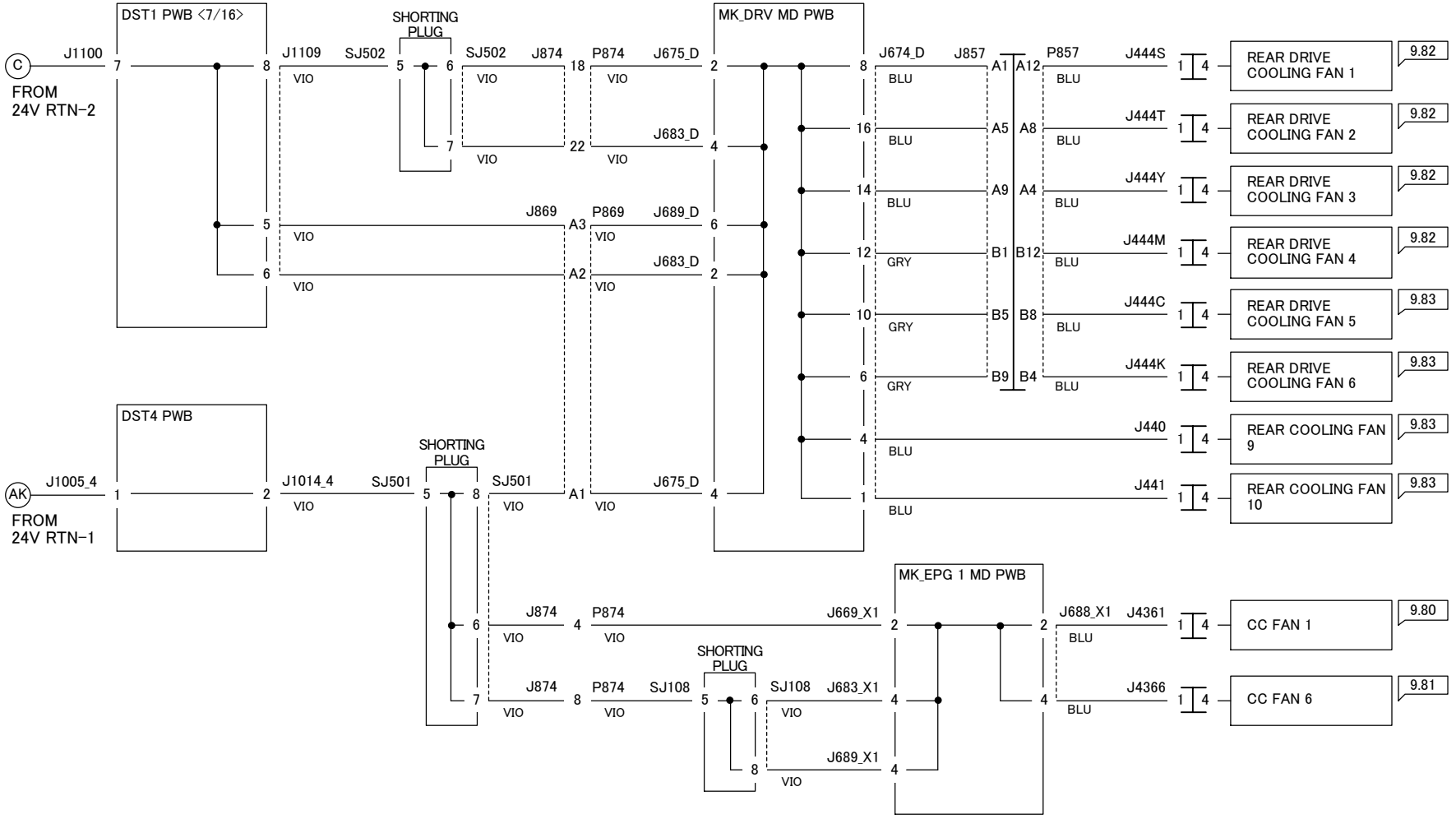

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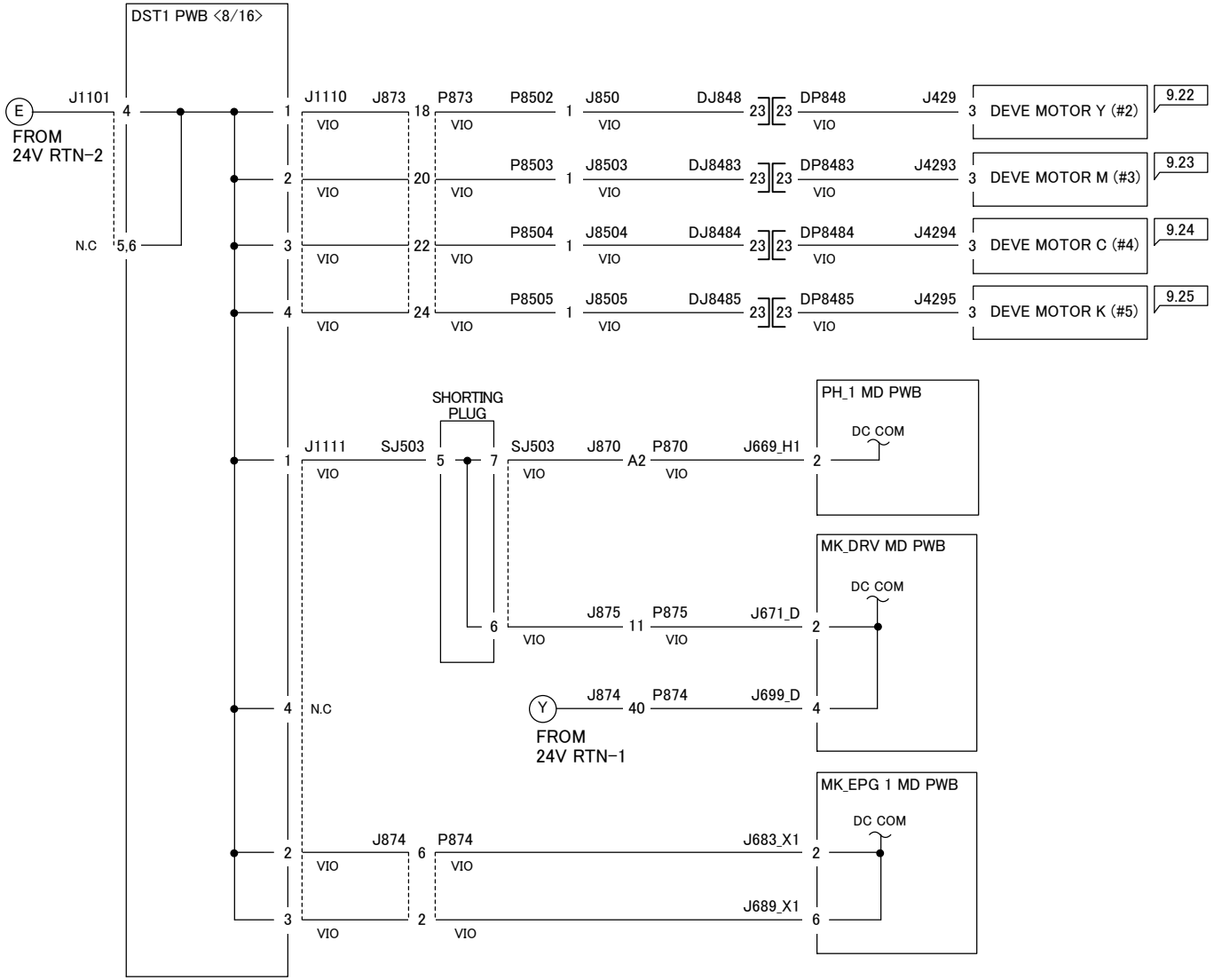
7.2.1.111 DC COM (24V RTN-11)



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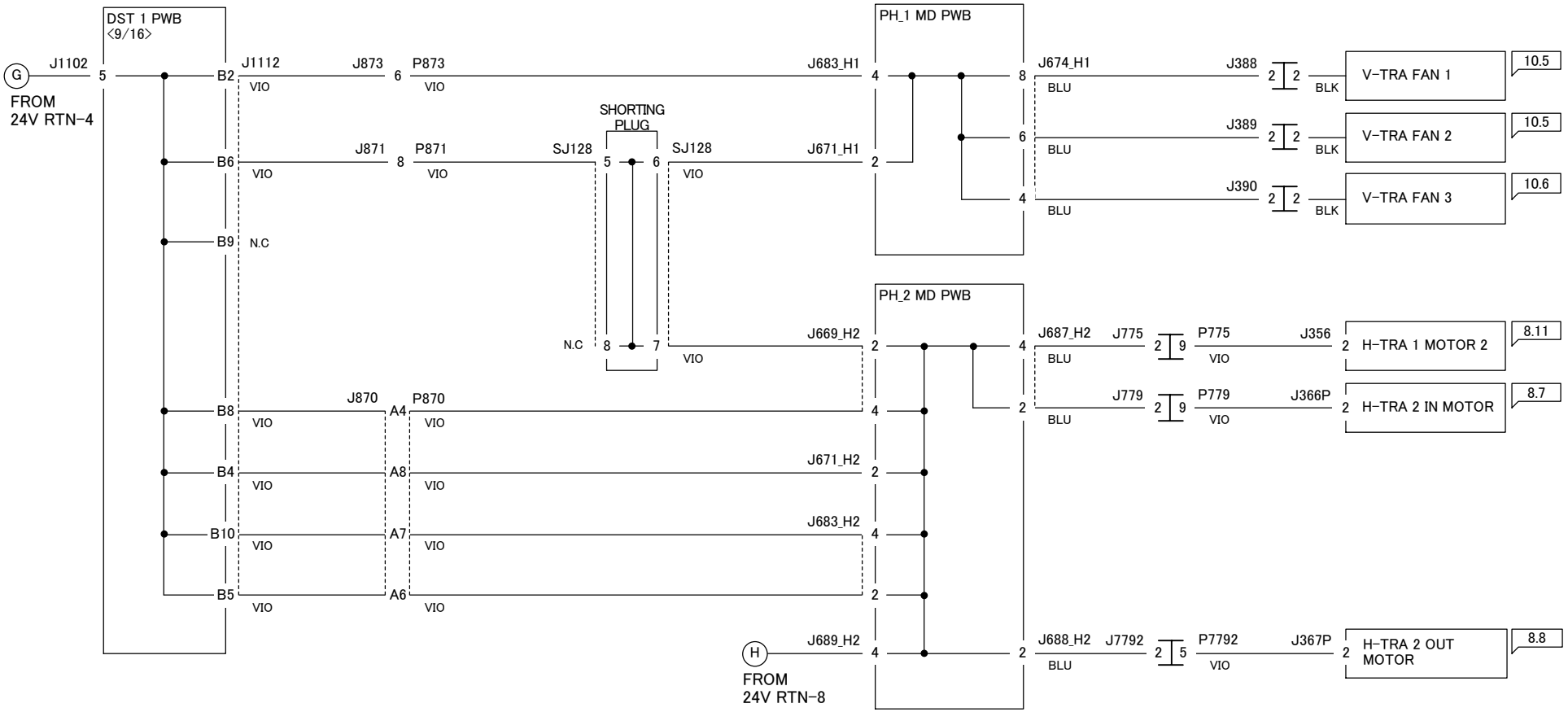

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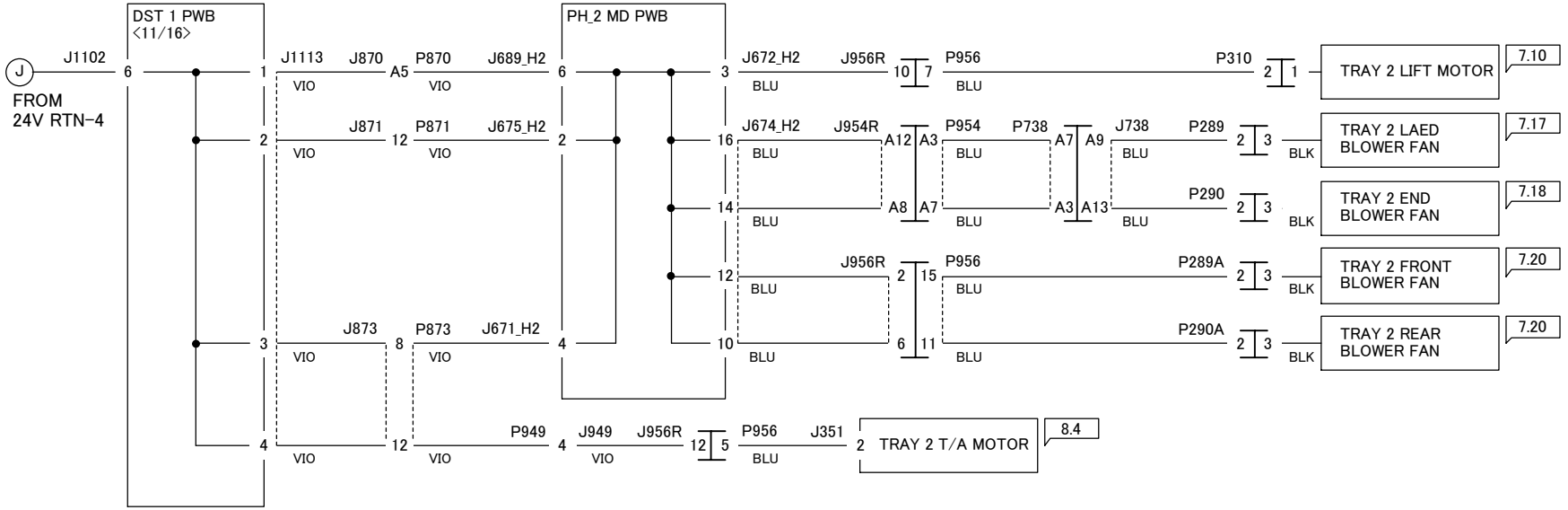
7.2.1.113 DC COM (24V RTN-13)



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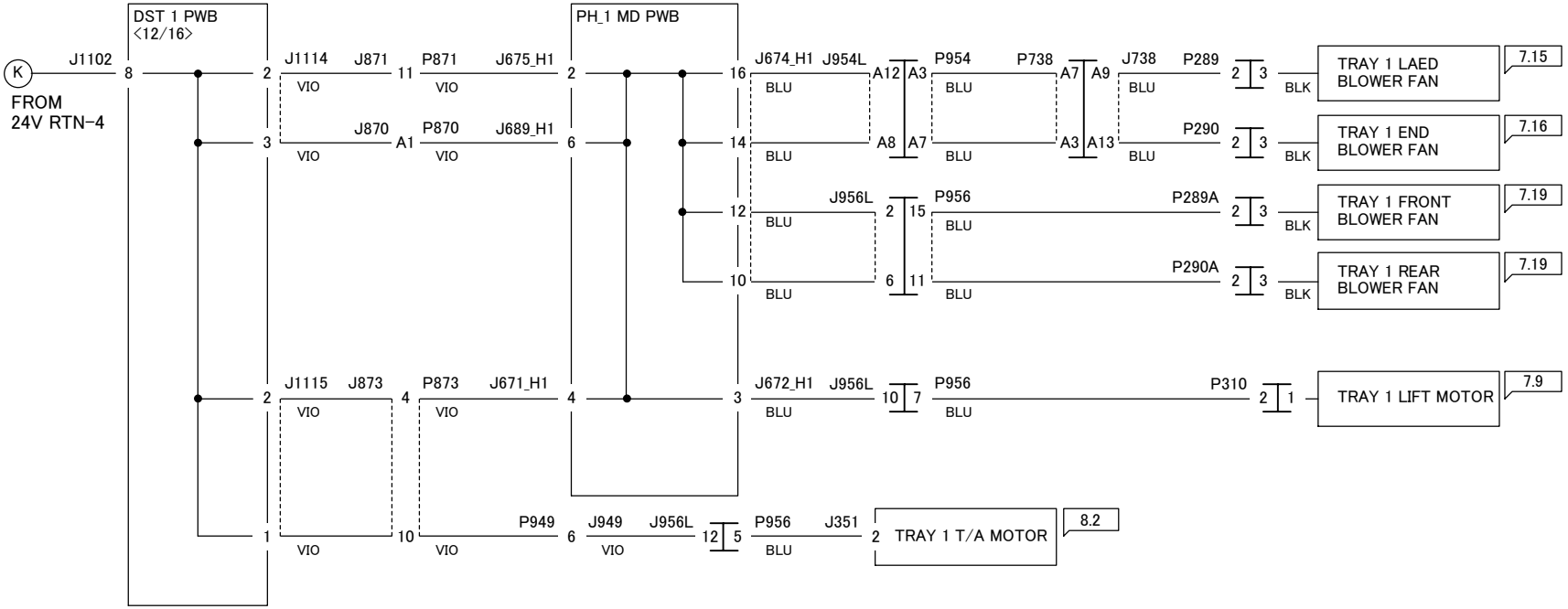

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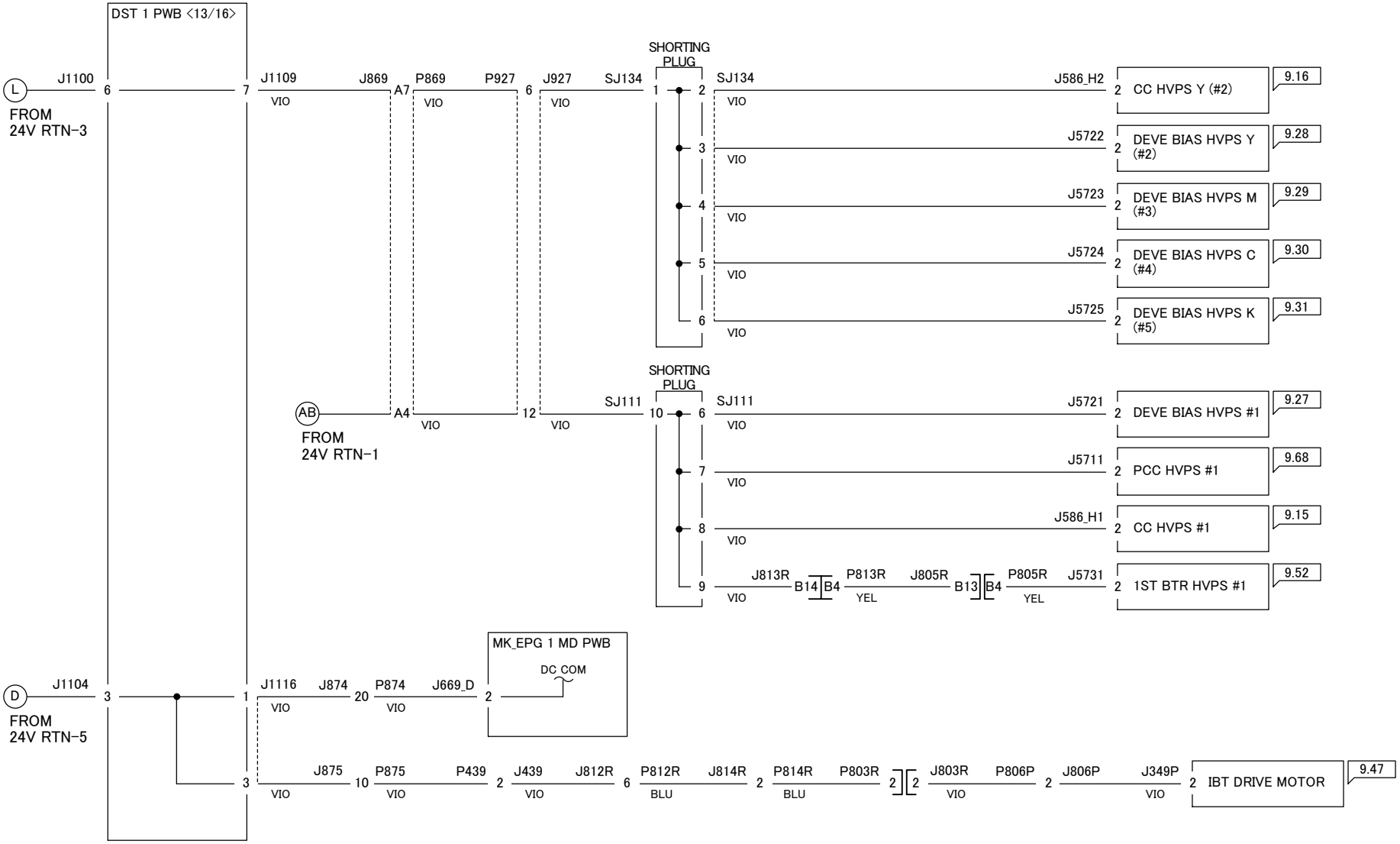

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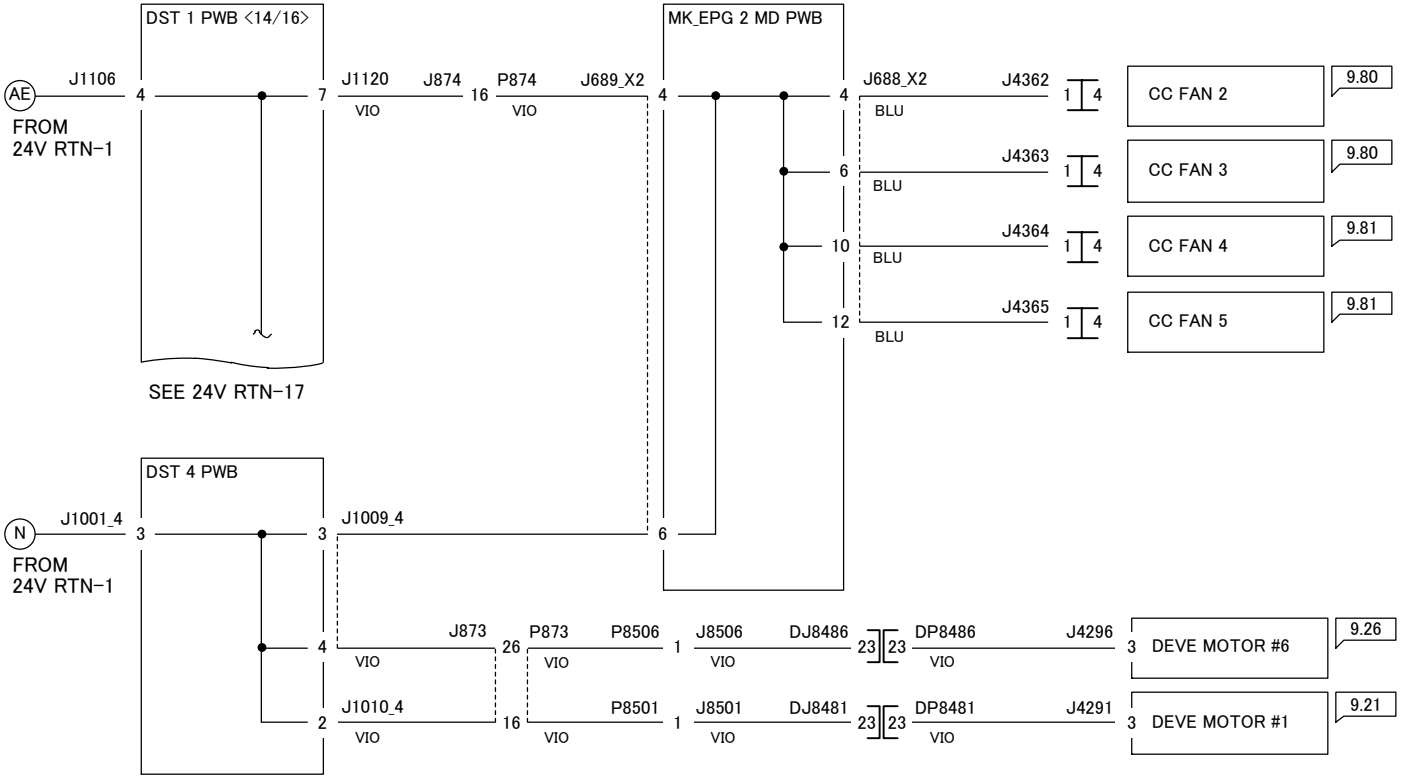
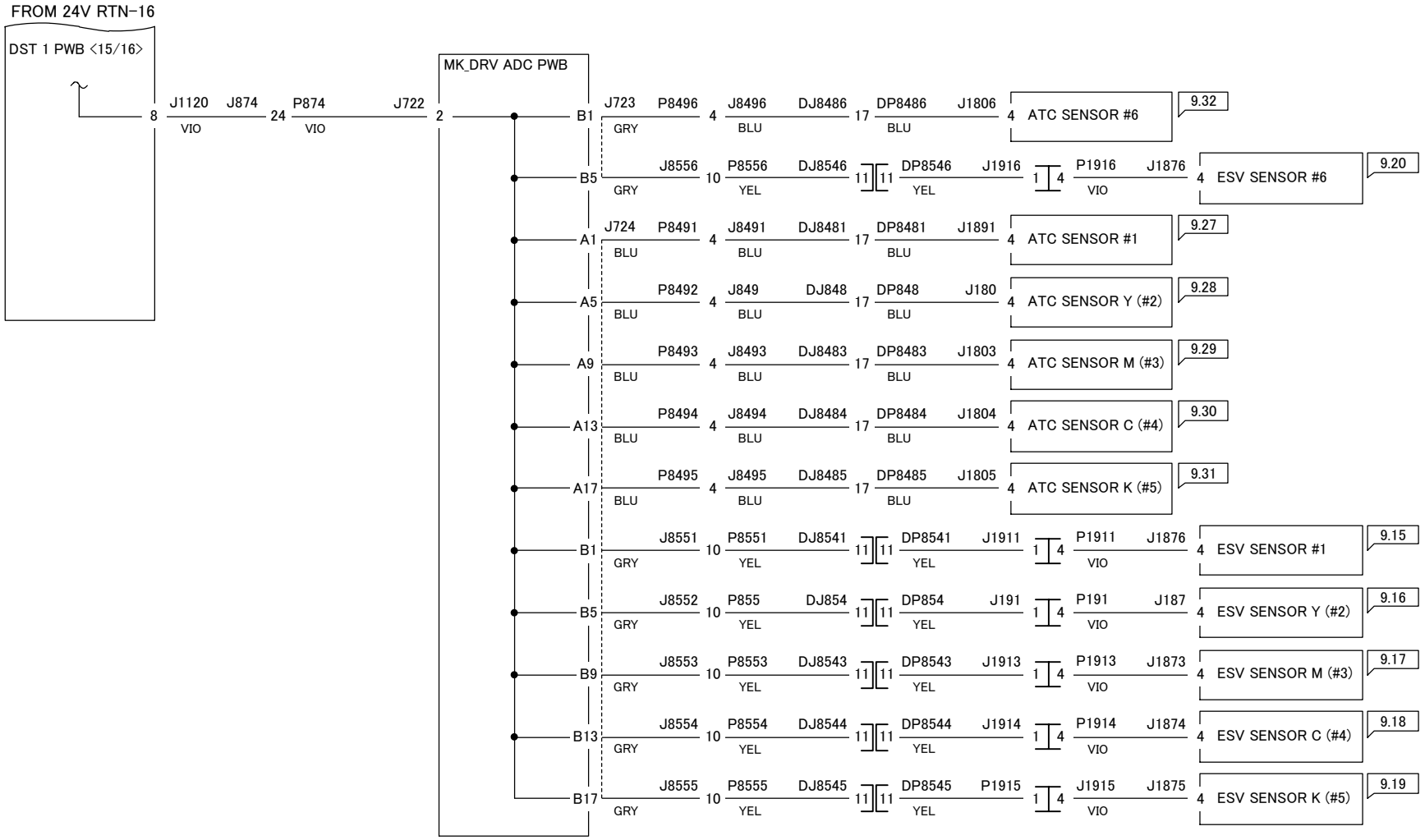


7.2.1.117 DC COM (24V RTN-17)



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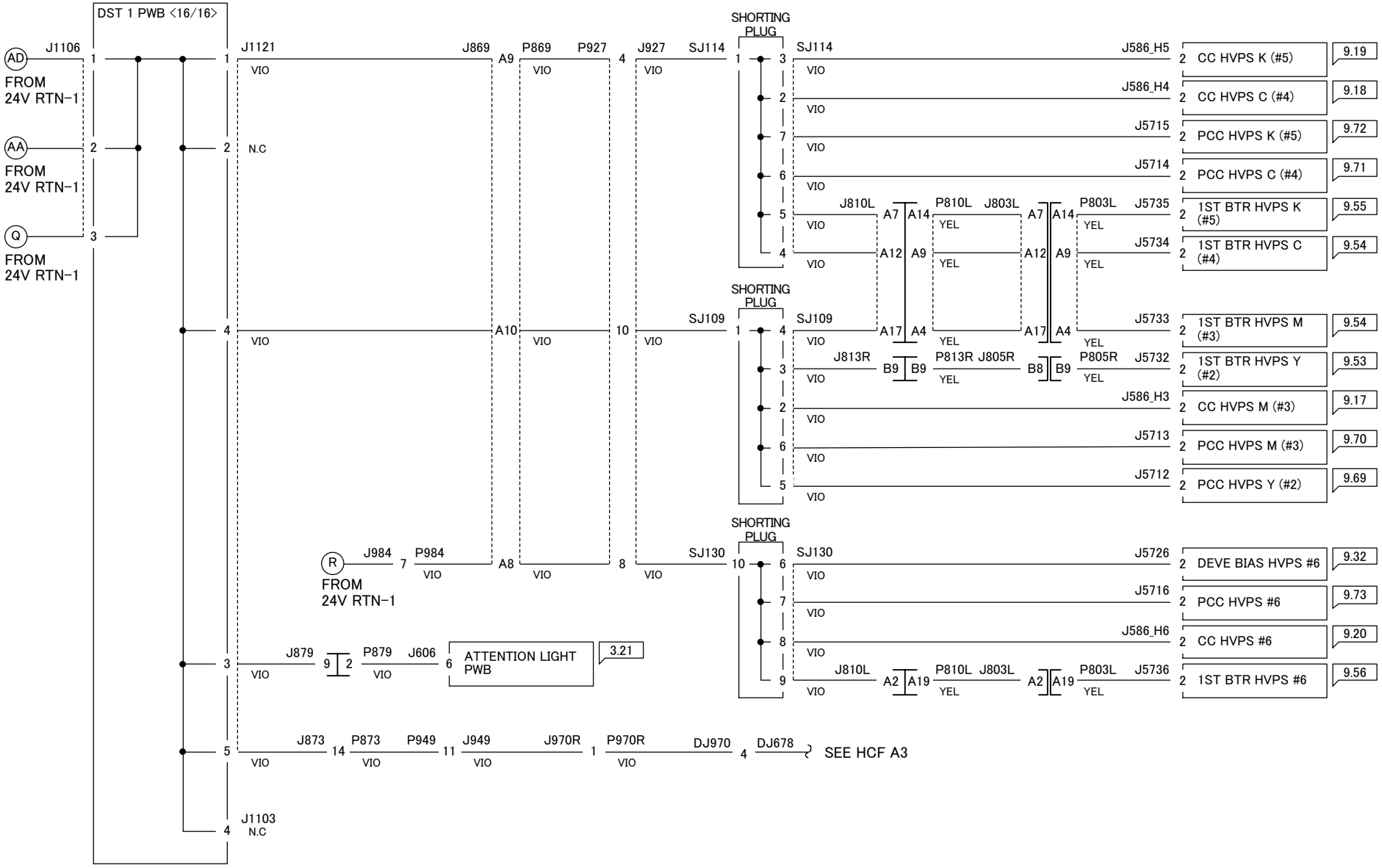

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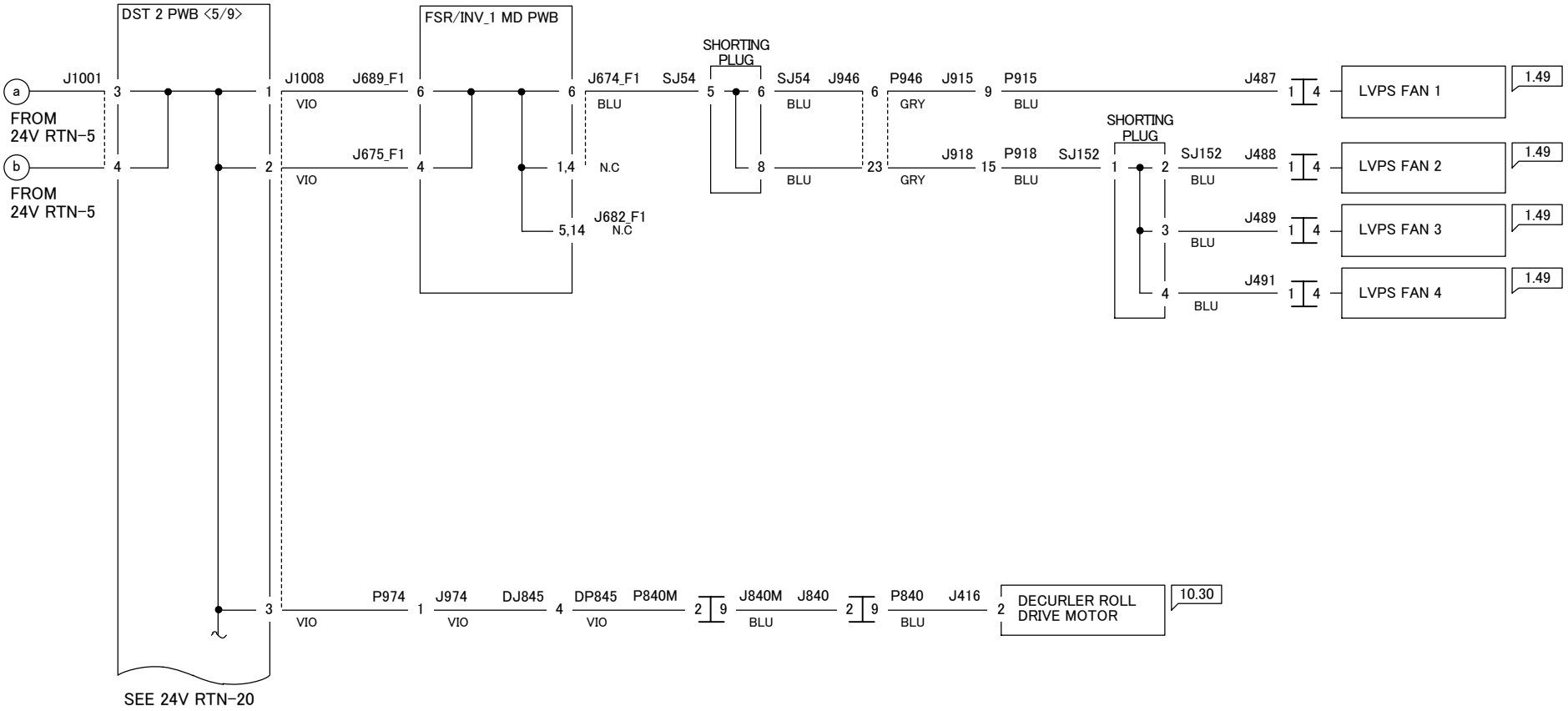

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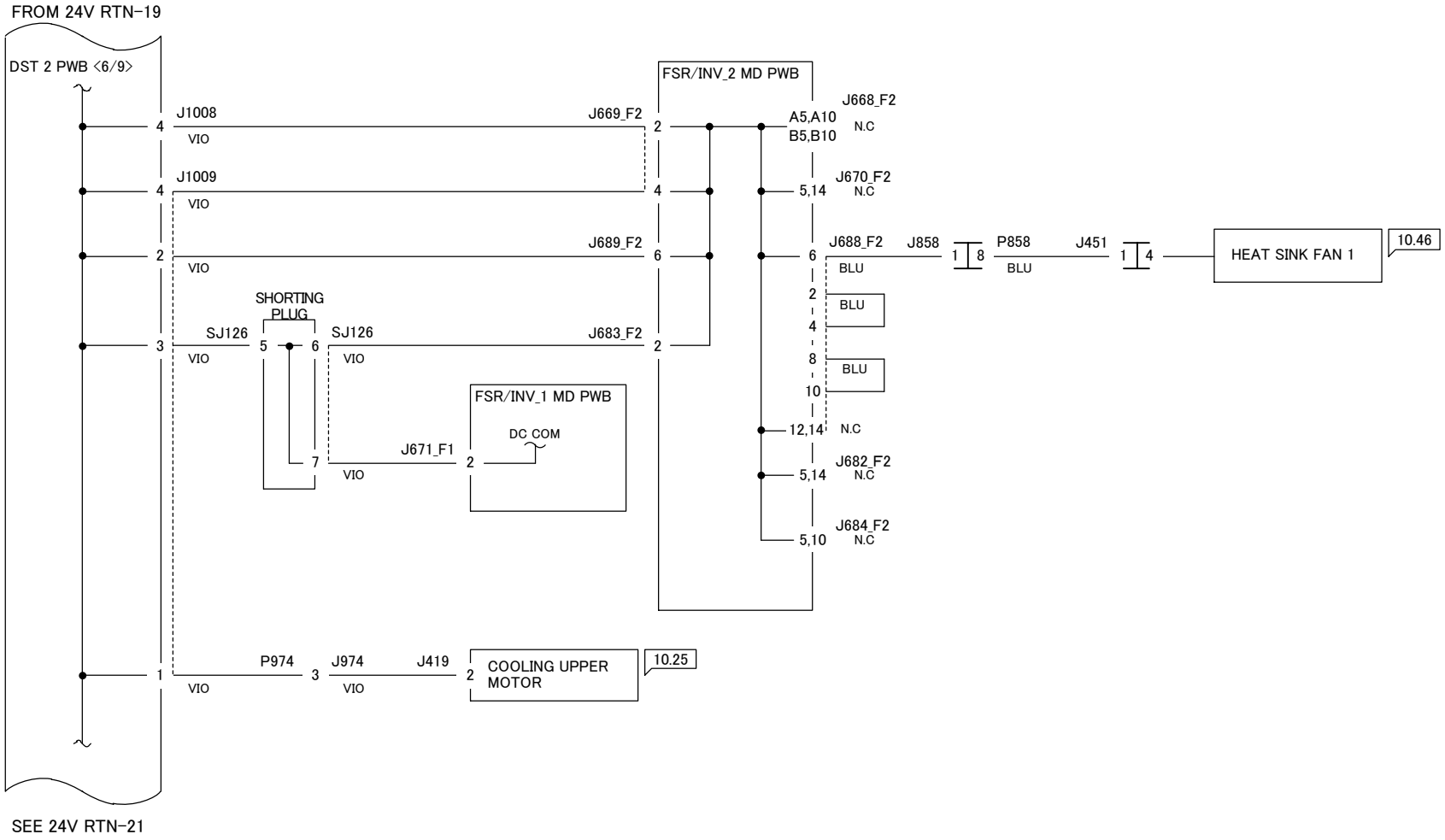

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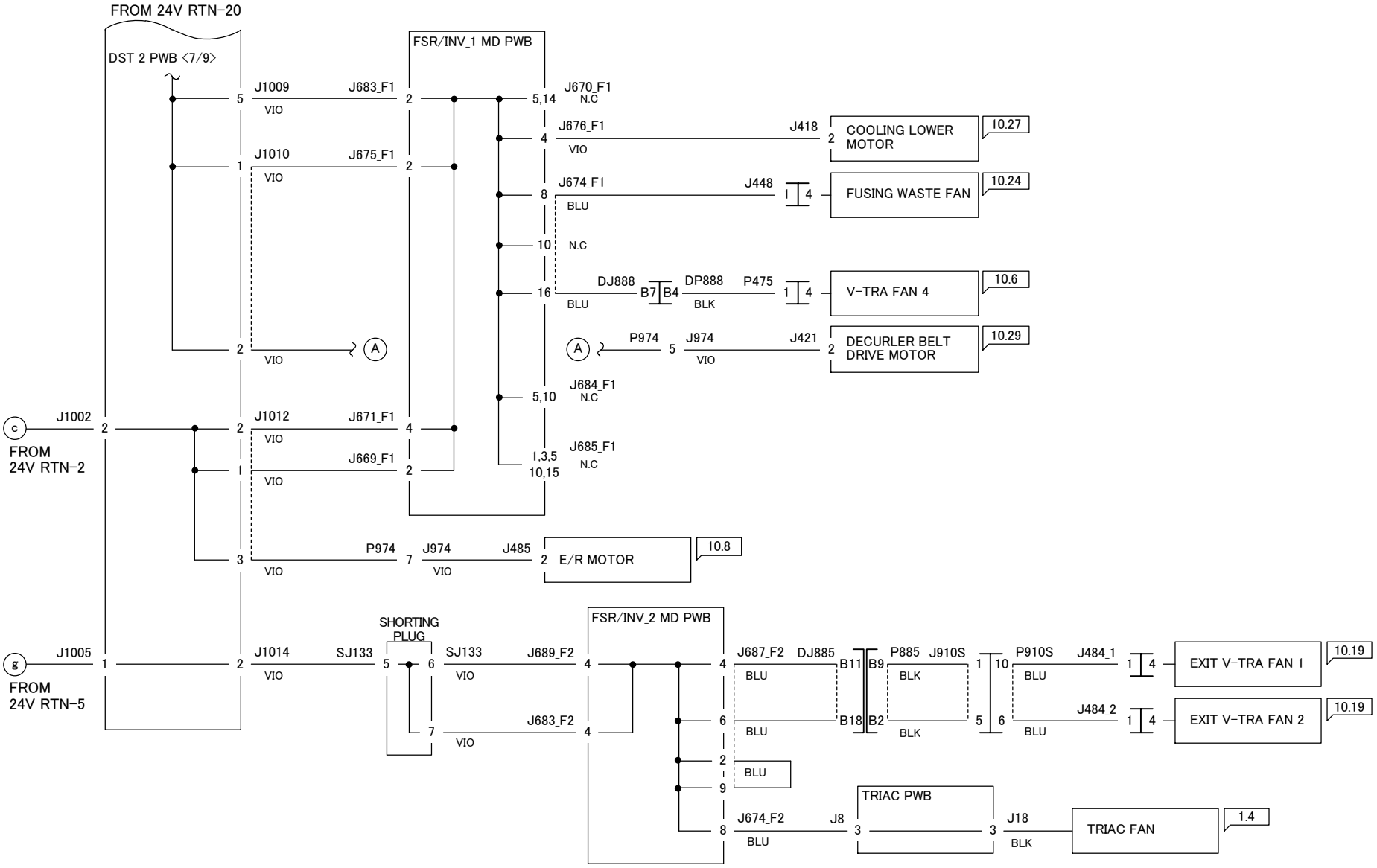

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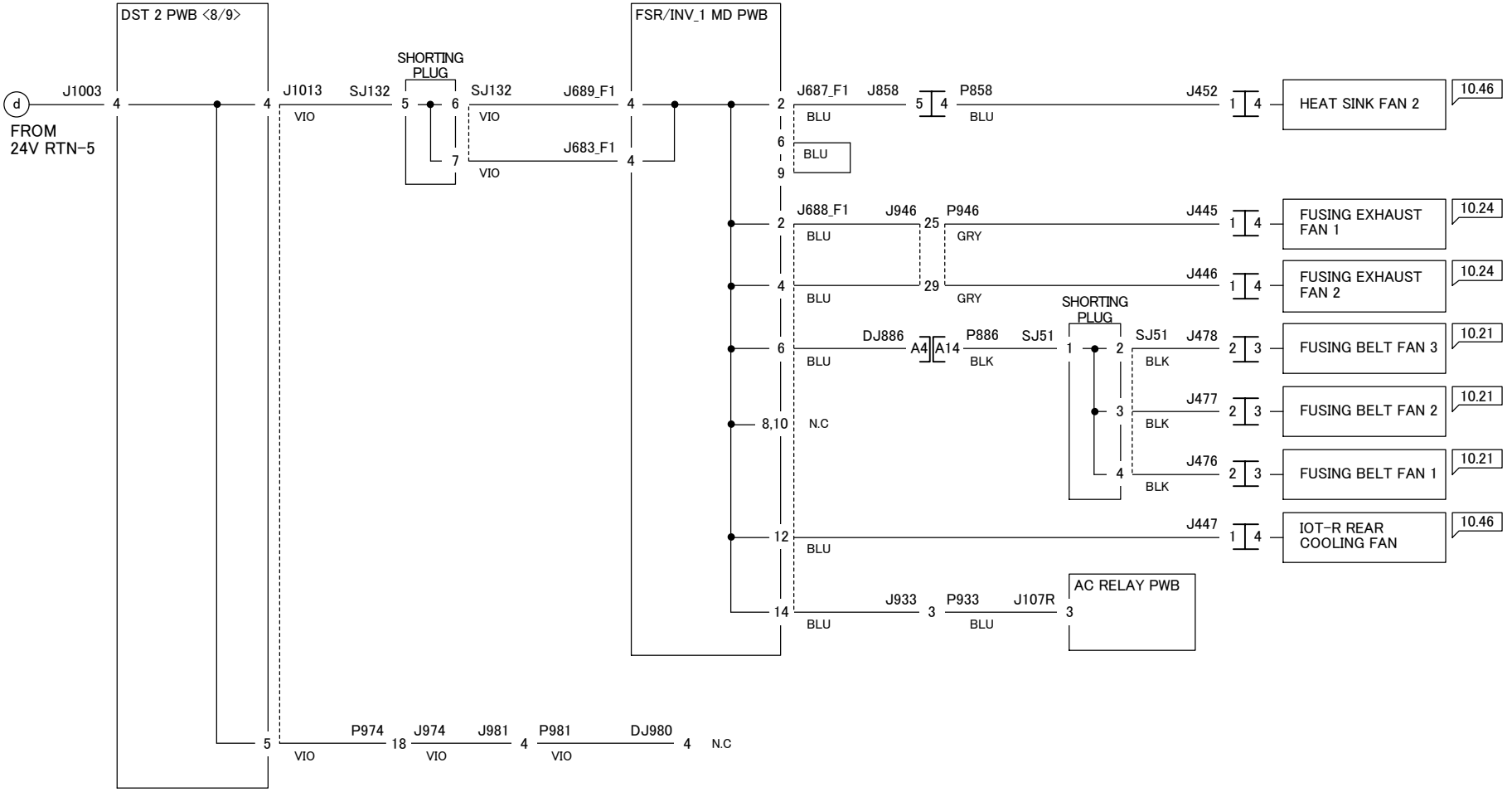

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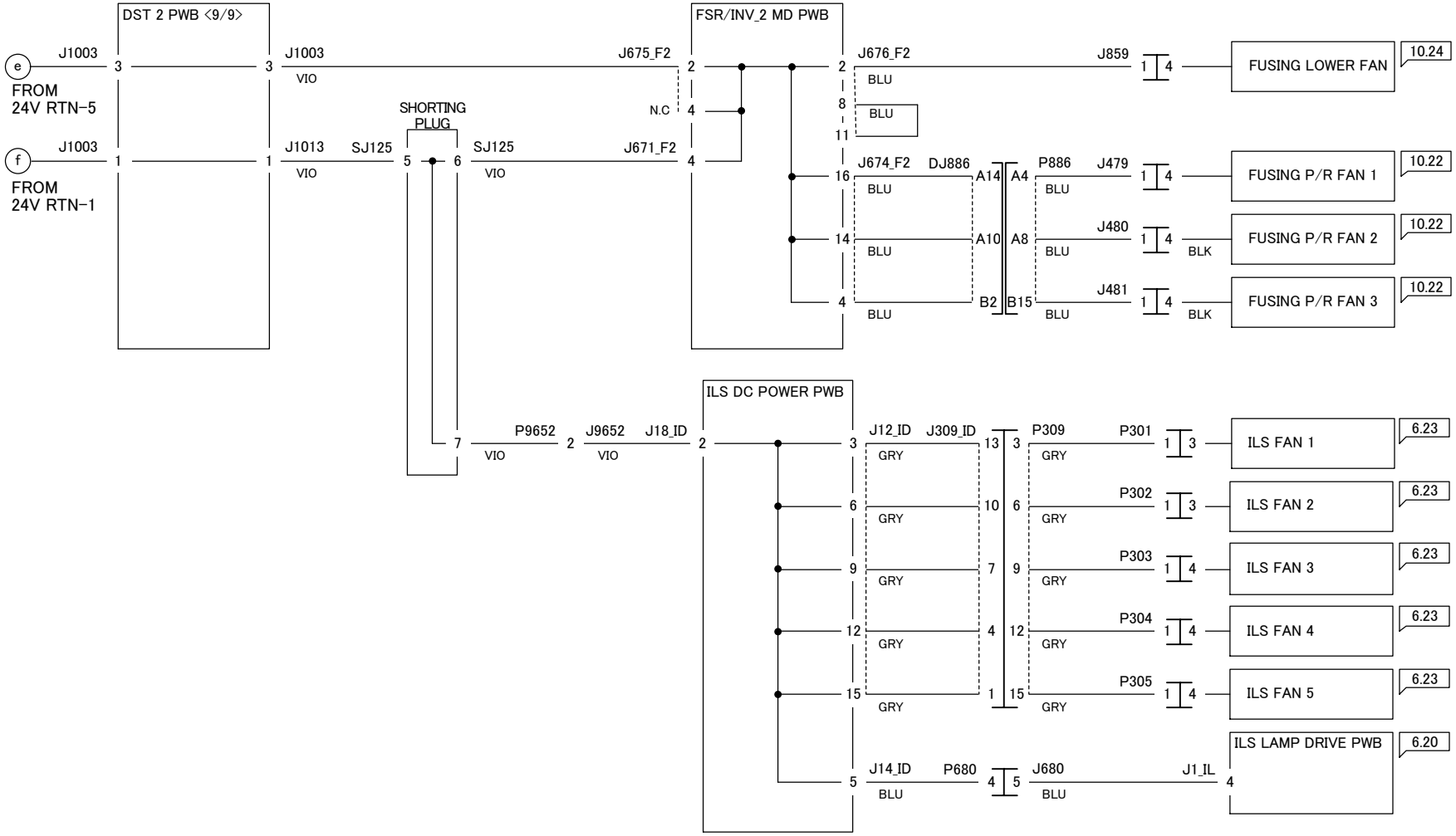

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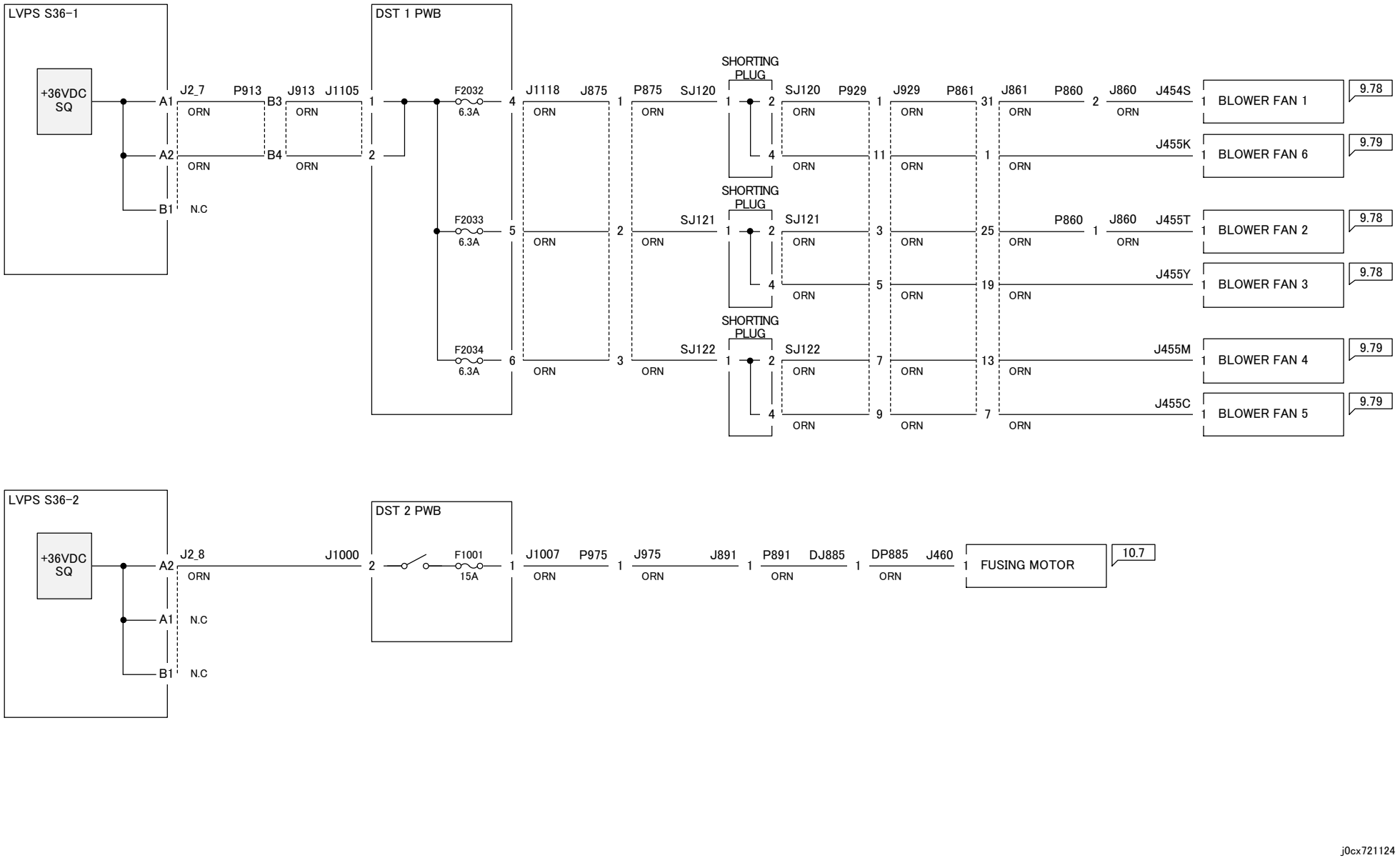
7.2.1.124 +36VDC-1



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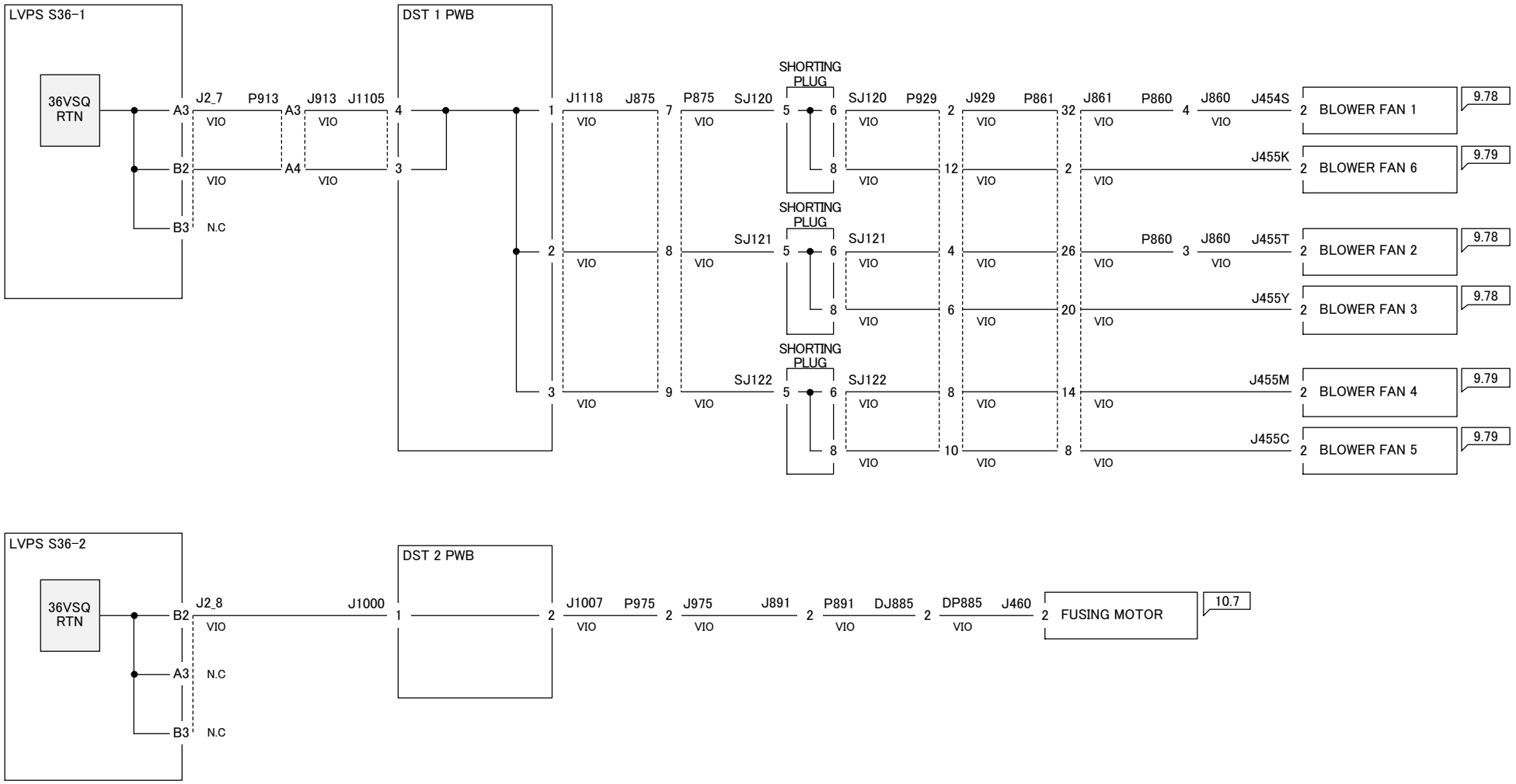

j0cx721125

7.3 BSD

7.3 BSD (Block Schematic Diagram)

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7.3 BSD (Block Schematic Diagram)

7.3.1 Preface

7.3.1.1 How to Use the BSDs

1. Enter the Chain specified in the Troubleshooting chapter.
2. Or enter the appropriate Chain, referring to the Contents.
3. Perform failure analysis in the Chain, using test data and the general procedures in the General chapter.
4. Once you have located the failure, go to the Parts List No. and/or Adjustment No. indicated for reference on the BSD.

Warning Before installing or removing parts, switch off the main power switch and disconnect the power cord from the outlet to avoid possible electric shocks or injuries.

7.3.1.2 Explanation of Symbols

Refers to the note that is usually on the same page.

Refers to test data that is usually on the same page when the voltage value shown on the BSD is different from the measured value.

PL7. 7

Refers to the Parts List No. PL stands for Parts List. 7.7 refers to the Plate No. PL No. indicates that the part is listed on the specified plate. PL No. is shown for all the replaceable parts on the BSDs.

Refers to the adjustment item(s) in the Disassembly, Assembly, and Adjustment chapter. 7.7.1 indicates that the adjustment procedure is described under the 7.7.1 section in the Disassembly, Assembly, and Adjustment chapter.

Indicates a variable register that is adjustable in the field.

Indicates a signal test point.

Indicates where the input to a function originates. The example indicates that the input originates from group function 3 of Chain 1

Indicates where the output from a function goes. The example indicates that the output goes to group function 1 of chain 6.

Indicates that the signal line continues vertically.

Indicates that the signal line continues horizontally.

Indicates that the signal line goes to another zone in the same function. The example refers to zone E3.

Indicates that the signal line goes back to another zone in the same function. The example refers to zone A4

Indicates that the signal line goes to a zone in another sheet. The example refers to zone A2, CH8.5.

Indicates that the signal line goes back to a zone in another sheet. The example refers to zone H4, CH8.5.

Indicates a power line output from Chain 1.

Indicates frame ground.

Indicates a twisted pair of wires.

Indicates that the signal goes from right to left, in the opposite direction to the normal direction.

Indicates a feedback signal.

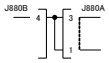
Indicates a mechanical connection to a part.

Indicates that a mechanical drive signal goes in the direction indicated.

Indicates Control Logic.

Indicates a double plug connector.

Indicates a drawer connector.



Indicates a shorting plug connector.

Indicates that the fasten is used for connection.

Indicates that an electrically conductive material such as a leaf spring and a plate is used for connection.

Indicates that the symbol-pointed-to section has been modified to code 1V.

Indicates the symbol-pointed-to section has not been modified to code 1V.

Indicates that the whole figure or the framed illustration has information with 1V installed.

Indicates that the whole figure or the framed illustration has information without 1V installed.

Indicates direction the air flows.

Indicates switch and is also used as Interlock Switch.

Indicates the Cheater type of Interlock Switch.

Indicates the Chip Fuse.

7.3.1.3 Signal Name

Signal name structure

- Input component

PAPER SENSED	(L)	+5VDC
Operation state	Logical value	Voltage with signal (H)

The example indicates that when paper is sensed, this signal level is (L) and that otherwise, the signal level is (H) with the voltage +5VDC.

- Output components

ON	(L)	+24VDC
Operation state	Logical value	Voltage with signal (H)

The example indicates that when the part is ON, the signal level is (L) and that when it is OFF, the signal level is (H) with the voltage +24VDC.

7.3.1.4 DC Voltage

A measurement of DC voltage is made between the particular test point and the frame unless otherwise specified by note and test data. The measured DC voltage is in the range below:

LVPS	Voltage	Level	Range
DP2R	+5VDC	(H)	+4.90～+5.30VDC
	+12VDC	(H)	+11.40～+12.60VDC
H1U	+5VDC	(H)	+4.95～+5.33VDC
	+5VDC SQ	(H)	+4.85～+5.35VDC
	+12VDC	(H)	+11.52～+12.48VDC
	+12VDC SQ	(H)	+11.40～+12.60VDC
	+24VDC SQ	(H)	+23.77～+25.62VDC
S24-1～6	+24VDC	(H)	+23.38～+25.62VDC
S36-1/2	+36VDC	(H)	+34.83～+38.17VDC

7.3.1.5 Other Descriptions

DC330 Input Component Voltage Level

The voltage levels (H/L) shown on the BSDs are the levels that are measured by the tester. Some of them are therefore different from H/L displayed on the UI panel.

1. Wiring Color

Wires are distinguished by color in part of the BSDs for this model. The colors of wires are shown below the signal lines in their respective abbreviations listed below:

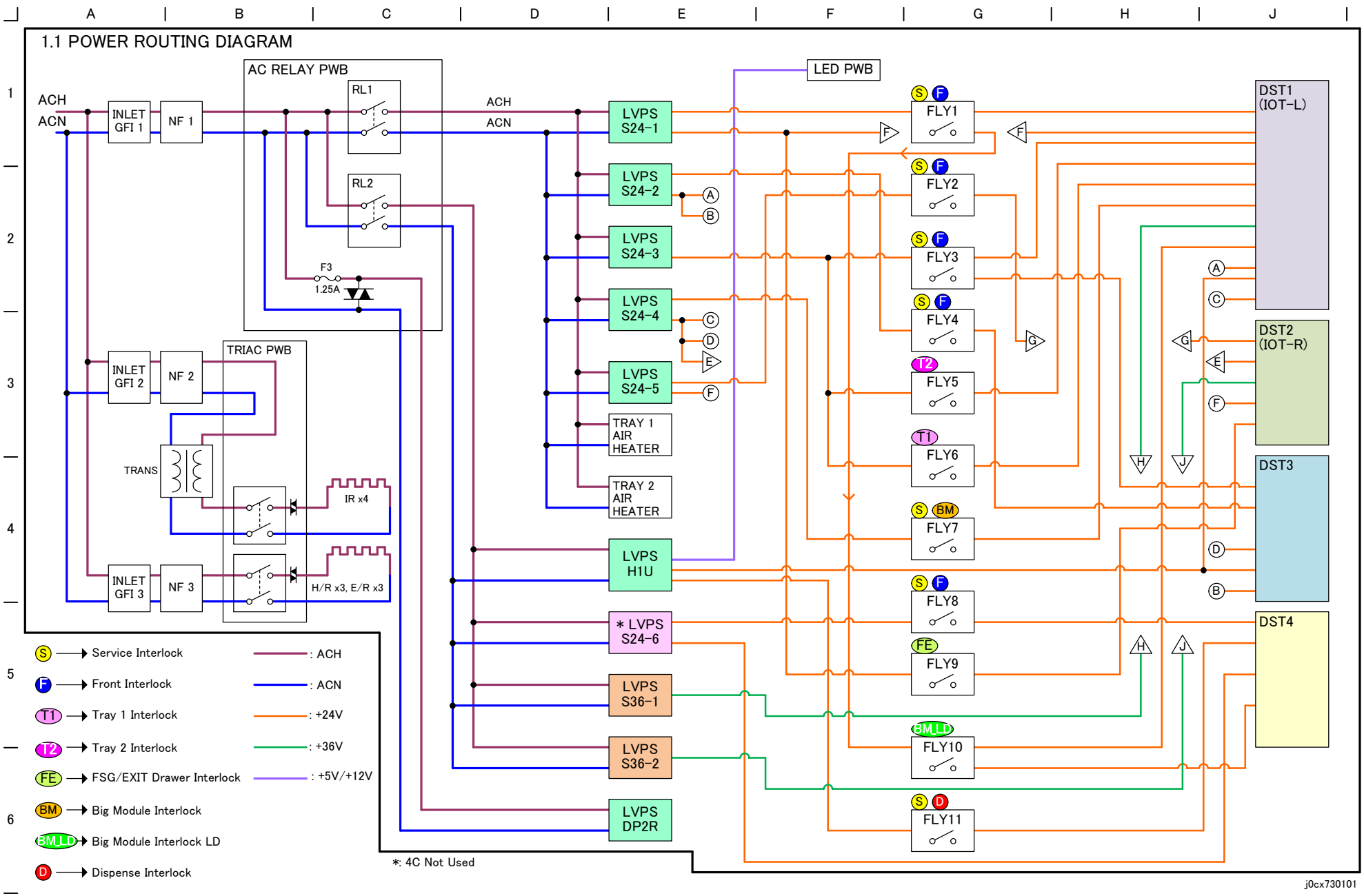
Abbreviation	Color
BRN	BROWN
RED	RED
ORN	ORANGE
YEL	YELLOW
GRN	GREEN
BLU	BLUE
VIO	VIOLET
GRY	GRAY
WHT	WHITE
BLK	BLACK
GRN/YEL	GREEN/YELLOW
PNK	PINK
SKY	SKY

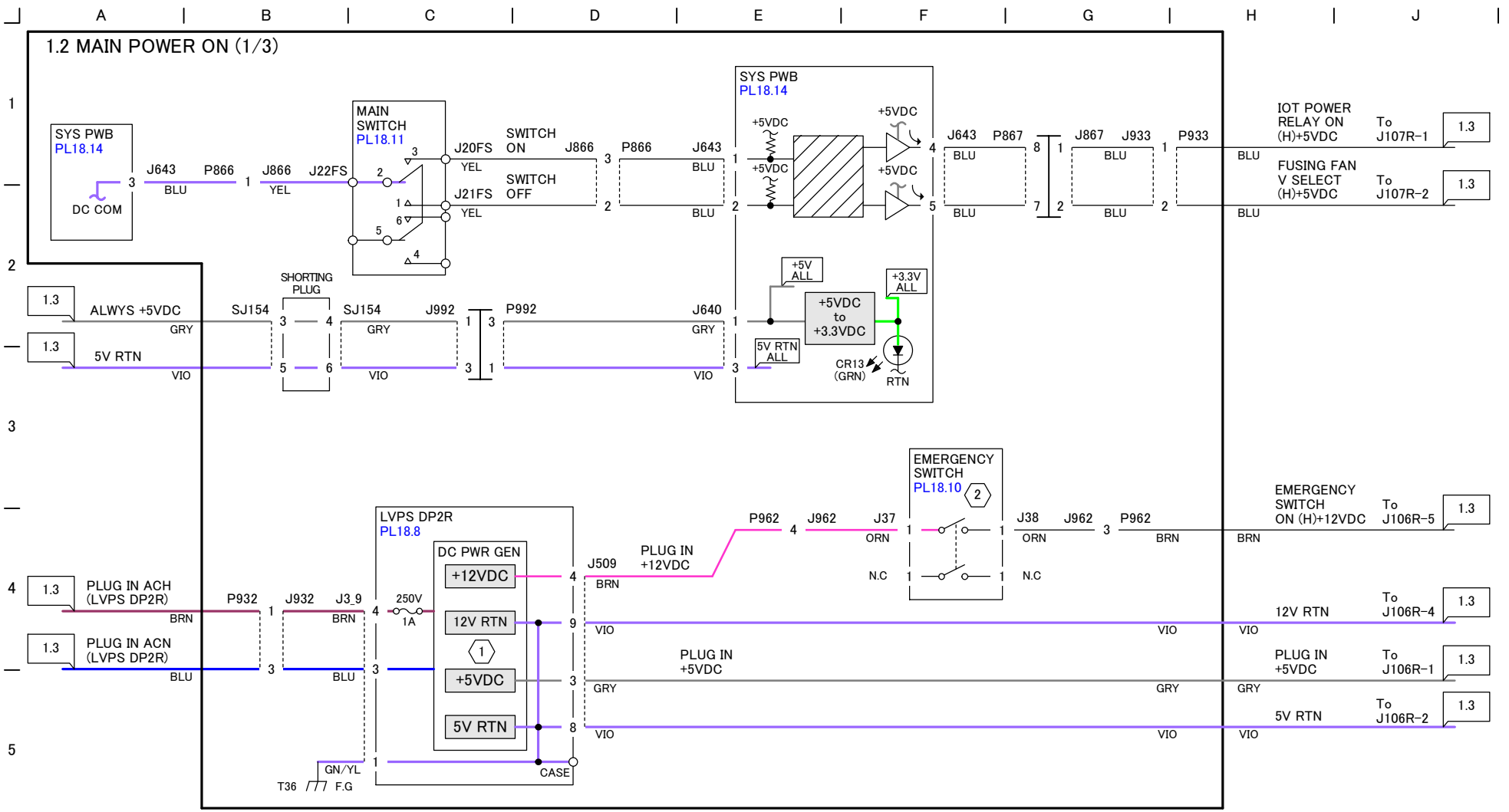
2. On this model, the color of power supply line depends on the voltage.
The relations between voltages and wire colors are as follows:
The colors of actual wires may sometimes differ from the colors of power supply lines on BSD.

Voltage	Color
ACH	BROWN
ACN	BLUE
+3.3VDC	YELLOW GREEN
+5VDC	GRAY
+24VDC	ORANGE
DC COM	VIOLET

Figures on the BSDs

The grayed-out portion of the figure shows the path from Motor or Solenoid to parts to drive.


1.1 POWER ROUTING DIAGRAM
AC RELAY PWB
RL1
RL2
F3
1.25A
ACH
ACN
INLET GFI 1
NF 1
INLET GFI 2
NF 2
INLET GFI 3
NF 3
TRIAC PWB
TRANS
IR x4
H/R x3, E/R x3
LED PWB
LVPS S24-1
LVPS S24-2
LVPS S24-3
LVPS S24-4
LVPS S24-5
TRAY 1 AIR HEATER
TRAY 2 AIR HEATER
LVPS H1U
* LVPS S24-6
LVPS S36-1
LVPS S36-2
LVPS DP2R
FLY1
FLY2
FLY3
FLY4
FLY5
FLY6
FLY7
FLY8
FLY9
FLY10
FLY11
DST1 (IOT-L)
DST2 (IOT-R)
DST3
DST4
S → Service Interlock
F → Front Interlock
T1 → Tray 1 Interlock
T2 → Tray 2 Interlock
FE → FSG/EXIT Drawer Interlock
BM → Big Module Interlock
BM_LD → Big Module Interlock LD
D → Dispense Interlock
: ACH
: ACN
: +24V
: +36V
: +5V/+12V
*: 4C Not Used
j0cx730101



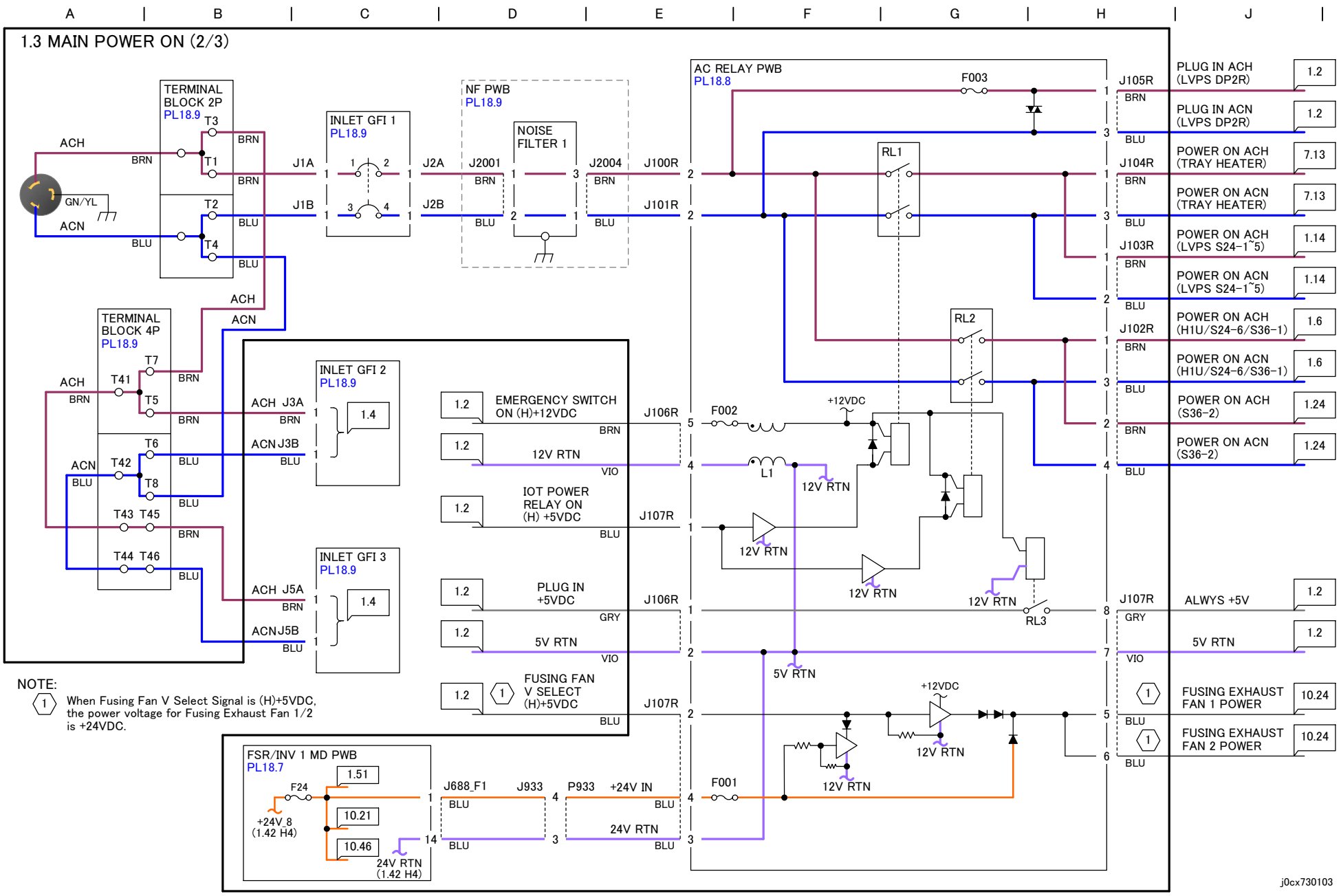
NOTE:

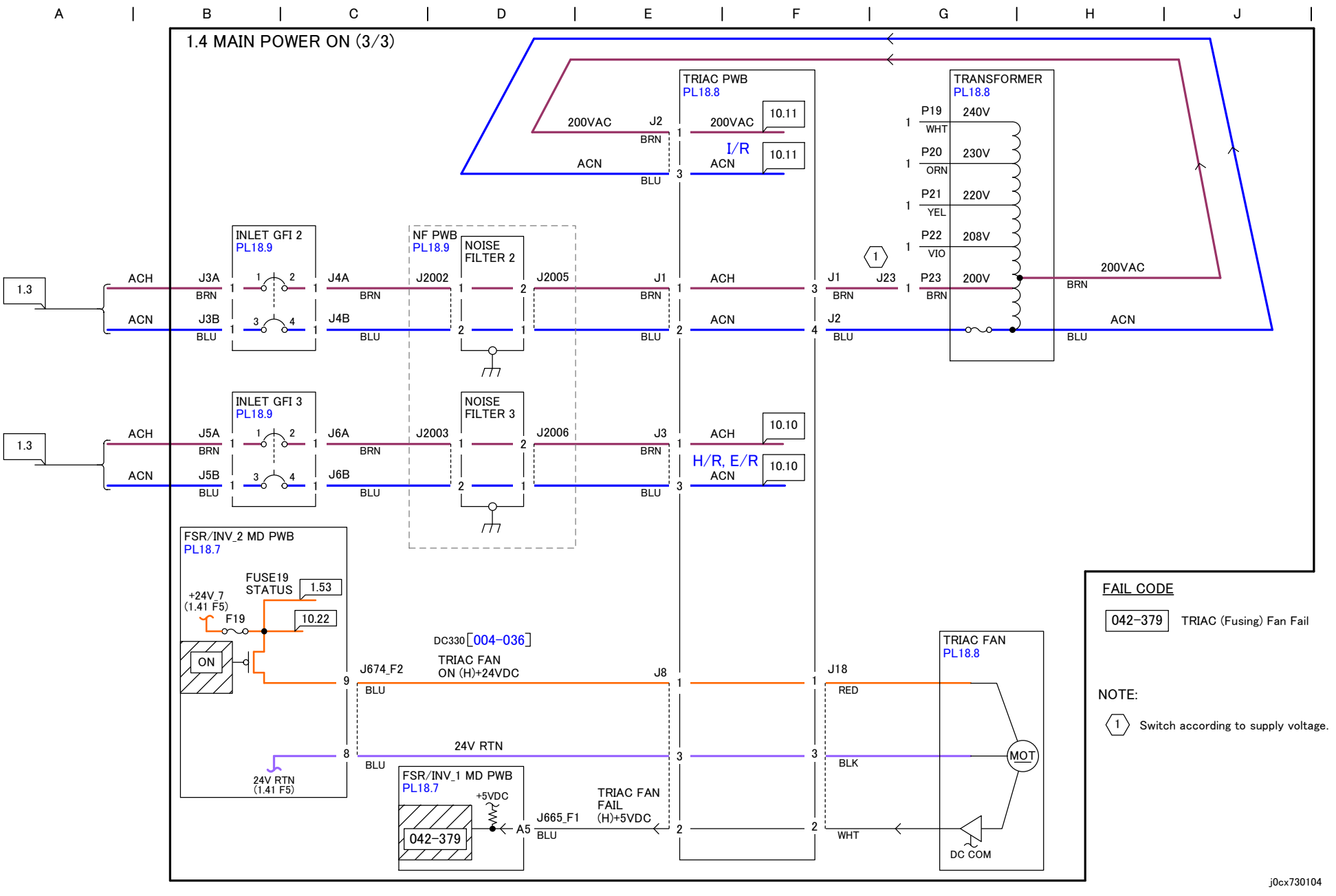
(1) ・ Short Protection (Over-current Protection)
If +5VDC output is shorted, it is stopped alone. If +12VDC output is shorted, all the outputs are stopped.
The output(s) is/are automatically restored 10 sec. after repair of the short circuit.

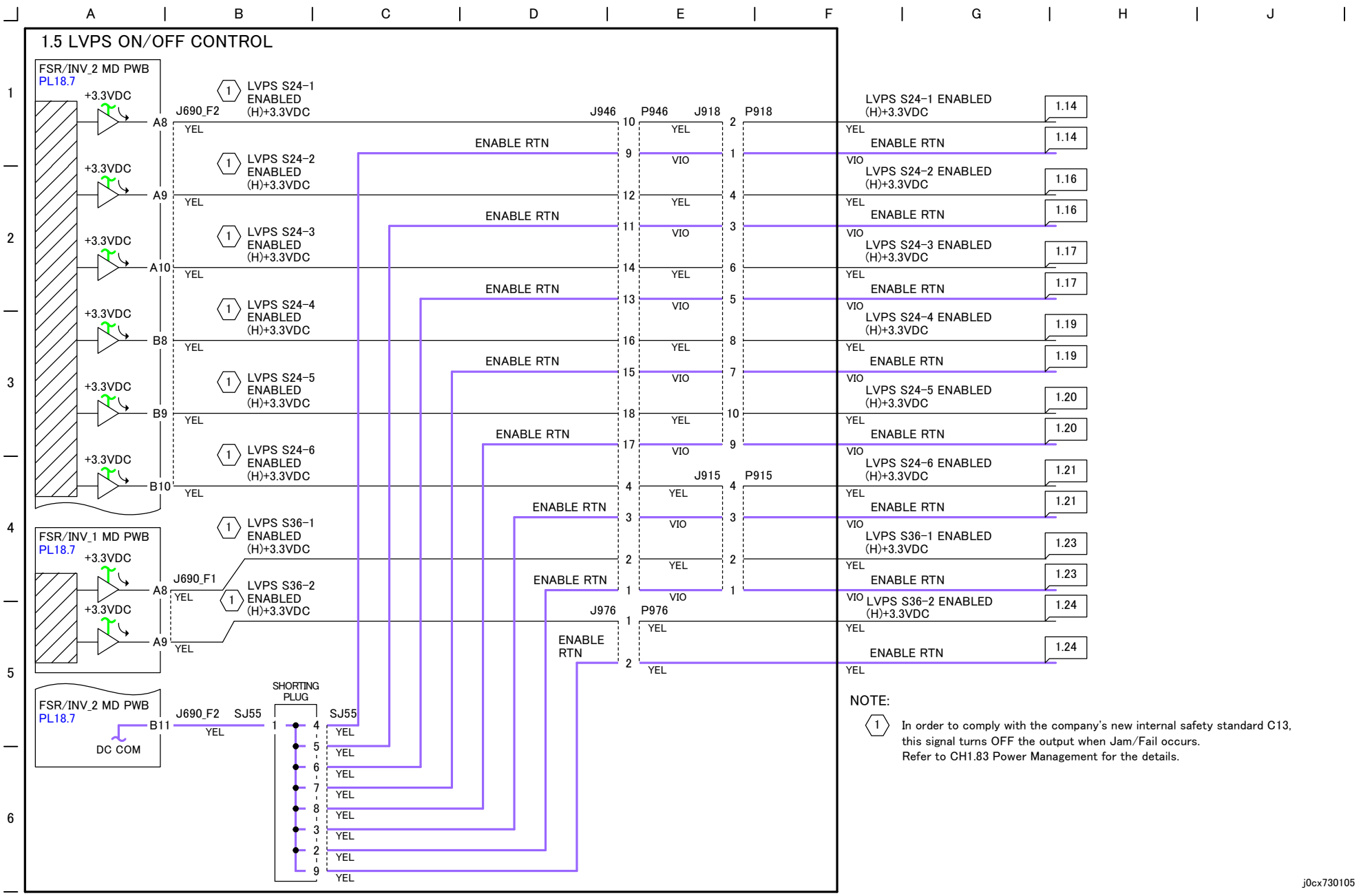
・ Over-voltage Protection
If +5VDC output reaches 6 to 8VDC or +12VDC reaches 14 to 16VDC, all the outputs are stopped. To restore them, power off, allow 3 min., then power on.

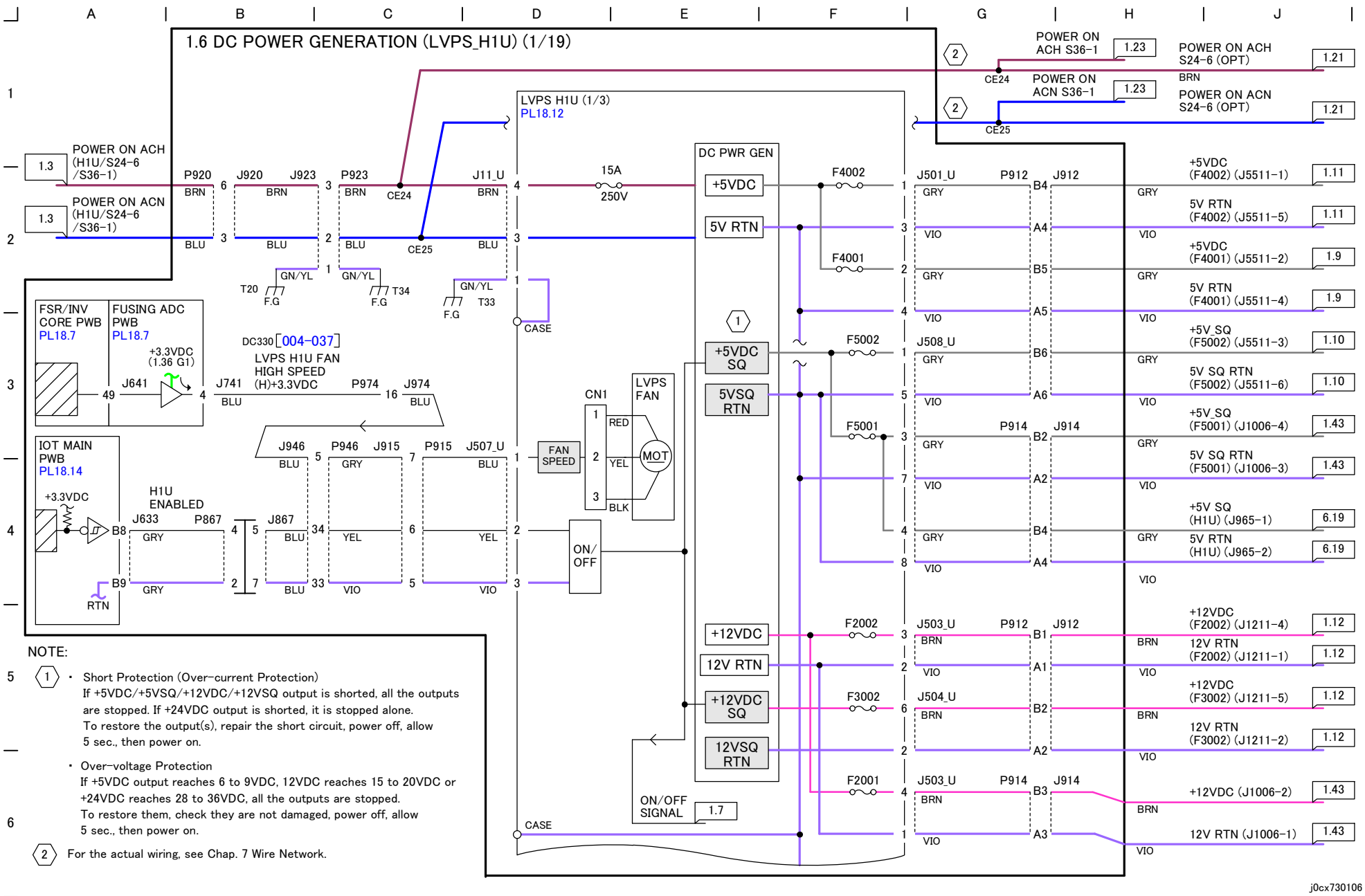
(2) Red Switch

j0cx730102


1.3 MAIN POWER ON (2/3)
TERMINAL BLOCK 2P PL18.9
TERMINAL BLOCK 4P PL18.9
INLET GFI 1 PL18.9
INLET GFI 2 PL18.9
INLET GFI 3 PL18.9
NF PWB PL18.9
NOISE FILTER 1
AC RELAY PWB PL18.8
FSR/INV 1 MD PWB PL18.7
ACH
ACN
GN/YL
BRN
BLU
T1
T2
T3
T4
T5
T6
T7
T8
T41
T42
T43 T45
T44 T46
J1A
J1B
J2A
J2B
J2001
J2004
J100R
J101R
J105R
J104R
J103R
J102R
J106R
J107R
J933
P933
J688_F1
F001
F002
F003
F24
RL1
RL2
RL3
L1
+12VDC
12V RTN
5V RTN
24V RTN
+24V IN
+24V_8 (1.42 H4)
24V RTN (1.42 H4)
ACH J3A
ACN J3B
ACH J5A
ACN J5B
EMERGENCY SWITCH ON (H)+12VDC
IOT POWER RELAY ON (H) +5VDC
PLUG IN +5VDC
FUSING FAN V SELECT (H)+5VDC
PLUG IN ACH (LVPS DP2R)
PLUG IN ACN (LVPS DP2R)
POWER ON ACH (TRAY HEATER)
POWER ON ACN (TRAY HEATER)
POWER ON ACH (LVPS S24-1~5)
POWER ON ACN (LVPS S24-1~5)
POWER ON ACH (H1U/S24-6/S36-1)
POWER ON ACN (H1U/S24-6/S36-1)
POWER ON ACH (S36-2)
POWER ON ACN (S36-2)
ALWYS +5V
FUSING EXHAUST FAN 1 POWER
FUSING EXHAUST FAN 2 POWER
NOTE:
1 When Fusing Fan V Select Signal is (H)+5VDC, the power voltage for Fusing Exhaust Fan 1/2 is +24VDC.
j0cx730103


1.4 MAIN POWER ON (3/3)
TRIAC PWB
PL18.8
TRANSFORMER
PL18.8
200VAC
J2
BRN
ACN
BLU
200VAC
10.11
I/R
ACN
10.11
P19
240V
WHT
P20
230V
ORN
P21
220V
YEL
P22
208V
VIO
P23
200V
BRN
200VAC
BRN
ACN
BLU
INLET GFI 2
PL18.9
NF PWB
PL18.9
NOISE FILTER 2
1.3
ACH
J3A
J4A
J2002
J2005
J1
ACH
J1
J23
ACN
J3B
J4B
ACN
J2
INLET GFI 3
PL18.9
NOISE FILTER 3
J5A
J6A
J2003
J2006
J3
ACH
10.10
H/R, E/R
ACN
10.10
J5B
J6B
FSR/INV_2 MD PWB
PL18.7
FUSE19
STATUS
1.53
+24V_7
(1.41 F5)
F19
10.22
ON
DC330 [004-036]
J674_F2
TRIAC FAN
ON (H)+24VDC
J8
J18
TRIAC FAN
PL18.8
24V RTN
24V RTN
(1.41 F5)
FSR/INV_1 MD PWB
PL18.7
+5VDC
042-379
A5
J665_F1
TRIAC FAN
FAIL
(H)+5VDC
MOT
DC COM
FAIL CODE
042-379
TRIAC (Fusing) Fan Fail
NOTE:
1
Switch according to supply voltage.
j0cx730104


1.5 LVPS ON/OFF CONTROL
FSR/INV_2 MD PWB
PL18.7
+3.3VDC
A8
A9
A10
B8
B9
B10
J690_F2
YEL
LVPS S24-1 ENABLED (H)+3.3VDC
LVPS S24-2 ENABLED (H)+3.3VDC
LVPS S24-3 ENABLED (H)+3.3VDC
LVPS S24-4 ENABLED (H)+3.3VDC
LVPS S24-5 ENABLED (H)+3.3VDC
LVPS S24-6 ENABLED (H)+3.3VDC
FSR/INV_1 MD PWB
PL18.7
J690_F1
LVPS S36-1 ENABLED (H)+3.3VDC
LVPS S36-2 ENABLED (H)+3.3VDC
FSR/INV_2 MD PWB
PL18.7
B11
DC COM
SHORTING PLUG
SJ55
J946
P946
J918
P918
J915
P915
J976
P976
ENABLE RTN
VIO
LVPS S24-1 ENABLED (H)+3.3VDC
LVPS S24-2 ENABLED (H)+3.3VDC
LVPS S24-3 ENABLED (H)+3.3VDC
LVPS S24-4 ENABLED (H)+3.3VDC
LVPS S24-5 ENABLED (H)+3.3VDC
LVPS S24-6 ENABLED (H)+3.3VDC
LVPS S36-1 ENABLED (H)+3.3VDC
LVPS S36-2 ENABLED (H)+3.3VDC
1.14
1.16
1.17
1.19
1.20
1.21
1.23
1.24
NOTE:
1 In order to comply with the company's new internal safety standard C13, this signal turns OFF the output when Jam/Fail occurs. Refer to CH1.83 Power Management for the details.
j0cx730105

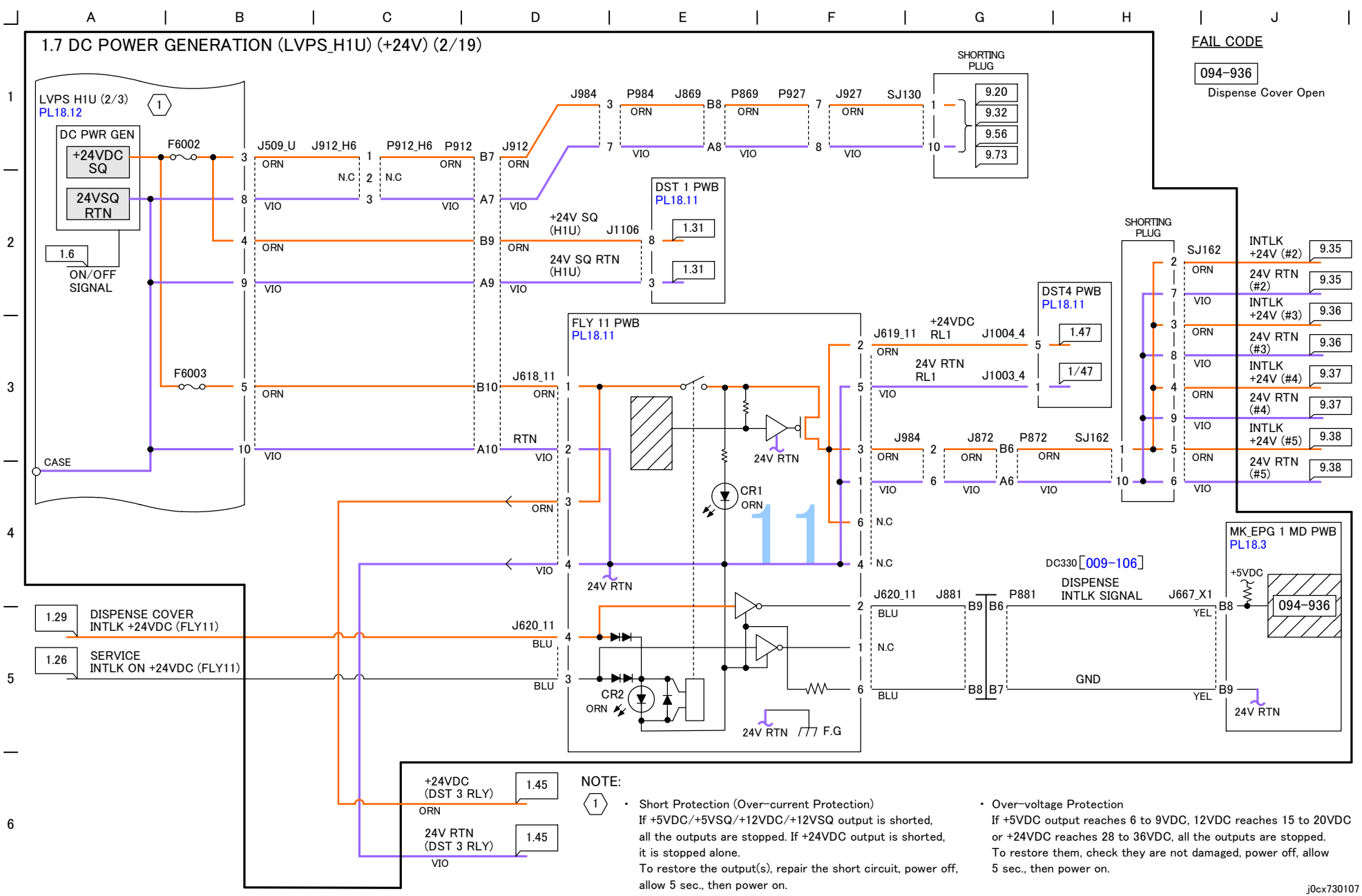


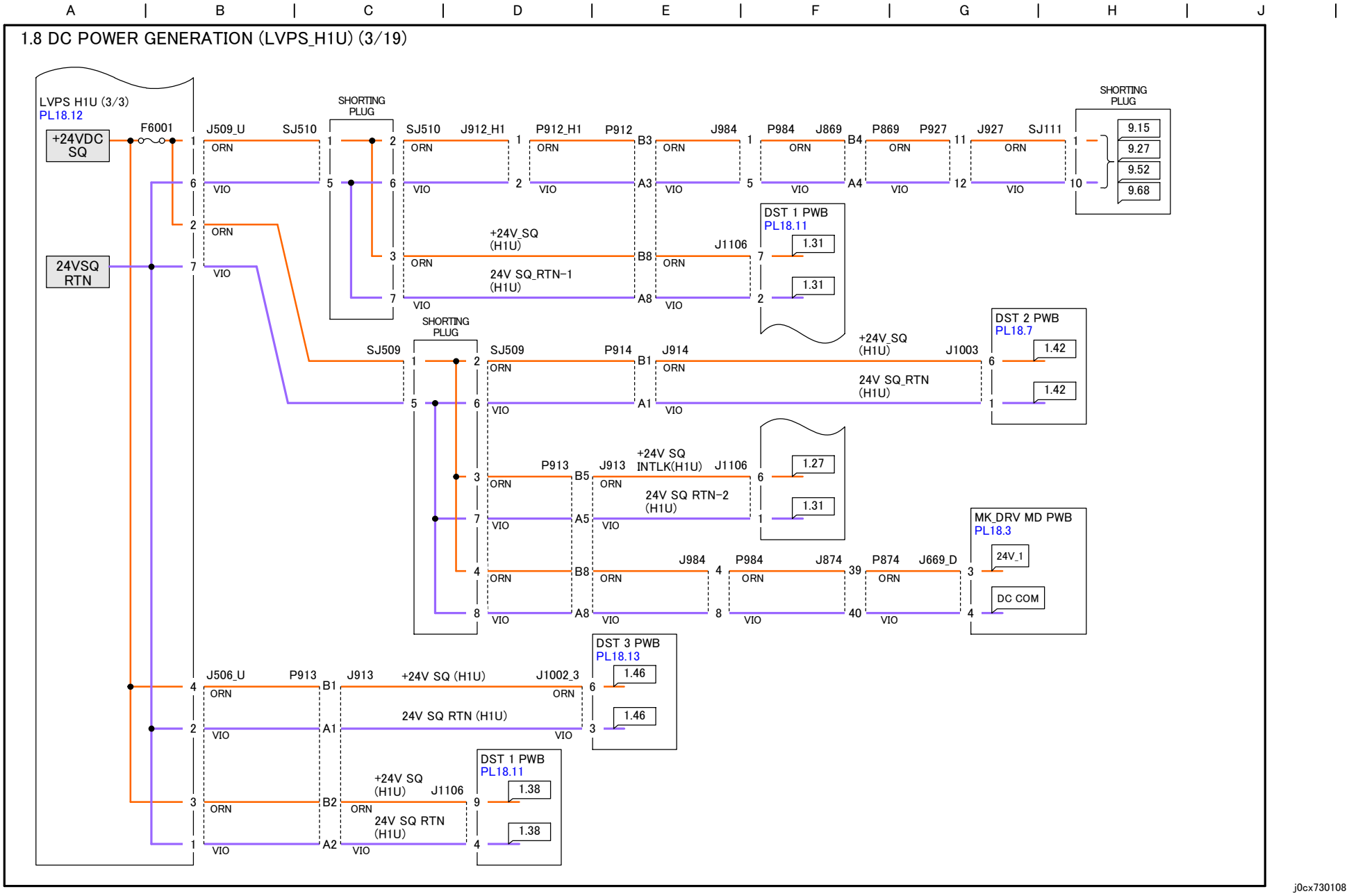
NOTE:

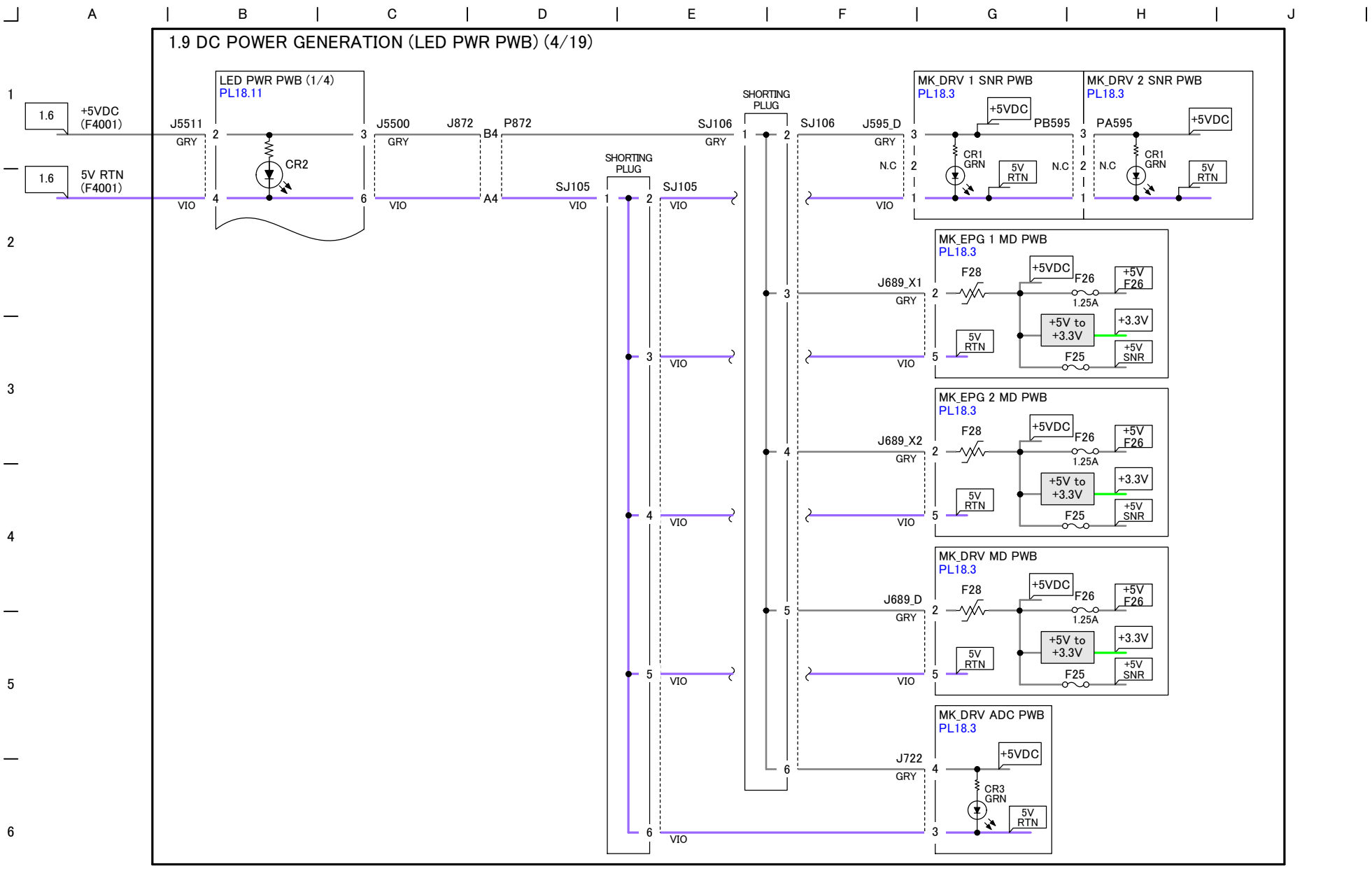
(1) • Short Protection (Over-current Protection)
If +5VDC/+5VSQ/+12VDC/+12VSQ output is shorted, all the outputs are stopped. If +24VDC output is shorted, it is stopped alone.
To restore the output(s), repair the short circuit, power off, allow 5 sec., then power on.

• Over-voltage Protection
If +5VDC output reaches 6 to 9VDC, 12VDC reaches 15 to 20VDC or +24VDC reaches 28 to 36VDC, all the outputs are stopped.
To restore them, check they are not damaged, power off, allow 5 sec., then power on.

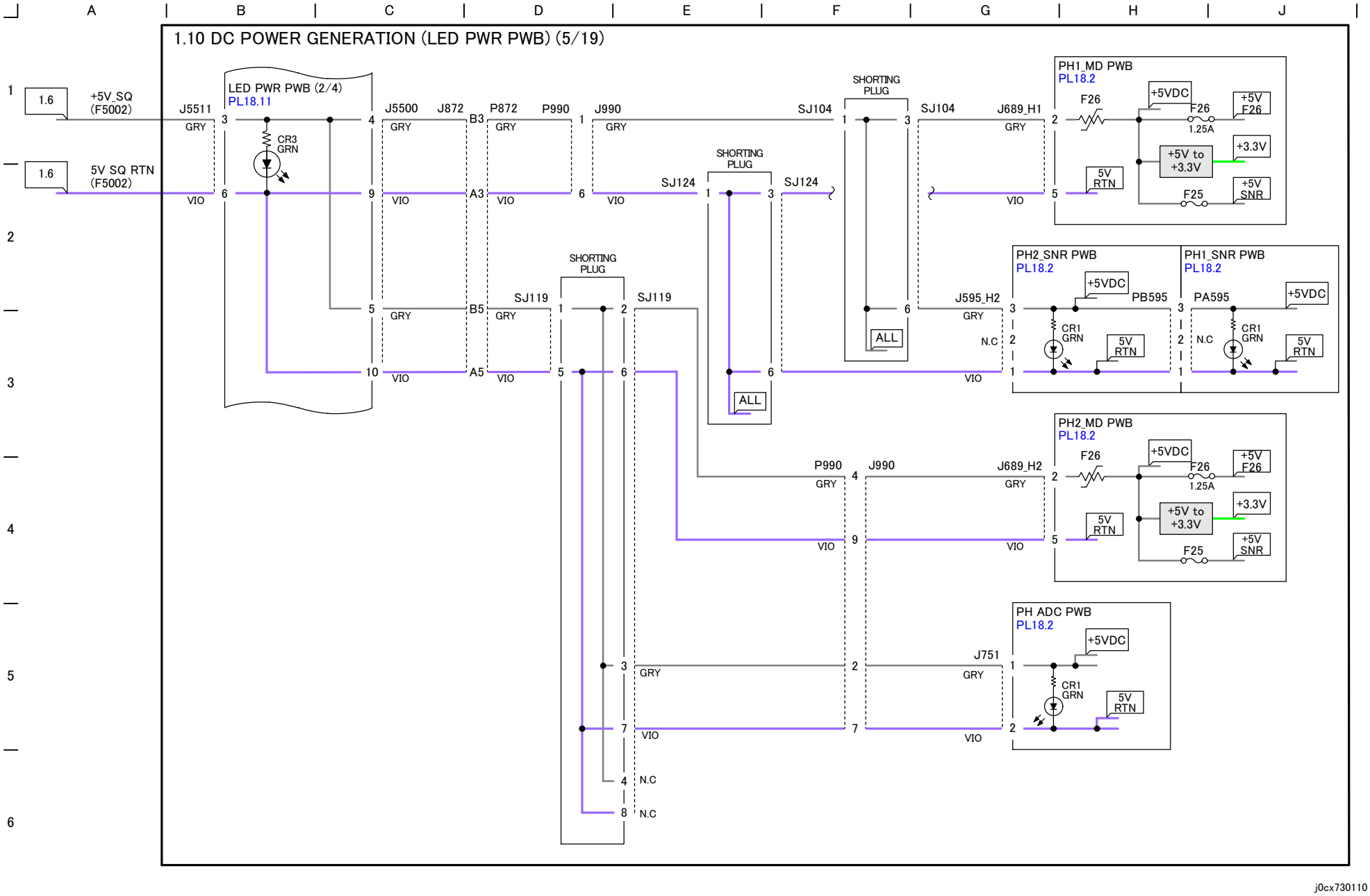
(2) For the actual wiring, see Chap. 7 Wire Network.

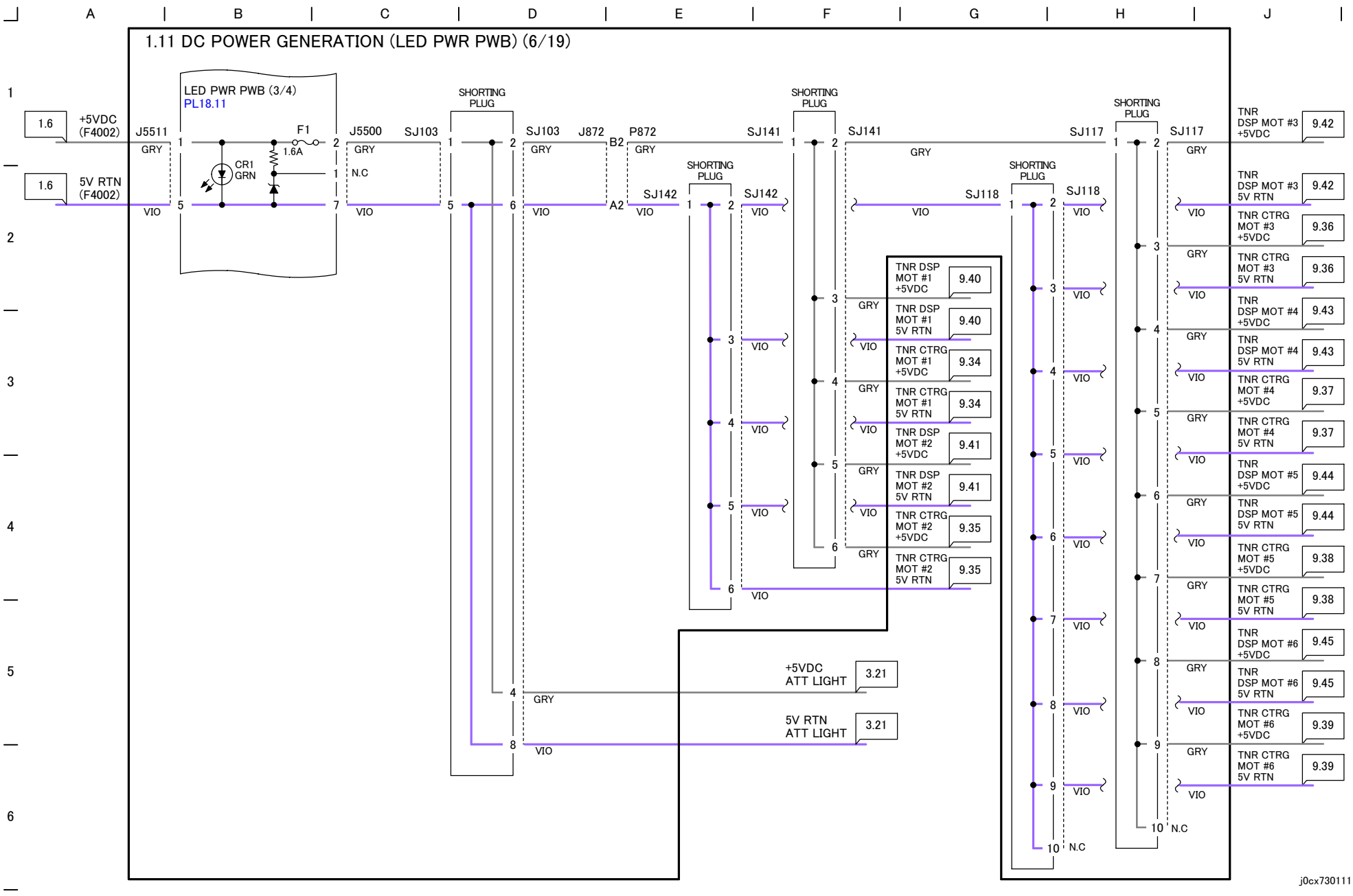

1.7 DC POWER GENERATION (LVPS_H1U) (+24V) (2/19)
FAIL CODE
094-936
Dispense Cover Open
LVPS H1U (2/3)
PL18.12
DC PWR GEN
+24VDC SQ
24VSQ RTN
F6002
F6003
1.6
ON/OFF SIGNAL
CASE
J509_U
J912_H6
P912_H6
P912
J912
J984
P984
J869
P869
P927
J927
SJ130
SHORTING PLUG
9.20
9.32
9.56
9.73
DST 1 PWB
PL18.11
+24V SQ (H1U)
J1106
24V SQ RTN (H1U)
1.31
FLY 11 PWB
PL18.11
J618_11
RTN
24V RTN
CR1
J619_11
+24VDC RL1
J1004_4
24V RTN RL1
J1003_4
DST4 PWB
PL18.11
1.47
1/47
J984
J872
P872
SJ162
SHORTING PLUG
INTLK +24V (#2)
24V RTN (#2)
INTLK +24V (#3)
24V RTN (#3)
INTLK +24V (#4)
24V RTN (#4)
INTLK +24V (#5)
24V RTN (#5)
9.35
9.36
9.37
9.38
MK_EPG 1 MD PWB
PL18.3
+5VDC
094-936
DC330 [009-106]
DISPENSE INTLK SIGNAL
J620_11
J881
P881
J667_X1
GND
24V RTN
F.G
CR2
1.29
DISPENSE COVER INTLK +24VDC (FLY11)
1.26
SERVICE INTLK ON +24VDC (FLY11)
+24VDC (DST 3 RLY)
1.45
24V RTN (DST 3 RLY)
1.45
NOTE:
1
• Short Protection (Over-current Protection)
If +5VDC/+5VSQ/+12VDC/+12VSQ output is shorted, all the outputs are stopped. If +24VDC output is shorted, it is stopped alone.
To restore the output(s), repair the short circuit, power off, allow 5 sec., then power on.
• Over-voltage Protection
If +5VDC output reaches 6 to 9VDC, 12VDC reaches 15 to 20VDC or +24VDC reaches 28 to 36VDC, all the outputs are stopped.
To restore them, check they are not damaged, power off, allow 5 sec., then power on.
j0cx730107

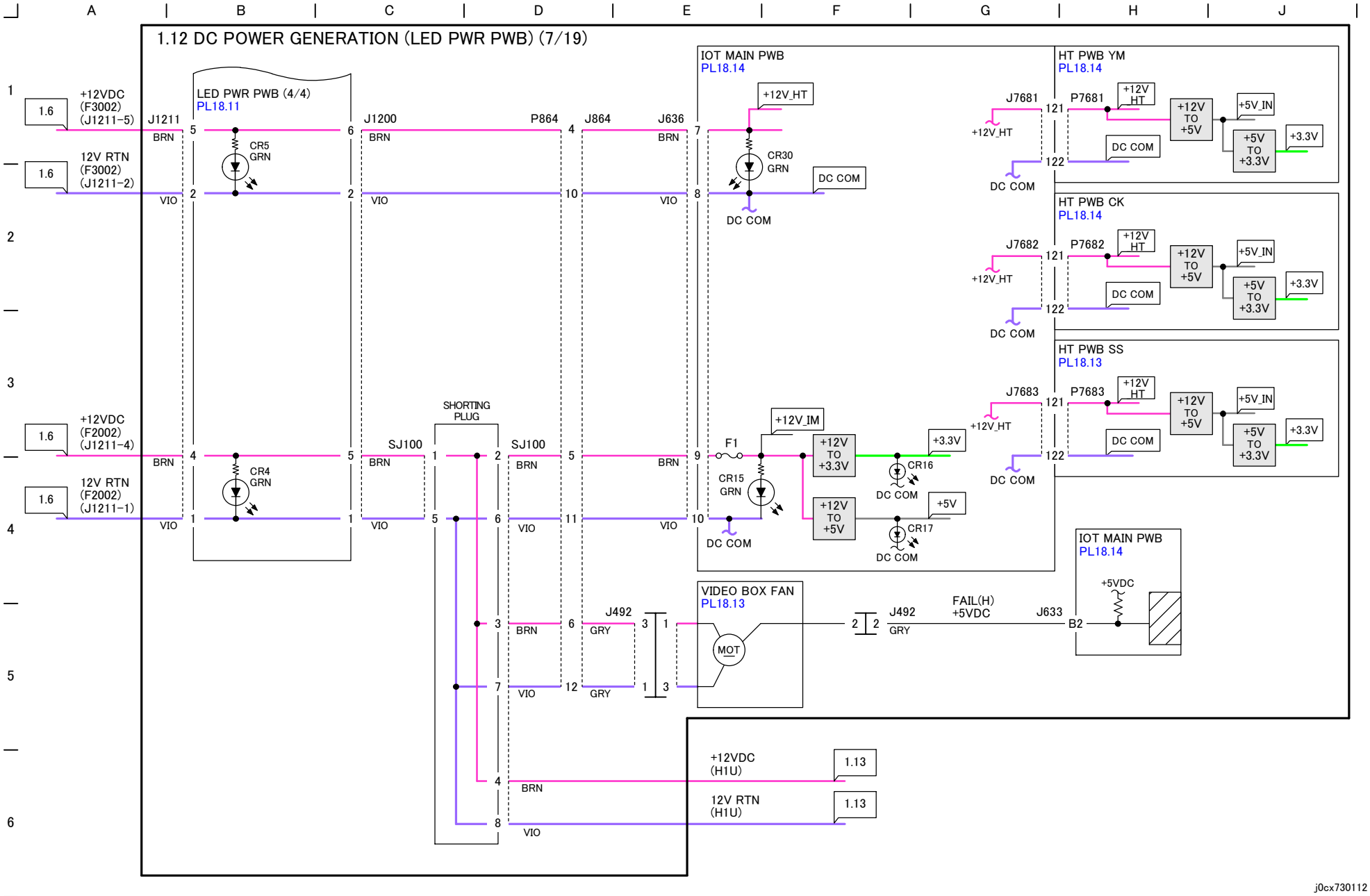

1.8 DC POWER GENERATION (LVPS_H1U) (3/19)
LVPS H1U (3/3)
PL18.12
+24VDC SQ
24VSQ RTN
F6001
SHORTING PLUG
DST 1 PWB
PL18.11
DST 2 PWB
PL18.7
DST 3 PWB
PL18.13
MK_DRV MD PWB
PL18.3
+24V_SQ (H1U)
24V SQ_RTN-1 (H1U)
24V SQ_RTN (H1U)
+24V SQ INTLK(H1U)
24V SQ RTN-2 (H1U)
24V SQ RTN (H1U)
24V_1
DC COM
j0cx730108

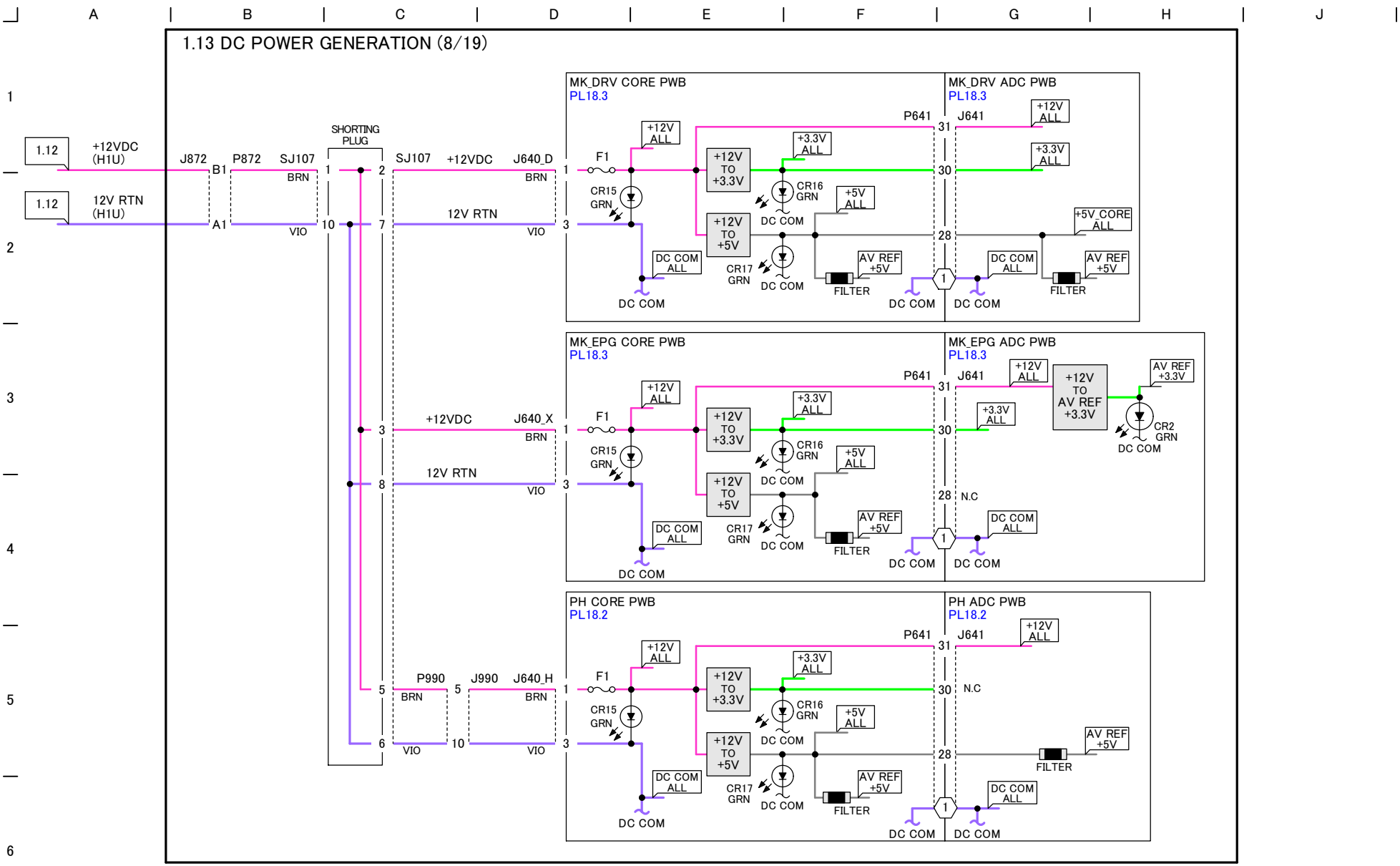

1.9 DC POWER GENERATION (LED PWR PWB) (4/19)
LED PWR PWB (1/4)
PL18.11
1.6
+5VDC
(F4001)
1.6
5V RTN
(F4001)
J5511
GRY
VIO
CR2
J5500
GRY
VIO
J872
B4
A4
P872
SJ105
VIO
SHORTING PLUG
SJ105
VIO
SJ106
GRY
SHORTING PLUG
SJ106
J595_D
GRY
N.C
VIO
MK_DRV 1 SNR PWB
PL18.3
+5VDC
PB595
CR1
GRN
5V RTN
N.C
MK_DRV 2 SNR PWB
PL18.3
PA595
+5VDC
N.C
CR1
GRN
5V RTN
MK_EPG 1 MD PWB
PL18.3
J689_X1
GRY
VIO
F28
+5VDC
F26
1.25A
+5V F26
+5V to +3.3V
+3.3V
+5V SNR
F25
5V RTN
MK_EPG 2 MD PWB
PL18.3
J689_X2
GRY
VIO
MK_DRV MD PWB
PL18.3
J689_D
GRY
VIO
MK_DRV ADC PWB
PL18.3
J722
GRY
CR3
GRN
5V RTN

j0cx730109


1.10 DC POWER GENERATION (LED PWR PWB) (5/19)
1.6
+5V_SQ (F5002)
1.6
5V SQ RTN (F5002)
LED PWR PWB (2/4)
PL18.11
J5511
J5500
J872
P872
P990
J990
SJ104
SJ124
SJ119
CR3 GRN
SHORTING PLUG
ALL
PH1_MD PWB
PL18.2
PH2_SNR PWB
PL18.2
PH1_SNR PWB
PL18.2
PH2_MD PWB
PL18.2
PH ADC PWB
PL18.2
J689_H1
J689_H2
J595_H2
J751
PB595
PA595
F26
1.25A
+5VDC
+5V F26
+5V to +3.3V
+3.3V
+5V SNR
5V RTN
F25
CR1 GRN
N.C
GRY
VIO
j0cx730110

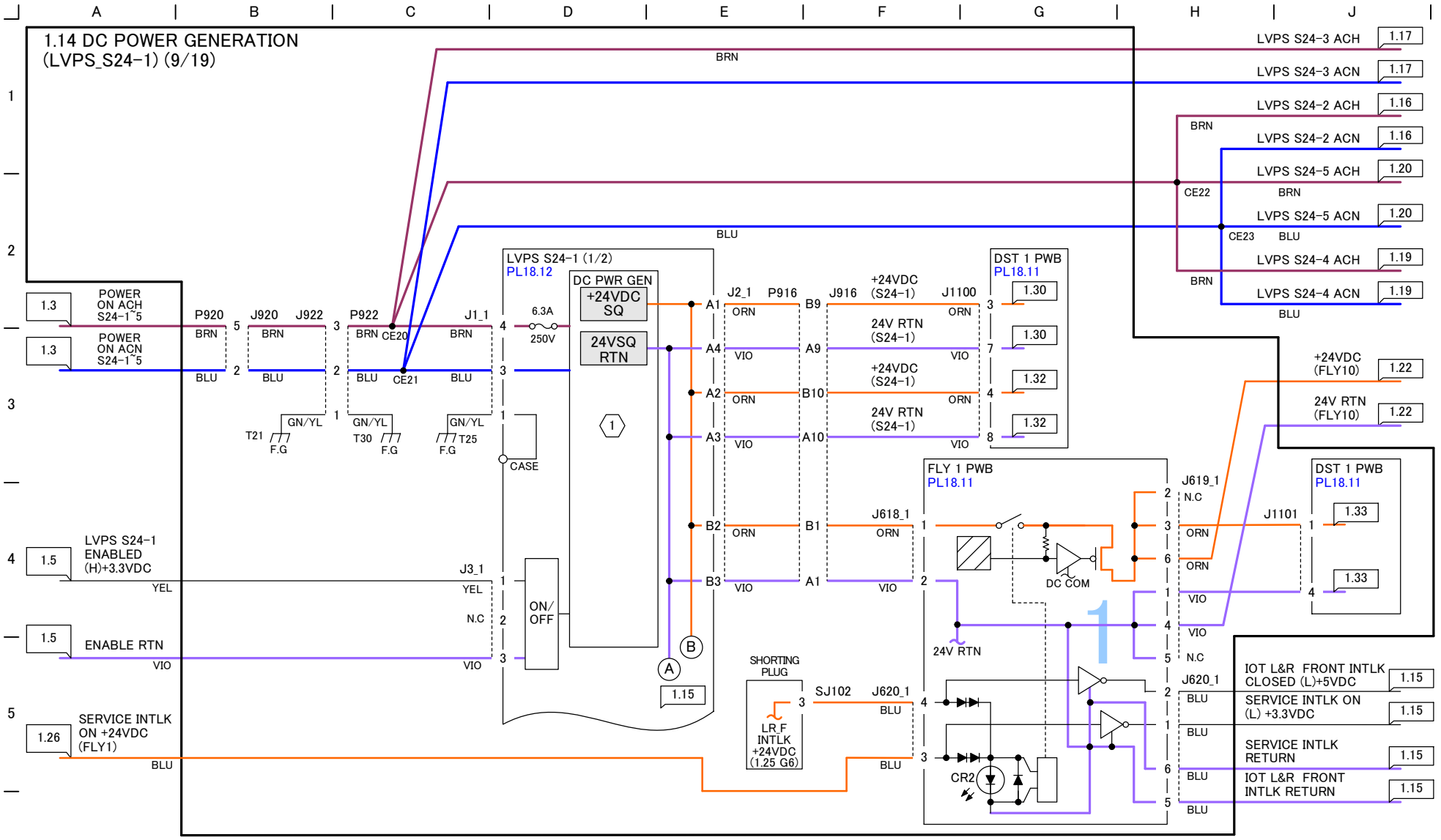

1.11 DC POWER GENERATION (LED PWR PWB) (6/19)
LED PWR PWB (3/4)
PL18.11
1.6
+5VDC
(F4002)
1.6
5V RTN
(F4002)
J5511
F1
1.6A
CR1
GRN
J5500
SJ103
SHORTING PLUG
SJ103
J872
B2
P872
A2
SJ141
SJ142
SJ117
SJ118
GRY
VIO
N.C
TNR DSP MOT #3 +5VDC 9.42
TNR DSP MOT #3 5V RTN 9.42
TNR CTRG MOT #3 +5VDC 9.36
TNR CTRG MOT #3 5V RTN 9.36
TNR DSP MOT #4 +5VDC 9.43
TNR DSP MOT #4 5V RTN 9.43
TNR CTRG MOT #4 +5VDC 9.37
TNR CTRG MOT #4 5V RTN 9.37
TNR DSP MOT #5 +5VDC 9.44
TNR DSP MOT #5 5V RTN 9.44
TNR CTRG MOT #5 +5VDC 9.38
TNR CTRG MOT #5 5V RTN 9.38
TNR DSP MOT #6 +5VDC 9.45
TNR DSP MOT #6 5V RTN 9.45
TNR CTRG MOT #6 +5VDC 9.39
TNR CTRG MOT #6 5V RTN 9.39
TNR DSP MOT #1 +5VDC 9.40
TNR DSP MOT #1 5V RTN 9.40
TNR CTRG MOT #1 +5VDC 9.34
TNR CTRG MOT #1 5V RTN 9.34
TNR DSP MOT #2 +5VDC 9.41
TNR DSP MOT #2 5V RTN 9.41
TNR CTRG MOT #2 +5VDC 9.35
TNR CTRG MOT #2 5V RTN 9.35
+5VDC ATT LIGHT 3.21
5V RTN ATT LIGHT 3.21
j0cx730111


1.12 DC POWER GENERATION (LED PWR PWB) (7/19)
LED PWR PWB (4/4)
PL18.11
+12VDC (F3002) (J1211-5)
12V RTN (F3002) (J1211-2)
+12VDC (F2002) (J2002-4)
12V RTN (F2002) (J1211-1)
J1211
J1200
P864
J864
J636
SJ100
SHORTING PLUG
CR5 GRN
CR4 GRN
CR30 GRN
CR15 GRN
CR16
CR17
F1
+12V_HT
+12V_IM
+12V TO +3.3V
+12V TO +5V
+3.3V
+5V
DC COM
IOT MAIN PWB
PL18.14
HT PWB YM
PL18.14
HT PWB CK
PL18.14
HT PWB SS
PL18.13
J7681
P7681
J7682
P7682
J7683
P7683
+12V HT
+5V_IN
+5V TO +3.3V
VIDEO BOX FAN
PL18.13
MOT
J492
FAIL(H) +5VDC
J633
B2
+5VDC
+12VDC (H1U)
12V RTN (H1U)
1.13
BRN
VIO
GRY
1.6
j0cx730112



NOTE: (1) Pin No.
2,11,13,16,18,20,22,24,26,27,29,32,33,35,37,39,42,51,56,60

j0cx730113



FAIL CODE

077-307
Service Interlock Open

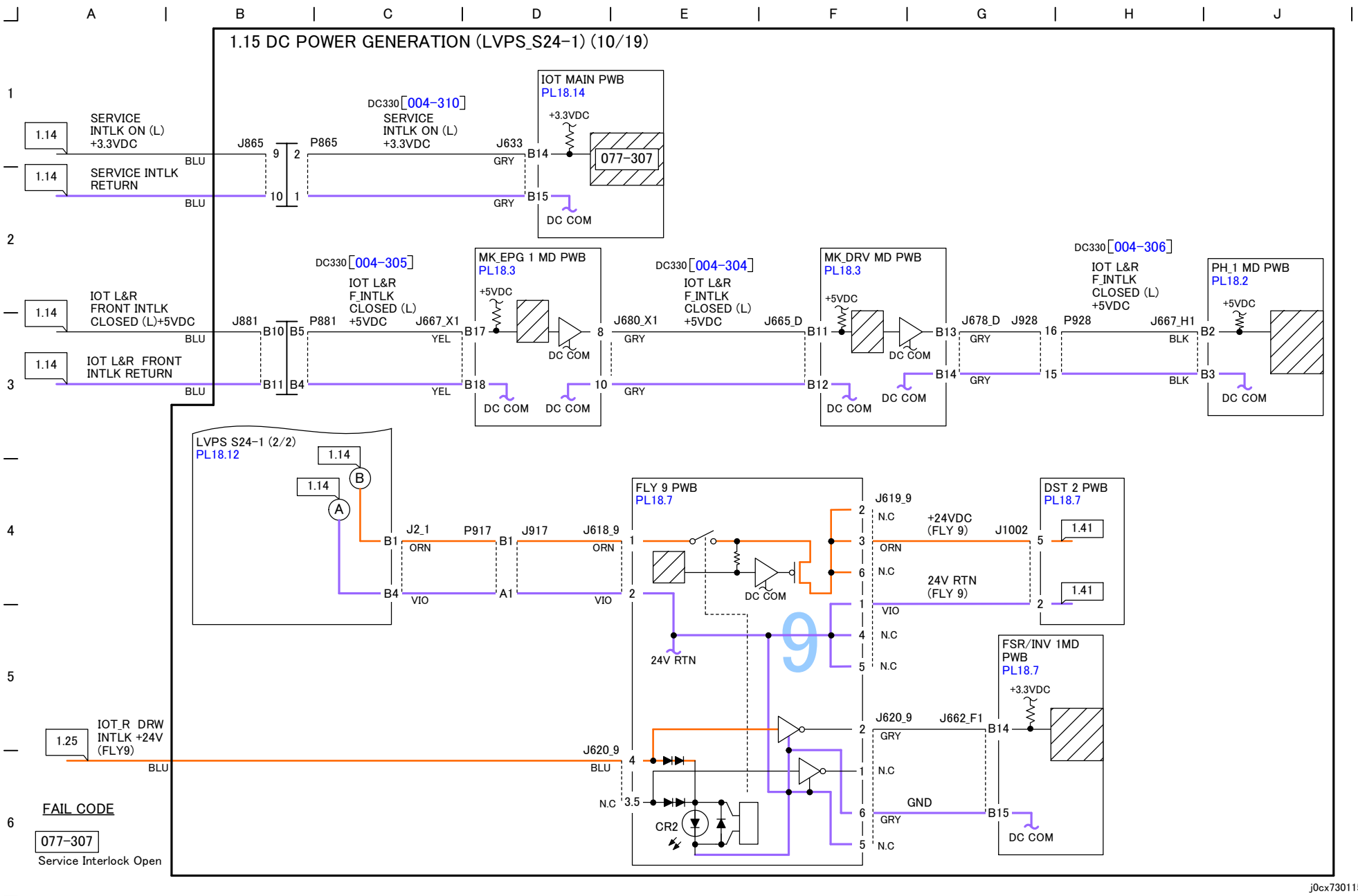
NOTE:

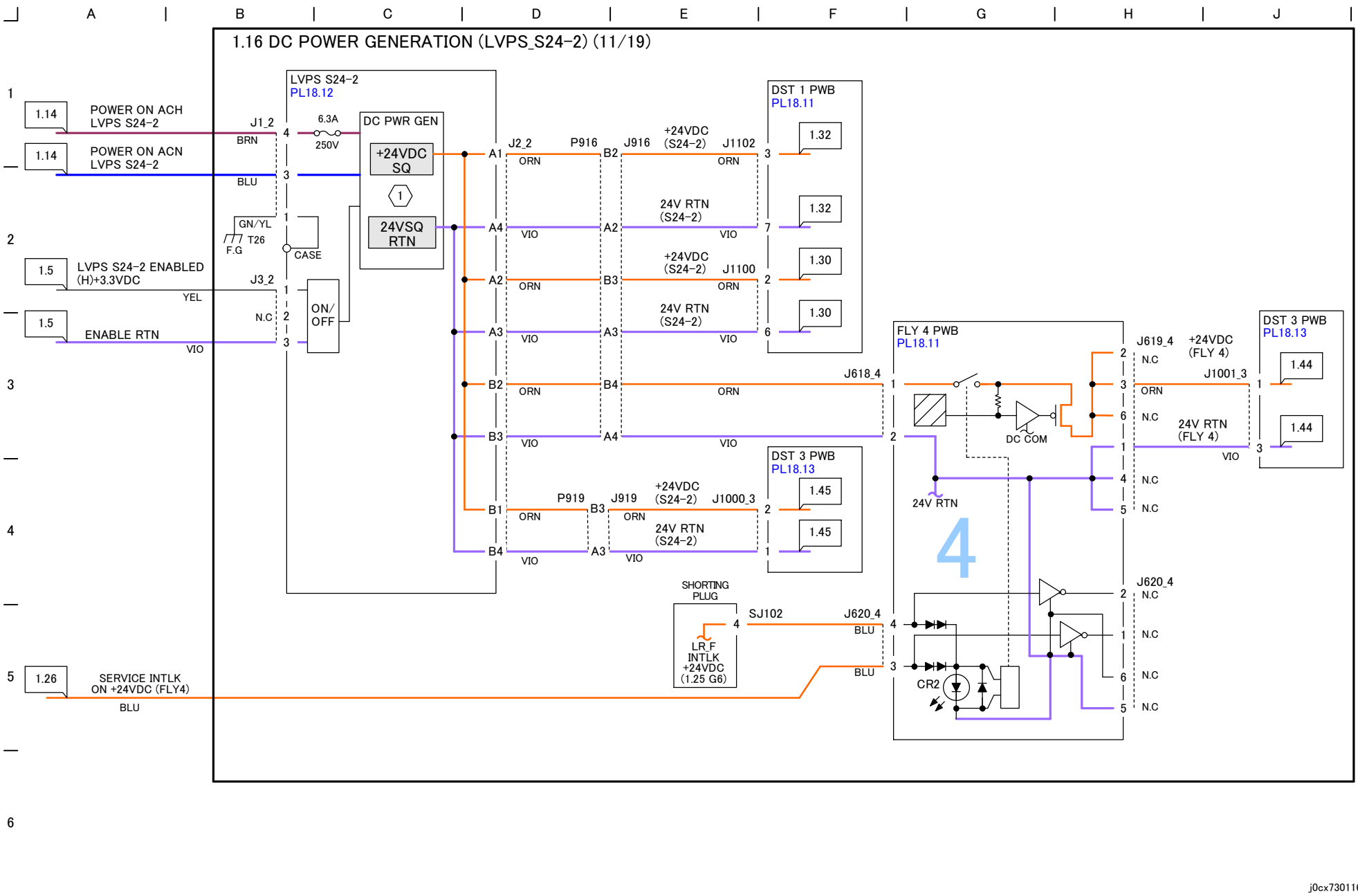
(1) ・ Short Protection (Over-current Protection)
If +24VDC output is shorted, it is stopped.
To restore it, repair the short circuit, power off, allow 5 sec., then power on.

・ Over-voltage Protection If +24VDC output reaches 26.7 to 32.0VDC, it is stopped.
To restore it, check it is not damaged, power off, allow 5 sec., then power on.

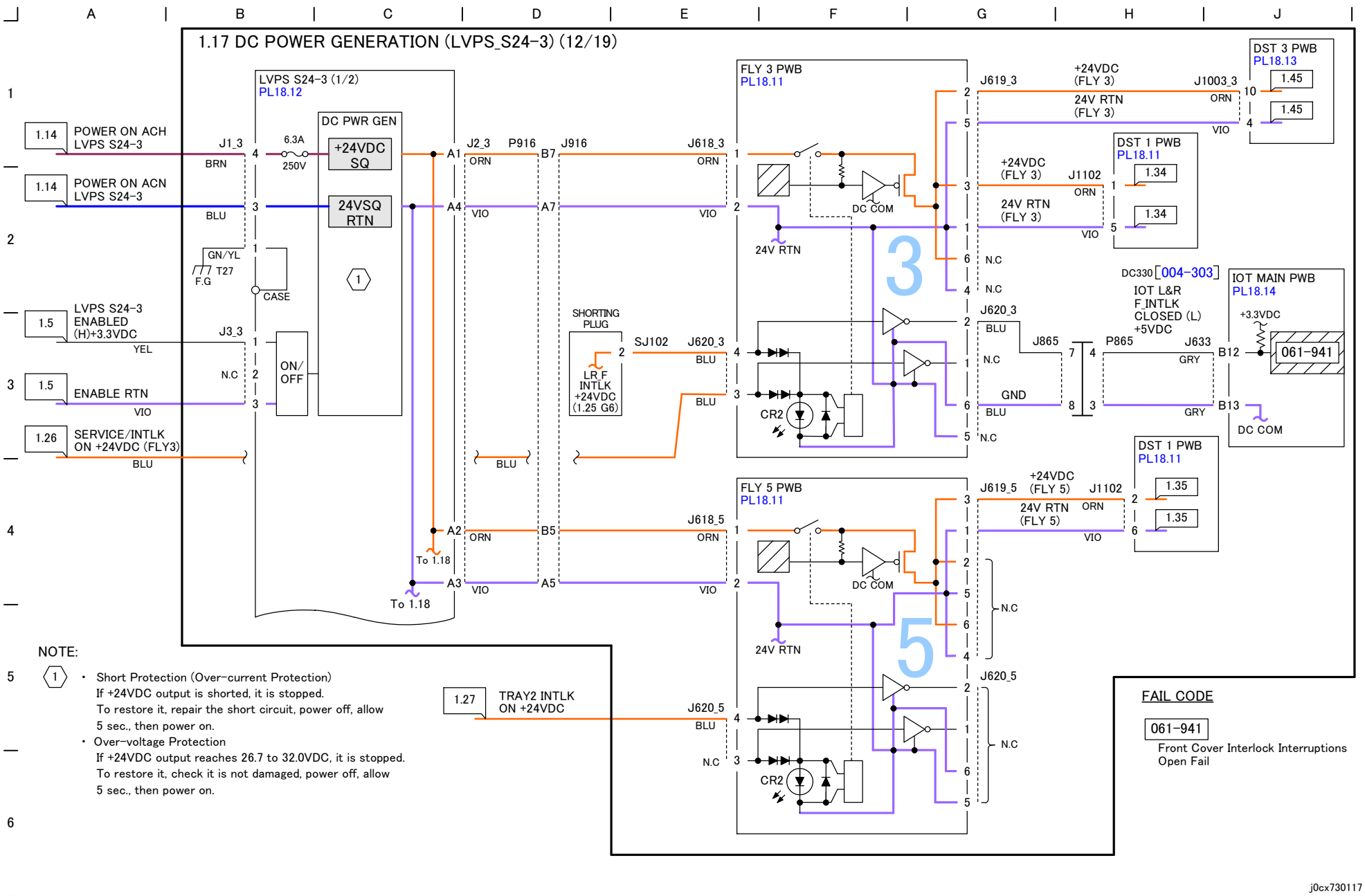
(2) For the actual wiring, see Chap. 7 Wire Network.

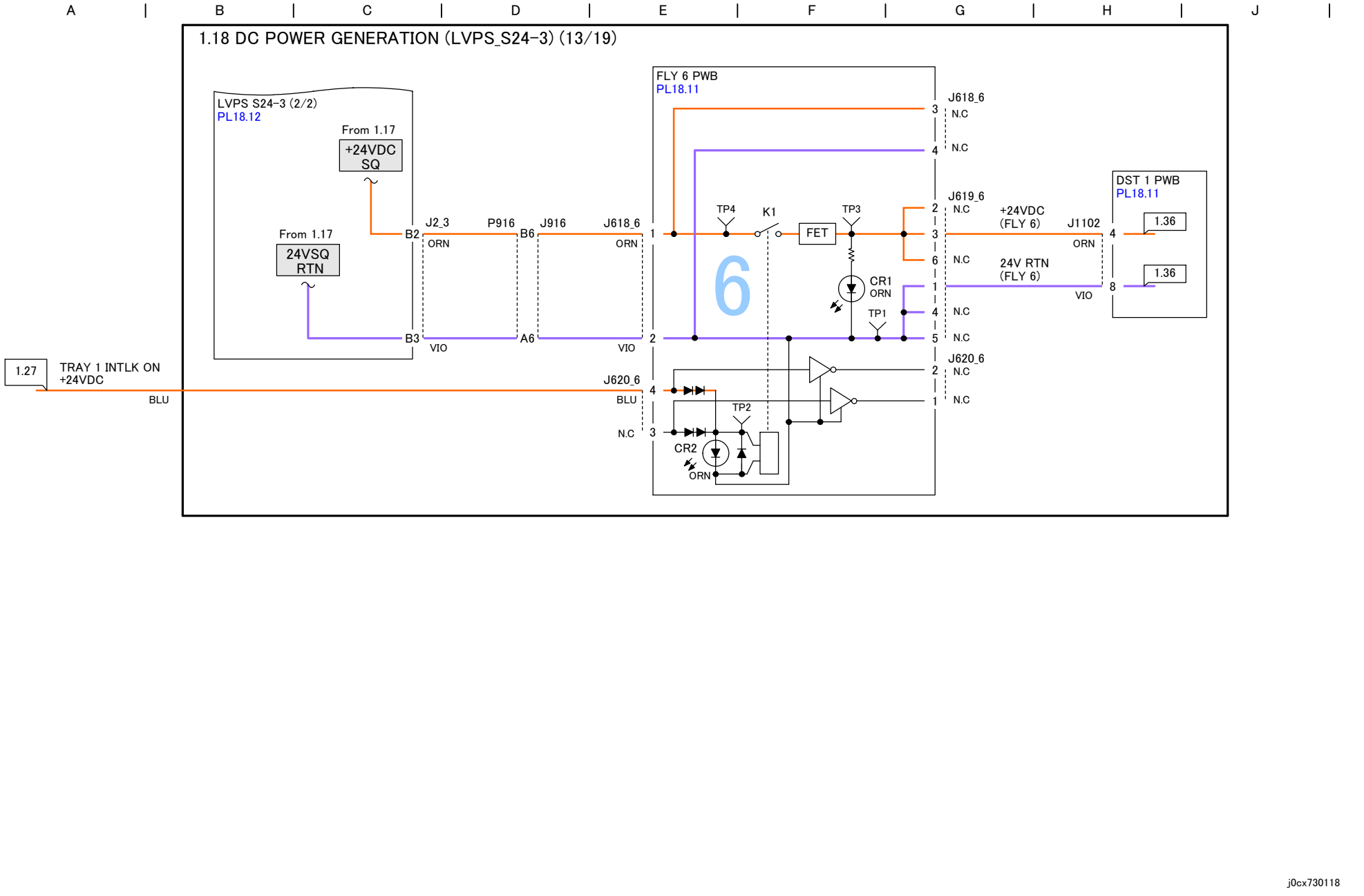
j0cx730114


1.15 DC POWER GENERATION (LVPS_S24-1) (10/19)
IOT MAIN PWB
PL18.14
+3.3VDC
077-307
DC330 [004-310]
SERVICE
INTLK ON (L)
+3.3VDC
1.14
SERVICE
INTLK ON (L)
+3.3VDC
J865
P865
J633
B14
B15
DC COM
1.14
SERVICE INTLK
RETURN
BLU
GRY
DC330 [004-305]
IOT L&R
F_INTLK
CLOSED (L)
+5VDC
MK_EPG 1 MD PWB
PL18.3
+5VDC
DC COM
DC330 [004-304]
IOT L&R
F_INTLK
CLOSED (L)
+5VDC
MK_DRV MD PWB
PL18.3
DC330 [004-306]
IOT L&R
F_INTLK
CLOSED (L)
+5VDC
PH_1 MD PWB
PL18.2
1.14
IOT L&R
FRONT INTLK
CLOSED (L)+5VDC
J881
P881
J667_X1
J680_X1
J665_D
J678_D
J928
P928
J667_H1
B17
B18
B10
B5
B11
B4
1.14
IOT L&R FRONT
INTLK RETURN
YEL
GRY
BLK
LVPS S24-1 (2/2)
PL18.12
1.14
B
1.14
A
J2_1
P917
J917
J618_9
B1
B4
A1
ORN
VIO
FLY 9 PWB
PL18.7
J619_9
N.C
+24VDC
(FLY 9)
J1002
24V RTN
(FLY 9)
DST 2 PWB
PL18.7
1.41
1.41
24V RTN
9
J620_9
J662_F1
FSR/INV 1MD
PWB
PL18.7
+3.3VDC
GND
CR2
1.25
IOT_R DRW
INTLK +24V
(FLY9)
FAIL CODE
077-307
Service Interlock Open
j0cx730115

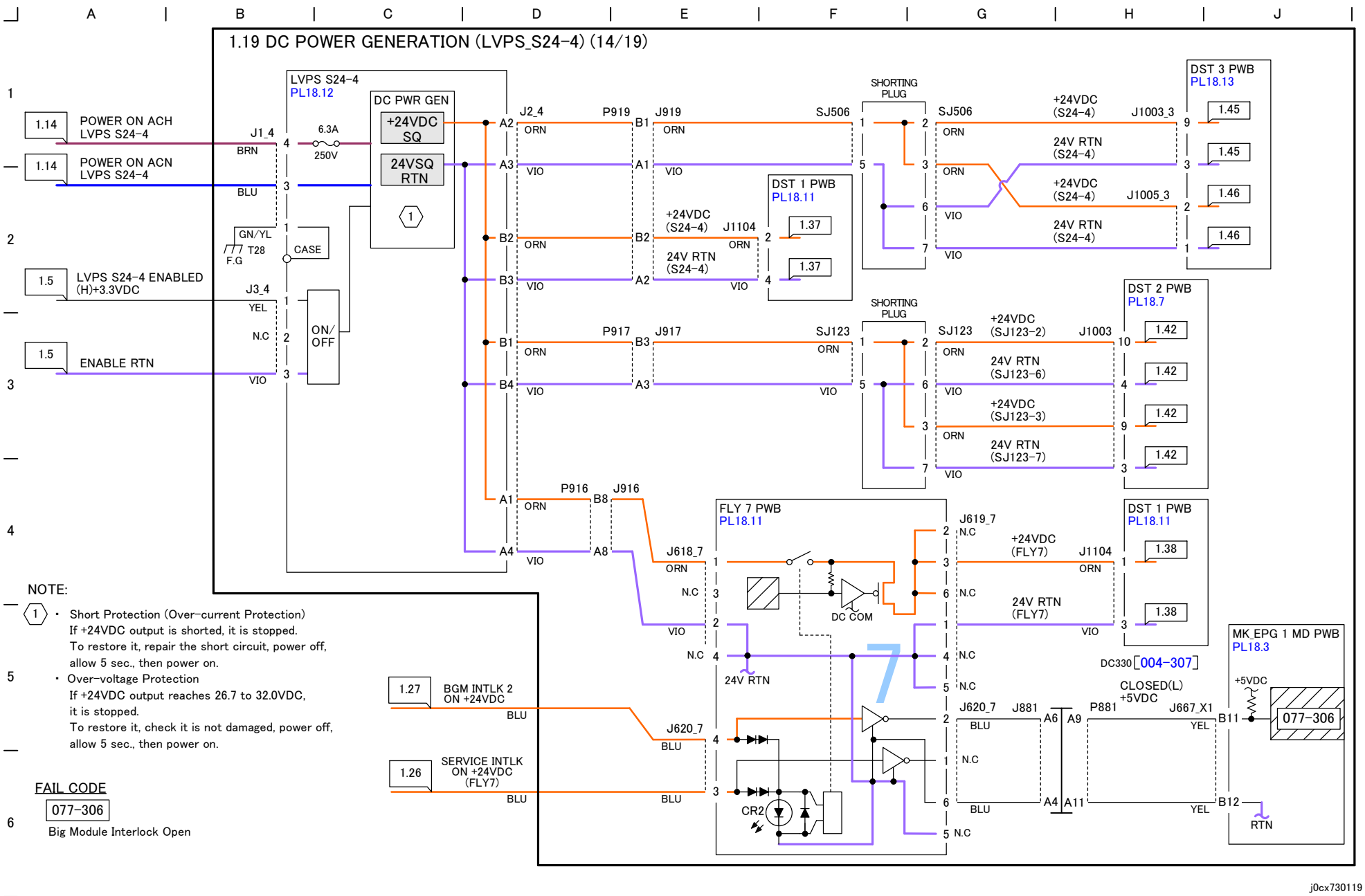

1.16 DC POWER GENERATION (LVPS_S24-2) (11/19)
LVPS S24-2
PL18.12
DC PWR GEN
+24VDC SQ
24VSQ RTN
6.3A
250V
J1_2
1.14
POWER ON ACH
LVPS S24-2
BRN
1.14
POWER ON ACN
LVPS S24-2
BLU
GN/YL
T26
F.G
CASE
1.5
LVPS S24-2 ENABLED
(H)+3.3VDC
YEL
J3_2
N.C
ON/
OFF
1.5
ENABLE RTN
VIO
1.26
SERVICE INTLK
ON +24VDC (FLY4)
BLU
J2_2
P916
J916
+24VDC
(S24-2)
J1102
24V RTN
(S24-2)
+24VDC
(S24-2)
J1100
24V RTN
(S24-2)
ORN
VIO
DST 1 PWB
PL18.11
1.32
1.32
1.30
1.30
J618_4
FLY 4 PWB
PL18.11
DC COM
24V RTN
4
J619_4
+24VDC
(FLY 4)
J1001_3
24V RTN
(FLY 4)
DST 3 PWB
PL18.13
1.44
1.44
P919
J919
J1000_3
DST 3 PWB
PL18.13
1.45
1.45
SHORTING
PLUG
LR_F
INTLK
+24VDC
(1.25 G6)
SJ102
J620_4
CR2
J620_4
N.C

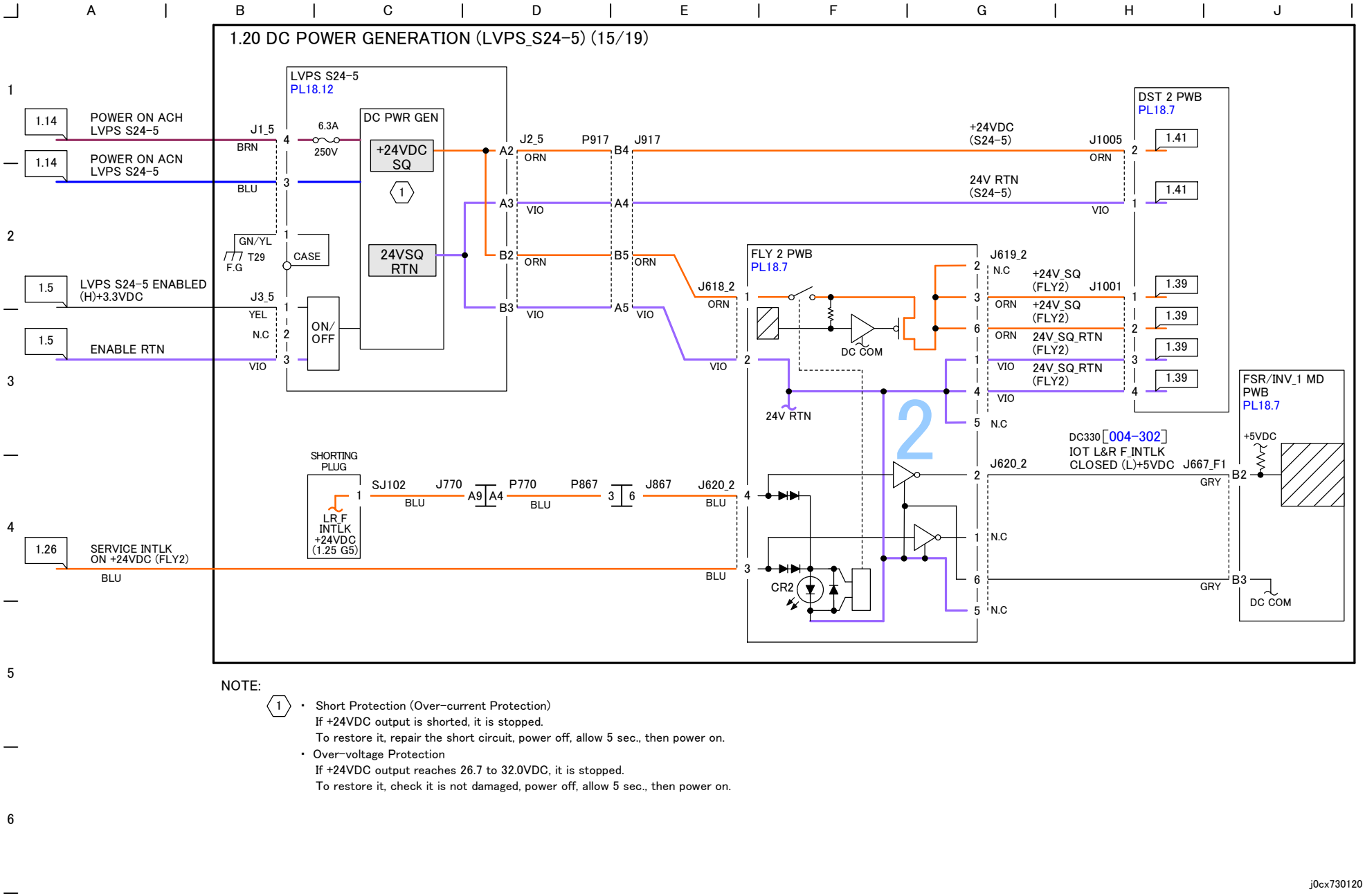
j0cx730116


1.17 DC POWER GENERATION (LVPS_S24-3) (12/19)
LVPS S24-3 (1/2)
PL18.12
DC PWR GEN
+24VDC SQ
24VSQ RTN
6.3A
250V
1.14 POWER ON ACH LVPS S24-3
1.14 POWER ON ACN LVPS S24-3
1.5 LVPS S24-3 ENABLED (H)+3.3VDC
1.5 ENABLE RTN
1.26 SERVICE/INTLK ON +24VDC (FLY3)
J1_3
BRN
BLU
GN/YL
T27
F.G
CASE
J3_3
YEL
N.C
VIO
BLU
ON/ OFF
SHORTING PLUG
LR_F INTLK +24VDC (1.25 G6)
SJ102
J620_3
J2_3
P916
J916
J618_3
A1
A4
A2
A3
B7
A7
B5
A5
ORN
VIO
To 1.18
To 1.18
FLY 3 PWB
PL18.11
FLY 5 PWB
PL18.11
DC COM
24V RTN
CR2
3
5
N.C
J619_3
+24VDC (FLY 3)
24V RTN (FLY 3)
J1003_3
DST 3 PWB
PL18.13
1.45
1.45
J1102
DST 1 PWB
PL18.11
1.34
1.34
J619_5
+24VDC (FLY 5)
24V RTN (FLY 5)
1.35
1.35
J620_3
J620_5
BLU
GND
J865
P865
J633
GRY
DC330 004-303
IOT L&R F_INTLK CLOSED (L) +5VDC
IOT MAIN PWB
PL18.14
+3.3VDC
061-941
B12
B13
DC COM
1.27 TRAY2 INTLK ON +24VDC
NOTE:
1 · Short Protection (Over-current Protection)
If +24VDC output is shorted, it is stopped.
To restore it, repair the short circuit, power off, allow 5 sec., then power on.
· Over-voltage Protection
If +24VDC output reaches 26.7 to 32.0VDC, it is stopped.
To restore it, check it is not damaged, power off, allow 5 sec., then power on.
FAIL CODE
061-941
Front Cover Interlock Interruptions Open Fail
j0cx730117


A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
1.18 DC POWER GENERATION (LVPS_S24-3) (13/19)
LVPS S24-3 (2/2)
PL18.12
From 1.17
+24VDC SQ
From 1.17
24VSQ RTN
B2
B3
J2_3
ORN
VIO
P916
B6
A6
J916
J618_6
ORN
VIO
1
2
FLY 6 PWB
PL18.11
6
TP4
K1
FET
TP3
CR1
ORN
TP1
TP2
CR2
ORN
J620_6
4
BLU
N.C
3
1.27
TRAY 1 INTLK ON
+24VDC
BLU
J618_6
3
N.C
4
N.C
J619_6
2
N.C
3
6
N.C
1
4
N.C
5
N.C
J620_6
2
N.C
1
N.C
+24VDC (FLY 6)
J1102
4
ORN
24V RTN (FLY 6)
8
VIO
DST 1 PWB
PL18.11
1.36
1.36

j0cx730118


1.19 DC POWER GENERATION (LVPS_S24-4) (14/19)
LVPS S24-4
PL18.12
DC PWR GEN
+24VDC SQ
24VSQ RTN
1.14 POWER ON ACH LVPS S24-4
1.14 POWER ON ACN LVPS S24-4
1.5 LVPS S24-4 ENABLED (H)+3.3VDC
1.5 ENABLE RTN
J1_4
BRN
BLU
6.3A
250V
GN/YL
T28
F.G
CASE
J3_4
YEL
N.C
VIO
ON/ OFF
J2_4
P919
J919
SJ506
ORN
VIO
SHORTING PLUG
DST 1 PWB
PL18.11
+24VDC (S24-4)
J1104
24V RTN (S24-4)
1.37
DST 3 PWB
PL18.13
J1003_3
J1005_3
1.45
1.46
P917
J917
SJ123
DST 2 PWB
PL18.7
+24VDC (SJ123-2)
J1003
24V RTN (SJ123-6)
+24VDC (SJ123-3)
24V RTN (SJ123-7)
1.42
P916
J916
FLY 7 PWB
PL18.11
J618_7
J619_7
+24VDC (FLY7)
24V RTN (FLY7)
DC COM
1.38
24V RTN
DC330 [004-307]
MK_EPG 1 MD PWB
PL18.3
CLOSED(L) +5VDC
+5VDC
J620_7
J881
P881
J667_X1
077-306
RTN
1.27 BGM INTLK 2 ON +24VDC
1.26 SERVICE INTLK ON +24VDC (FLY7)
CR2
NOTE:
1 ・ Short Protection (Over-current Protection)
If +24VDC output is shorted, it is stopped.
To restore it, repair the short circuit, power off, allow 5 sec., then power on.
・ Over-voltage Protection
If +24VDC output reaches 26.7 to 32.0VDC, it is stopped.
To restore it, check it is not damaged, power off, allow 5 sec., then power on.
FAIL CODE
077-306
Big Module Interlock Open
j0cx730119

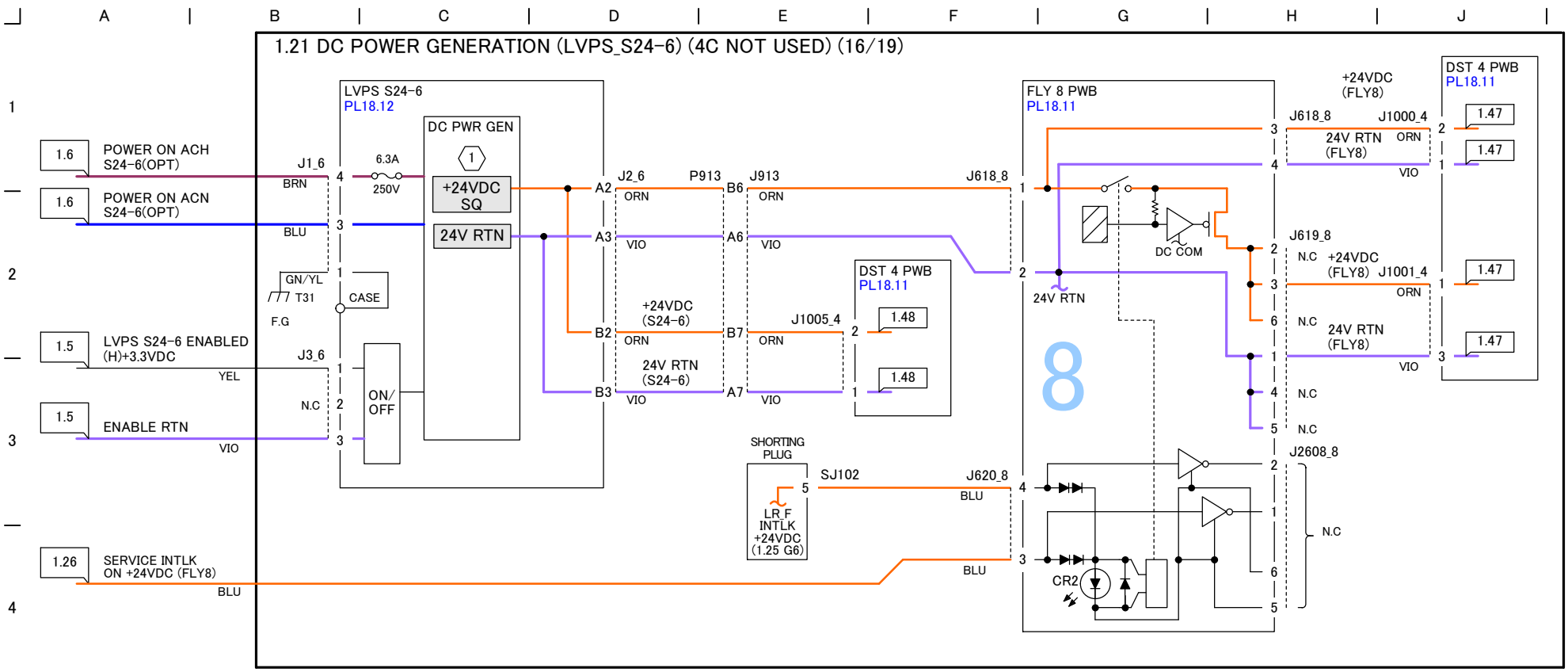


NOTE:

(1) ・ Short Protection (Over-current Protection)
If +24VDC output is shorted, it is stopped.
To restore it, repair the short circuit, power off, allow 5 sec., then power on.

・ Over-voltage Protection
If +24VDC output reaches 26.7 to 32.0VDC, it is stopped.
To restore it, check it is not damaged, power off, allow 5 sec., then power on.

j0cx730120

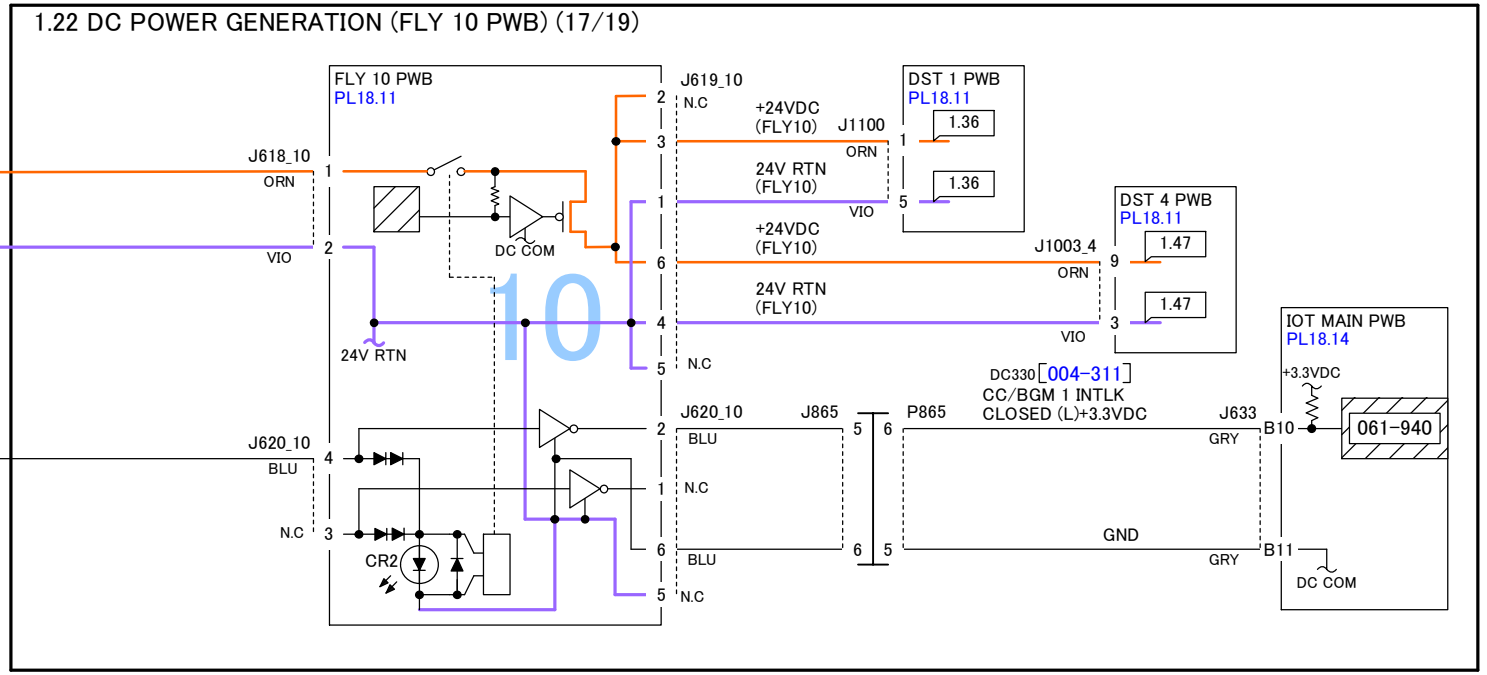


NOTE:

(1) ・ Short Protection (Over-current Protection)
If +24VDC output is shorted, it is stopped.
To restore it, repair the short circuit, power off, allow 5 sec., then power on.

・ Over-voltage Protection
If +24VDC output reaches 26.7 to 32.0VDC, it is stopped.
To restore it, check it is not damaged, power off, allow 5 sec., then power on.

j0cx730121



NOTE:

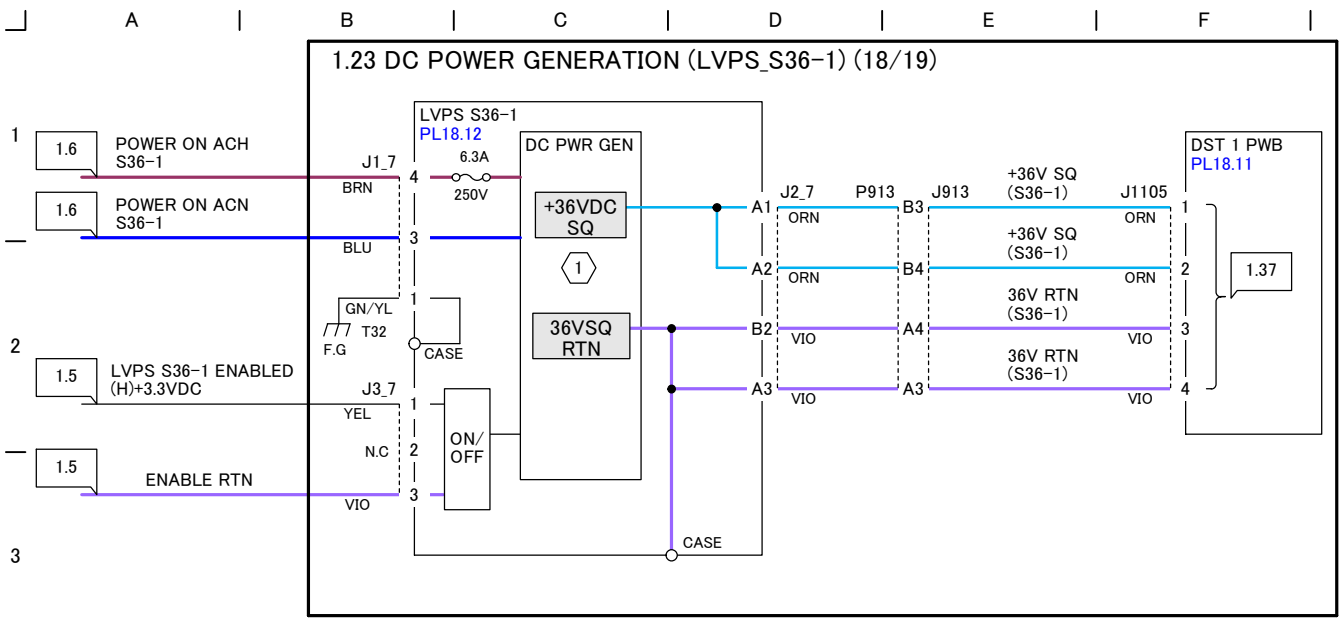
(1) ・ Short Protection (Over-current Protection)
If +24VDC output is shorted, it is stopped.
To restore it, repair the short circuit, power off, allow 5 sec., then power on.

・ Over-voltage Protection
If +24VDC output reaches 26.7 to 32.0VDC, it is stopped.
To restore it, check it is not damaged, power off, allow 5 sec., then power on.

FAIL CODE

061-940	CC/Big Module Interlock Open

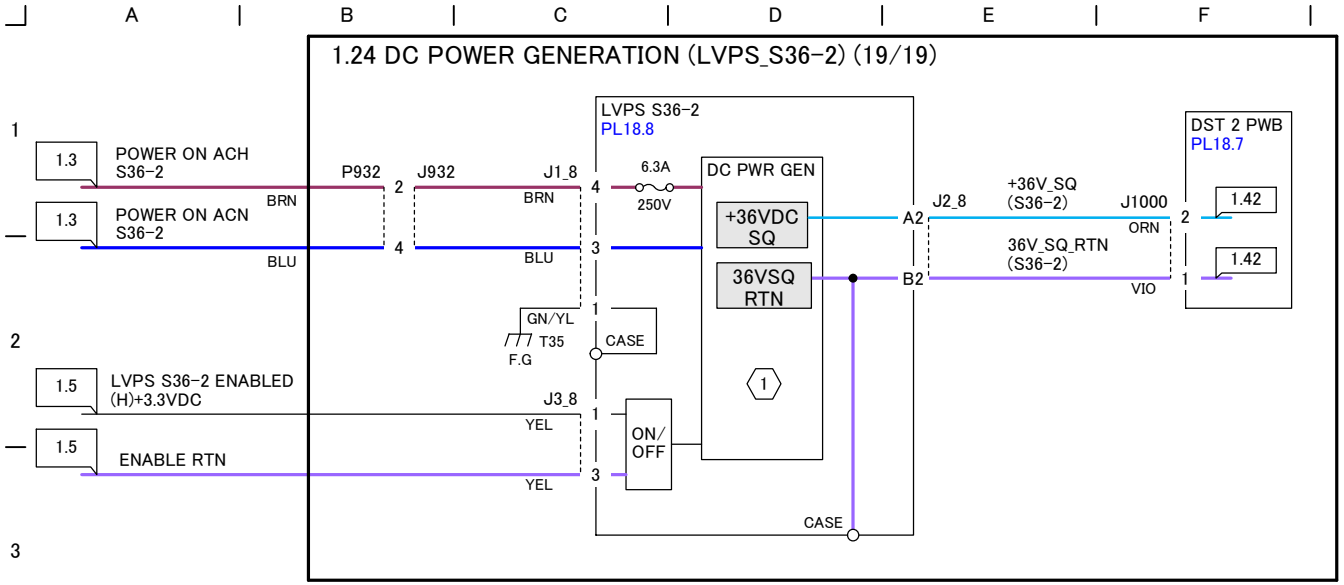
j0cx730122



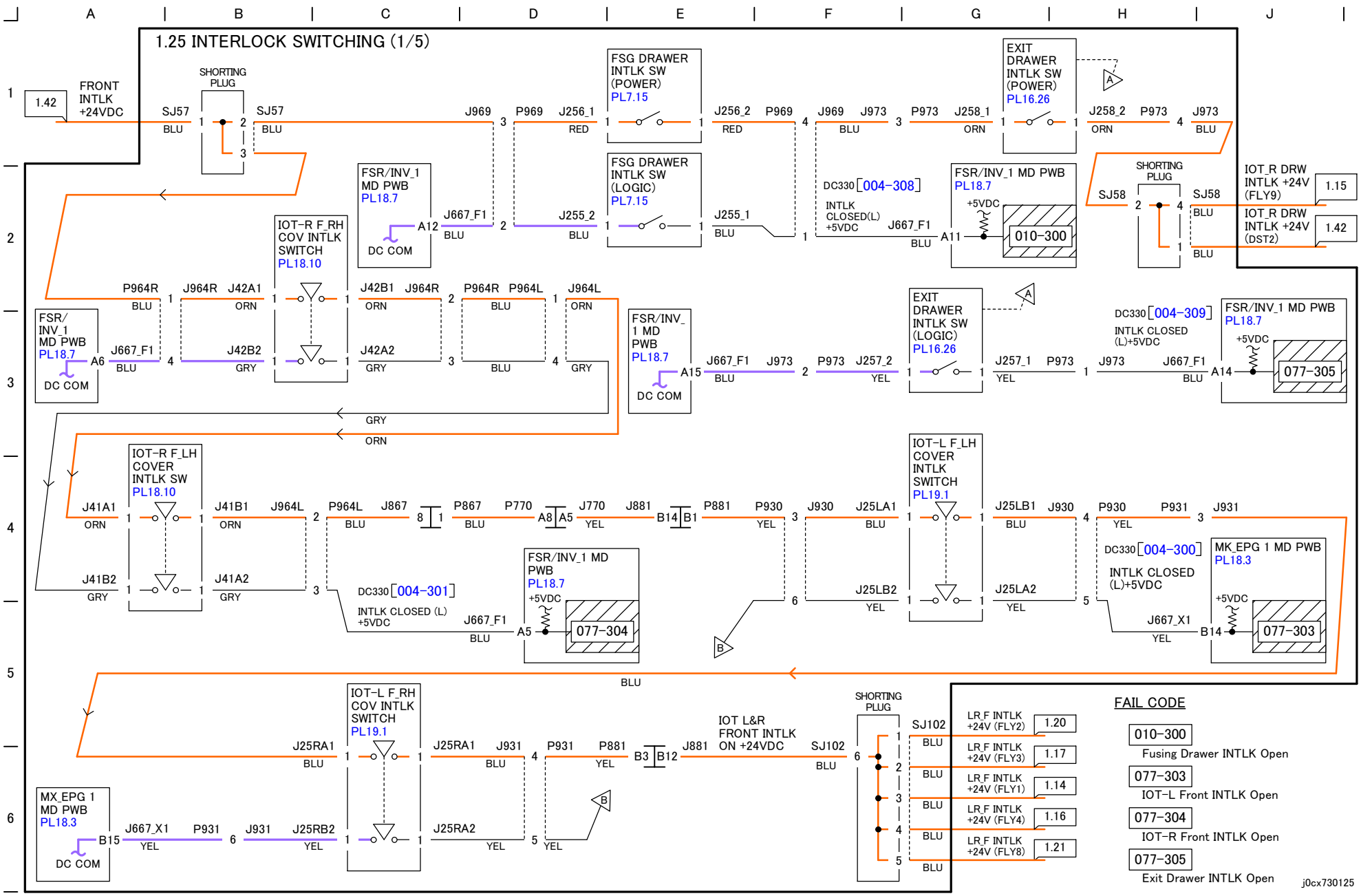
NOTE: (1)

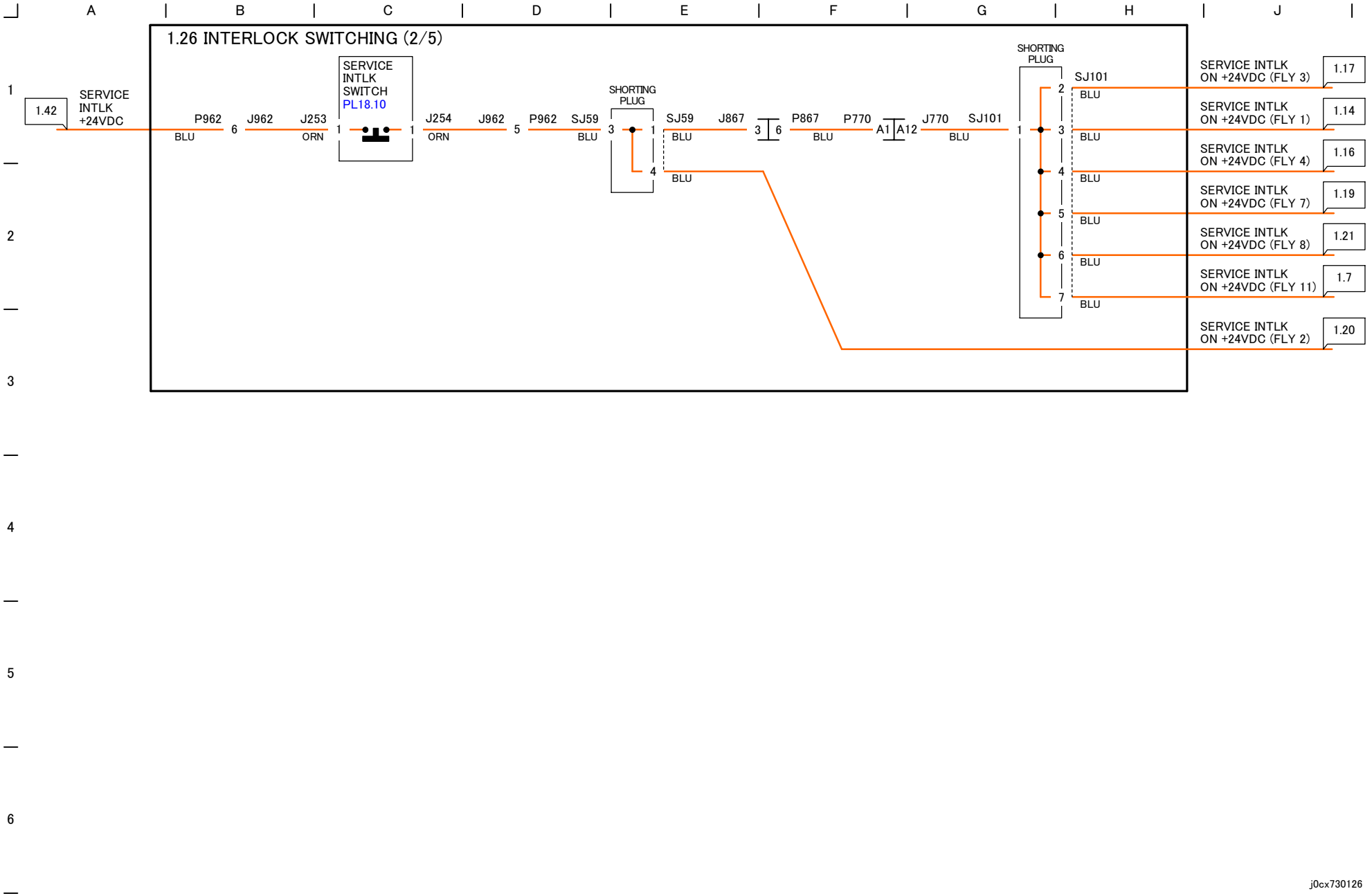
- Short Protection (Over-current Protection)
  If +36VDC output is shorted, it is stopped.
  To restore it, repair the short circuit, power off, allow 5 sec., then power on.
- Over-voltage Protection
  If +36VDC output reaches 39 to 42VDC, it is stopped.
  To restore it, check it is not damaged, power off, allow 5 sec., then power on.

j0cx730123



NOTE: (1)
- Short Protection (Over-current Protection)
  If +36VDC output is shorted, it is stopped.
  To restore it, repair the short circuit, power off, allow 5 sec., then power on.
- Over-voltage Protection
  If +36VDC output reaches 39 to 42VDC, it is stopped.
  To restore it, check it is not damaged, power off, allow 5 sec., then power on.


1.25 INTERLOCK SWITCHING (1/5)
FRONT INTLK +24VDC
1.42
SHORTING PLUG
SJ57
BLU
FSG DRAWER INTLK SW (POWER) PL7.15
FSG DRAWER INTLK SW (LOGIC) PL7.15
EXIT DRAWER INTLK SW (POWER) PL16.26
FSR/INV_1 MD PWB PL18.7
DC COM
IOT-R F_RH COV INTLK SWITCH PL18.10
DC330 [004-308]
INTLK CLOSED(L) +5VDC
010-300
SJ58
IOT_R DRW INTLK +24V (FLY9)
1.15
IOT_R DRW INTLK +24V (DST2)
1.42
FSR/INV_1 MD PWB PL18.7
EXIT DRAWER INTLK SW (LOGIC) PL16.26
DC330 [004-309]
INTLK CLOSED (L)+5VDC
077-305
IOT-R F_LH COVER INTLK SW PL18.10
DC330 [004-301]
INTLK CLOSED (L) +5VDC
077-304
IOT-L F_LH COVER INTLK SWITCH PL19.1
DC330 [004-300]
INTLK CLOSED (L)+5VDC
MK_EPG 1 MD PWB PL18.3
077-303
IOT-L F_RH COV INTLK SWITCH PL19.1
MX_EPG 1 MD PWB PL18.3
IOT L&R FRONT INTLK ON +24VDC
LR_F INTLK +24V (FLY2)
1.20
LR_F INTLK +24V (FLY3)
1.17
LR_F INTLK +24V (FLY1)
1.14
LR_F INTLK +24V (FLY4)
1.16
LR_F INTLK +24V (FLY8)
1.21
FAIL CODE
010-300
Fusing Drawer INTLK Open
077-303
IOT-L Front INTLK Open
077-304
IOT-R Front INTLK Open
077-305
Exit Drawer INTLK Open
j0cx730125


A
B
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1
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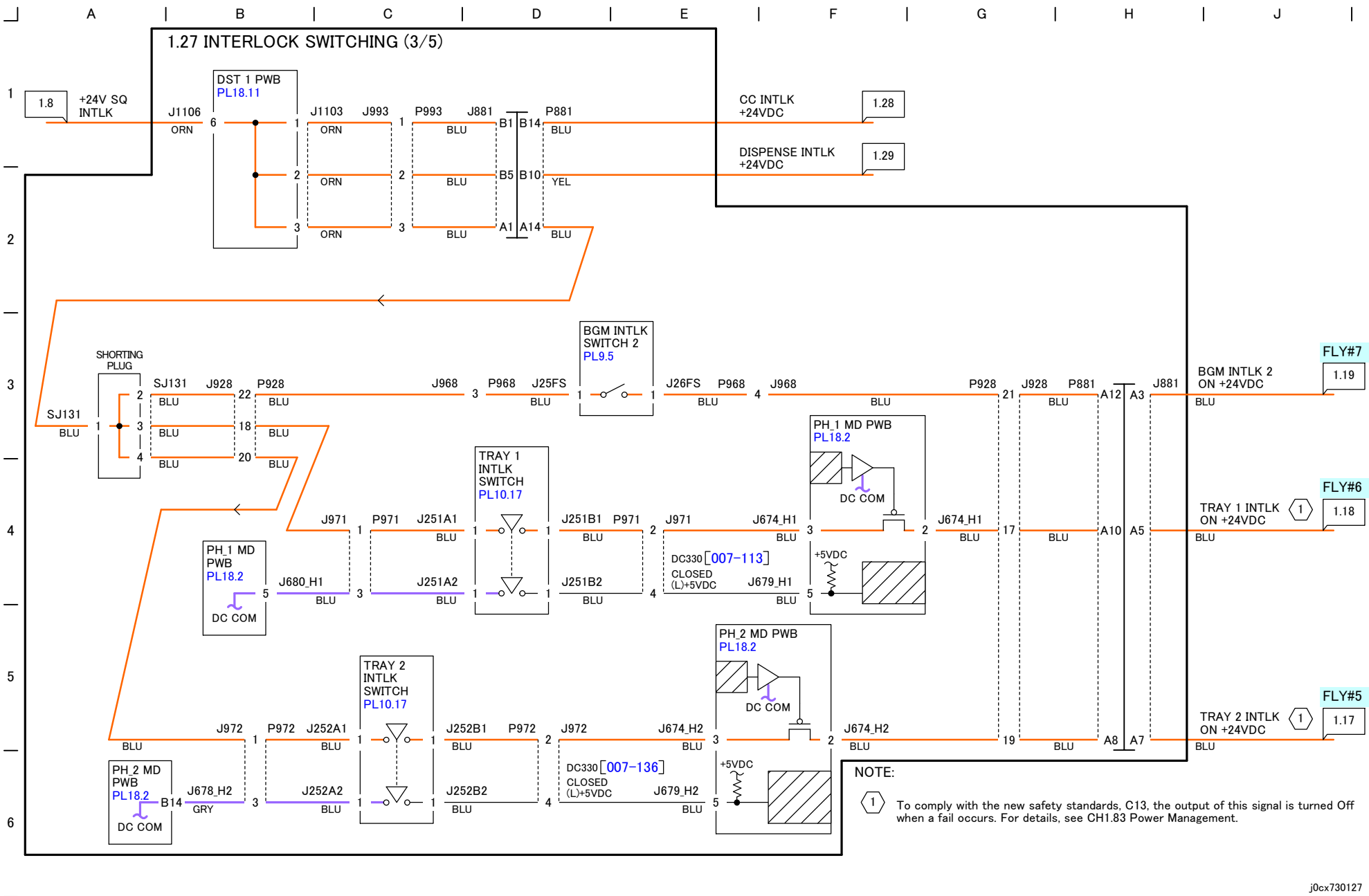
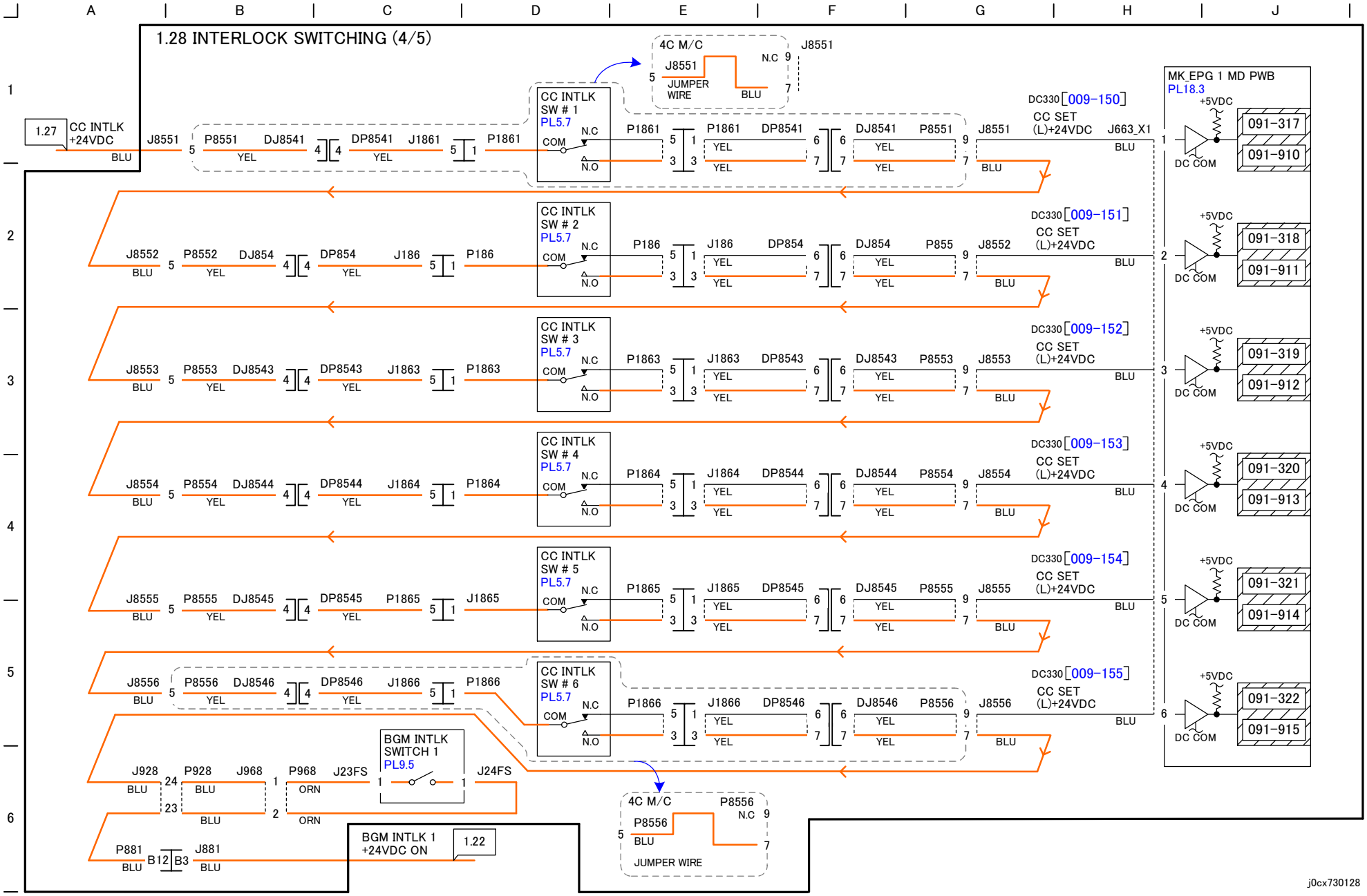
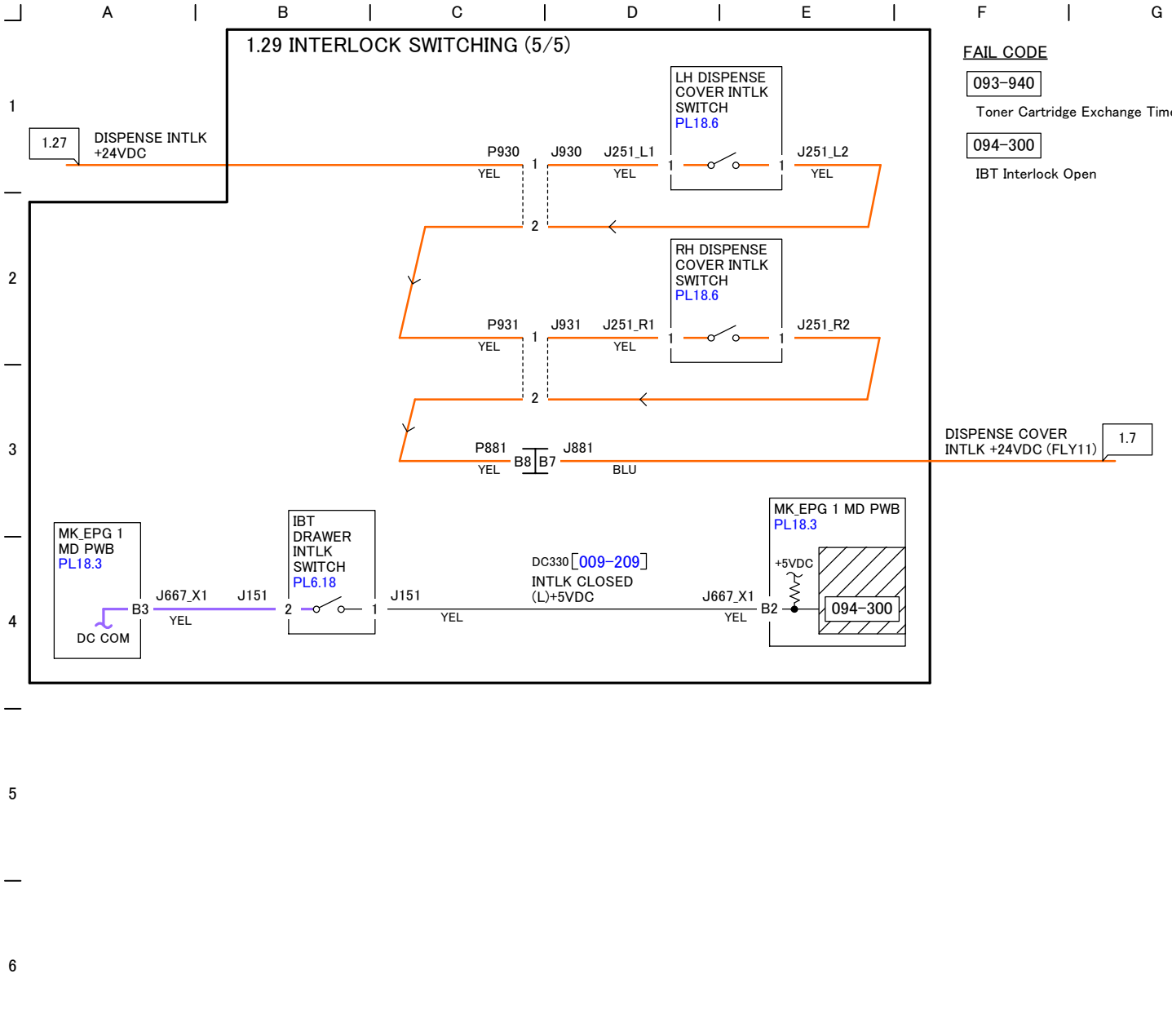
6
1.26 INTERLOCK SWITCHING (2/5)
1.42
SERVICE INTLK +24VDC
P962
BLU
6
J962
J253
ORN
1
SERVICE INTLK SWITCH PL18.10
1
J254
ORN
J962
5
P962
SJ59
BLU
SHORTING PLUG
3
1
4
SJ59
BLU
J867
3
6
P867
BLU
P770
A1
A12
J770
BLU
SJ101
BLU
1
SHORTING PLUG
2
3
4
5
6
7
SJ101
BLU
BLU
BLU
BLU
BLU
BLU
SERVICE INTLK ON +24VDC (FLY 3)
1.17
SERVICE INTLK ON +24VDC (FLY 1)
1.14
SERVICE INTLK ON +24VDC (FLY 4)
1.16
SERVICE INTLK ON +24VDC (FLY 7)
1.19
SERVICE INTLK ON +24VDC (FLY 8)
1.21
SERVICE INTLK ON +24VDC (FLY 11)
1.7
SERVICE INTLK ON +24VDC (FLY 2)
1.20

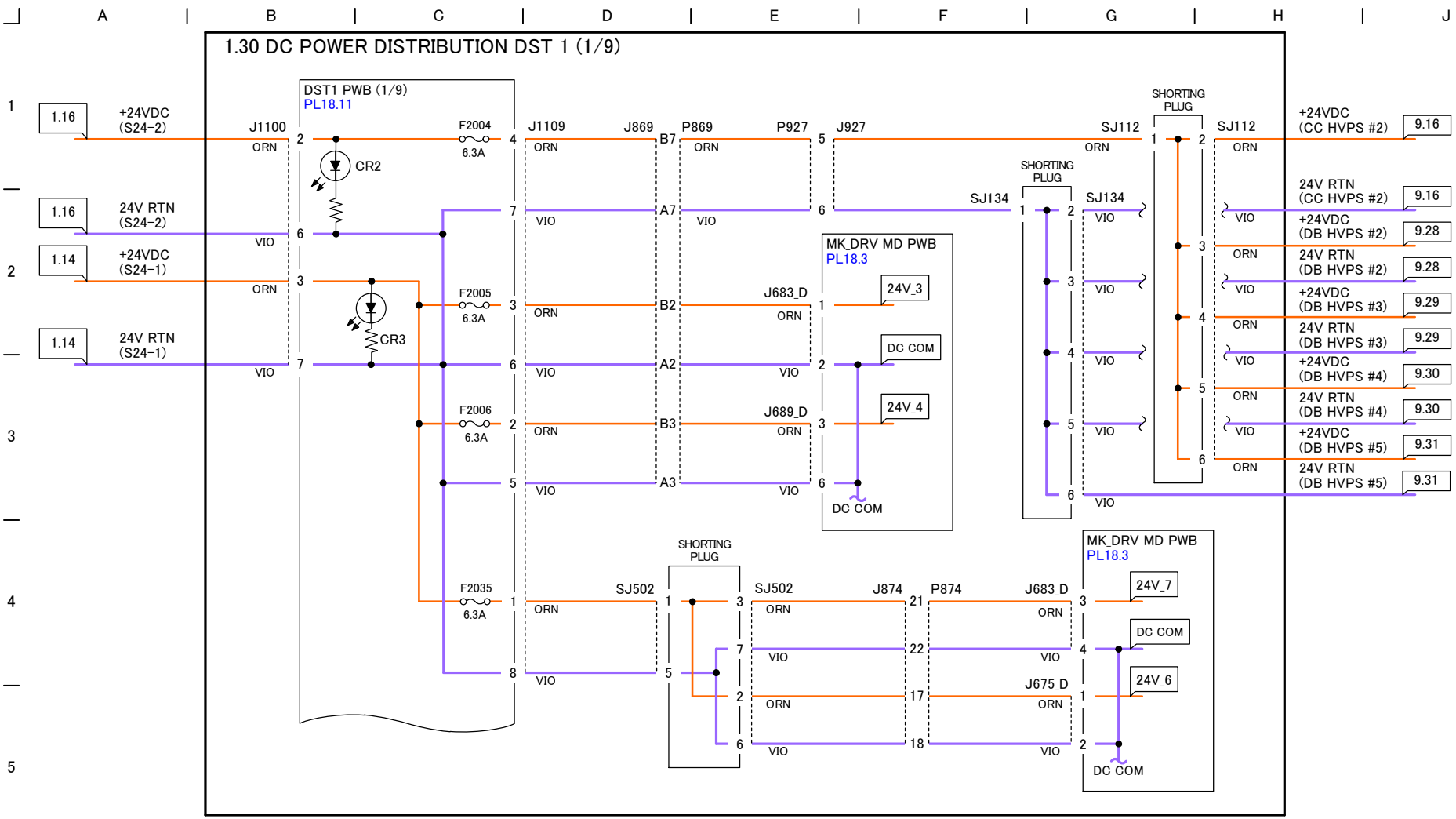
j0cx730126


1.27 INTERLOCK SWITCHING (3/5)
1.8
+24V SQ INTLK
DST 1 PWB
PL18.11
J1106
J1103
J993
P993
J881
P881
CC INTLK +24VDC
1.28
DISPENSE INTLK +24VDC
1.29
SHORTING PLUG
SJ131
J928
P928
J968
P968
J25FS
J26FS
BGM INTLK SWITCH 2
PL9.5
PH_1 MD PWB
PL18.2
DC COM
TRAY 1 INTLK SWITCH
PL10.17
J971
P971
J251A1
J251B1
J251A2
J251B2
J674_H1
J680_H1
J679_H1
DC330 [007-113]
CLOSED (L)+5VDC
+5VDC
PH_2 MD PWB
PL18.2
TRAY 2 INTLK SWITCH
PL10.17
J972
P972
J252A1
J252B1
J252A2
J252B2
J674_H2
J678_H2
J679_H2
DC330 [007-136]
FLY#7
BGM INTLK 2 ON +24VDC
1.19
FLY#6
TRAY 1 INTLK ON +24VDC
1.18
FLY#5
TRAY 2 INTLK ON +24VDC
1.17
NOTE:
1 To comply with the new safety standards, C13, the output of this signal is turned Off when a fail occurs. For details, see CH1.83 Power Management.
j0cx730127

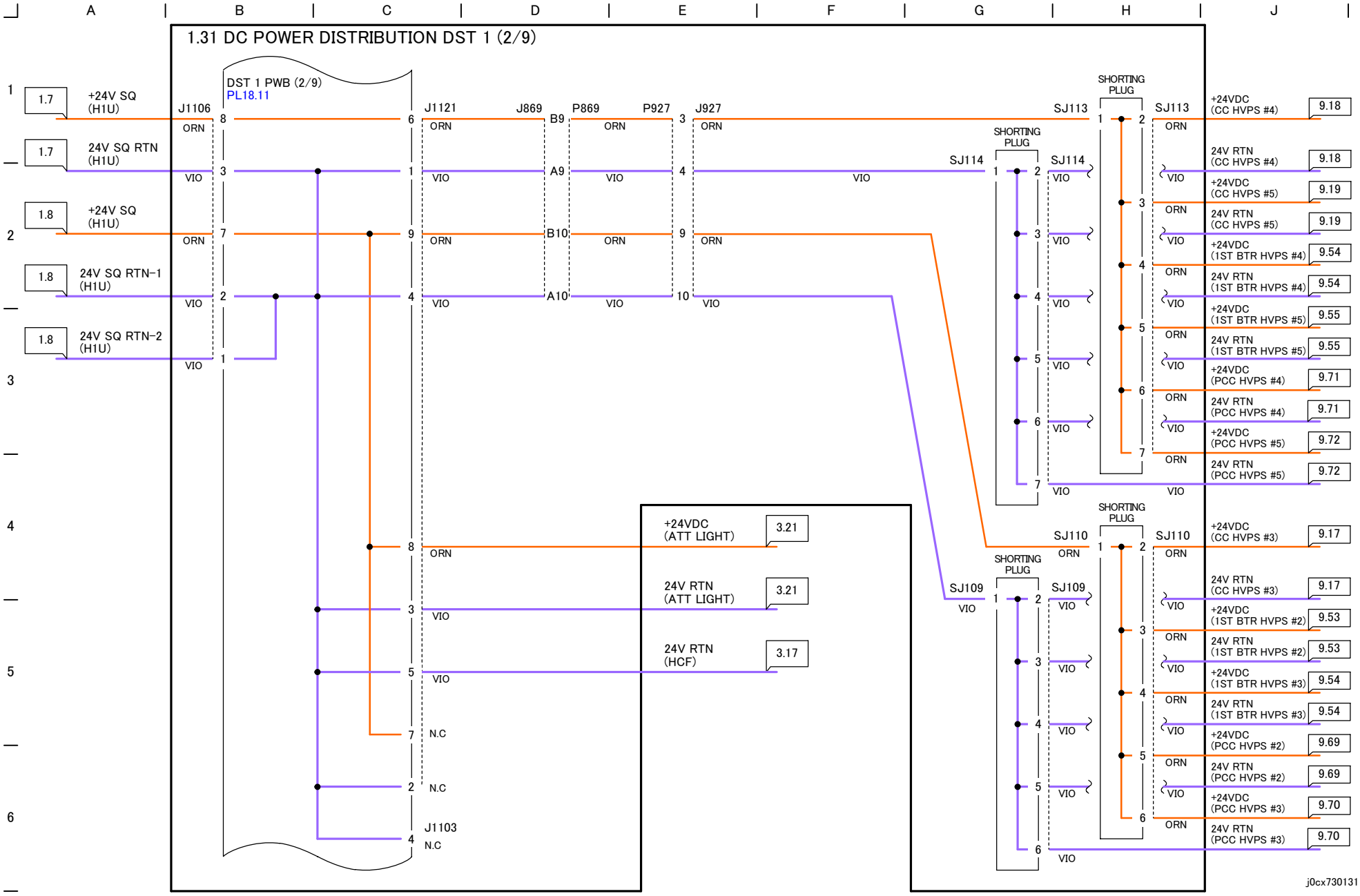

1.28 INTERLOCK SWITCHING (4/5)
4C M/C
J8551
JUMPER WIRE
N.C
BLU
1.27
CC INTLK +24VDC
CC INTLK SW # 1 PL5.7
CC INTLK SW # 2 PL5.7
CC INTLK SW # 3 PL5.7
CC INTLK SW # 4 PL5.7
CC INTLK SW # 5 PL5.7
CC INTLK SW # 6 PL5.7
COM
N.O
MK_EPG 1 MD PWB PL18.3
+5VDC
DC COM
091-317
091-910
091-318
091-911
091-319
091-912
091-320
091-913
091-321
091-914
091-322
091-915
DC330[009-150] CC SET (L)+24VDC
DC330[009-151] CC SET (L)+24VDC
DC330[009-152] CC SET (L)+24VDC
DC330[009-153] CC SET (L)+24VDC
DC330[009-154] CC SET (L)+24VDC
DC330[009-155] CC SET (L)+24VDC
J663_X1
BGM INTLK SWITCH 1 PL9.5
BGM INTLK 1 +24VDC ON
1.22
4C M/C
P8556
JUMPER WIRE
j0cx730128

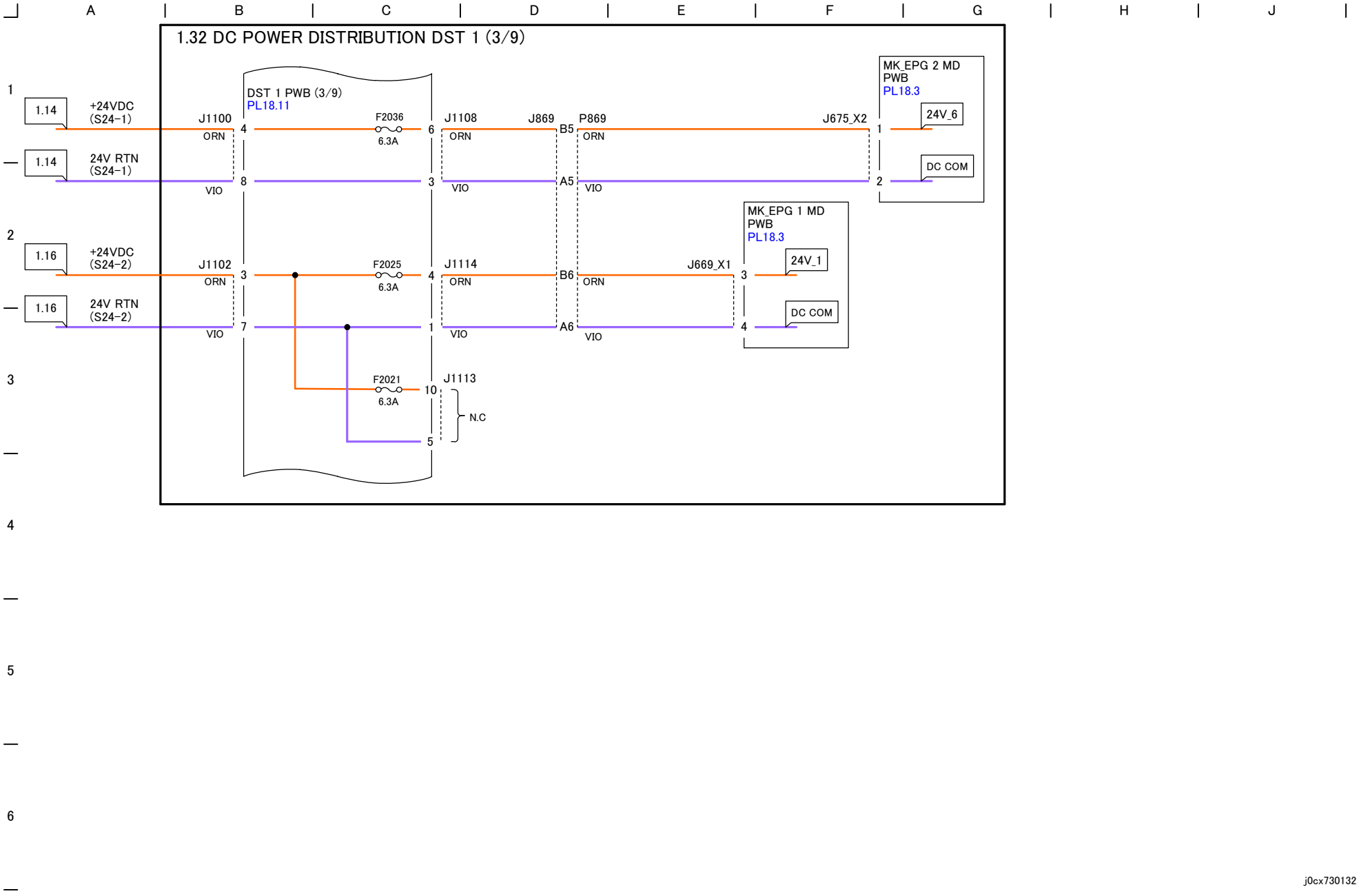

1.29 INTERLOCK SWITCHING (5/5)
1.27
DISPENSE INTLK +24VDC
LH DISPENSE COVER INTLK SWITCH PL18.6
P930
J930
J251_L1
J251_L2
YEL
RH DISPENSE COVER INTLK SWITCH PL18.6
P931
J931
J251_R1
J251_R2
P881
J881
B8
B7
BLU
DISPENSE COVER INTLK +24VDC (FLY11)
1.7
MK_EPG 1 MD PWB PL18.3
DC COM
B3
J667_X1
J151
IBT DRAWER INTLK SWITCH PL6.18
DC330 009-209
INTLK CLOSED (L)+5VDC
B2
+5VDC
094-300
FAIL CODE
093-940
Toner Cartridge Exchange Time Over
094-300
IBT Interlock Open

j0cx730129


1.30 DC POWER DISTRIBUTION DST 1 (1/9)
DST1 PWB (1/9)
PL18.11
1.16
+24VDC (S24-2)
1.16
24V RTN (S24-2)
1.14
+24VDC (S24-1)
1.14
24V RTN (S24-1)
J1100
F2004
6.3A
CR2
F2005
6.3A
CR3
F2006
6.3A
F2035
6.3A
J1109
J869
P869
P927
J927
SJ112
SHORTING PLUG
SJ134
SHORTING PLUG
MK_DRV MD PWB
PL18.3
24V_3
DC COM
24V_4
DC COM
J683_D
J689_D
SJ502
SHORTING PLUG
J874
P874
MK_DRV MD PWB
PL18.3
24V_7
DC COM
24V_6
DC COM
J683_D
J675_D
+24VDC (CC HVPS #2) 9.16
24V RTN (CC HVPS #2) 9.16
+24VDC (DB HVPS #2) 9.28
24V RTN (DB HVPS #2) 9.28
+24VDC (DB HVPS #3) 9.29
24V RTN (DB HVPS #3) 9.29
+24VDC (DB HVPS #4) 9.30
24V RTN (DB HVPS #4) 9.30
+24VDC (DB HVPS #5) 9.31
24V RTN (DB HVPS #5) 9.31
ORN
VIO

j0cx730130


1.31 DC POWER DISTRIBUTION DST 1 (2/9)
DST 1 PWB (2/9)
PL18.11
1.7 +24V SQ (H1U)
1.7 24V SQ RTN (H1U)
1.8 +24V SQ (H1U)
1.8 24V SQ RTN-1 (H1U)
1.8 24V SQ RTN-2 (H1U)
J1106
J1121
J869
P869
P927
J927
SJ113
SJ114
SJ110
SJ109
SHORTING PLUG
+24VDC (CC HVPS #4) 9.18
24V RTN (CC HVPS #4) 9.18
+24VDC (CC HVPS #5) 9.19
24V RTN (CC HVPS #5) 9.19
+24VDC (1ST BTR HVPS #4) 9.54
24V RTN (1ST BTR HVPS #4) 9.54
+24VDC (1ST BTR HVPS #5) 9.55
24V RTN (1ST BTR HVPS #5) 9.55
+24VDC (PCC HVPS #4) 9.71
24V RTN (PCC HVPS #4) 9.71
+24VDC (PCC HVPS #5) 9.72
24V RTN (PCC HVPS #5) 9.72
+24VDC (CC HVPS #3) 9.17
24V RTN (CC HVPS #3) 9.17
+24VDC (1ST BTR HVPS #2) 9.53
24V RTN (1ST BTR HVPS #2) 9.53
+24VDC (1ST BTR HVPS #3) 9.54
24V RTN (1ST BTR HVPS #3) 9.54
+24VDC (PCC HVPS #2) 9.69
24V RTN (PCC HVPS #2) 9.69
+24VDC (PCC HVPS #3) 9.70
24V RTN (PCC HVPS #3) 9.70
+24VDC (ATT LIGHT) 3.21
24V RTN (ATT LIGHT) 3.21
24V RTN (HCF) 3.17
N.C
J1103
j0cx730131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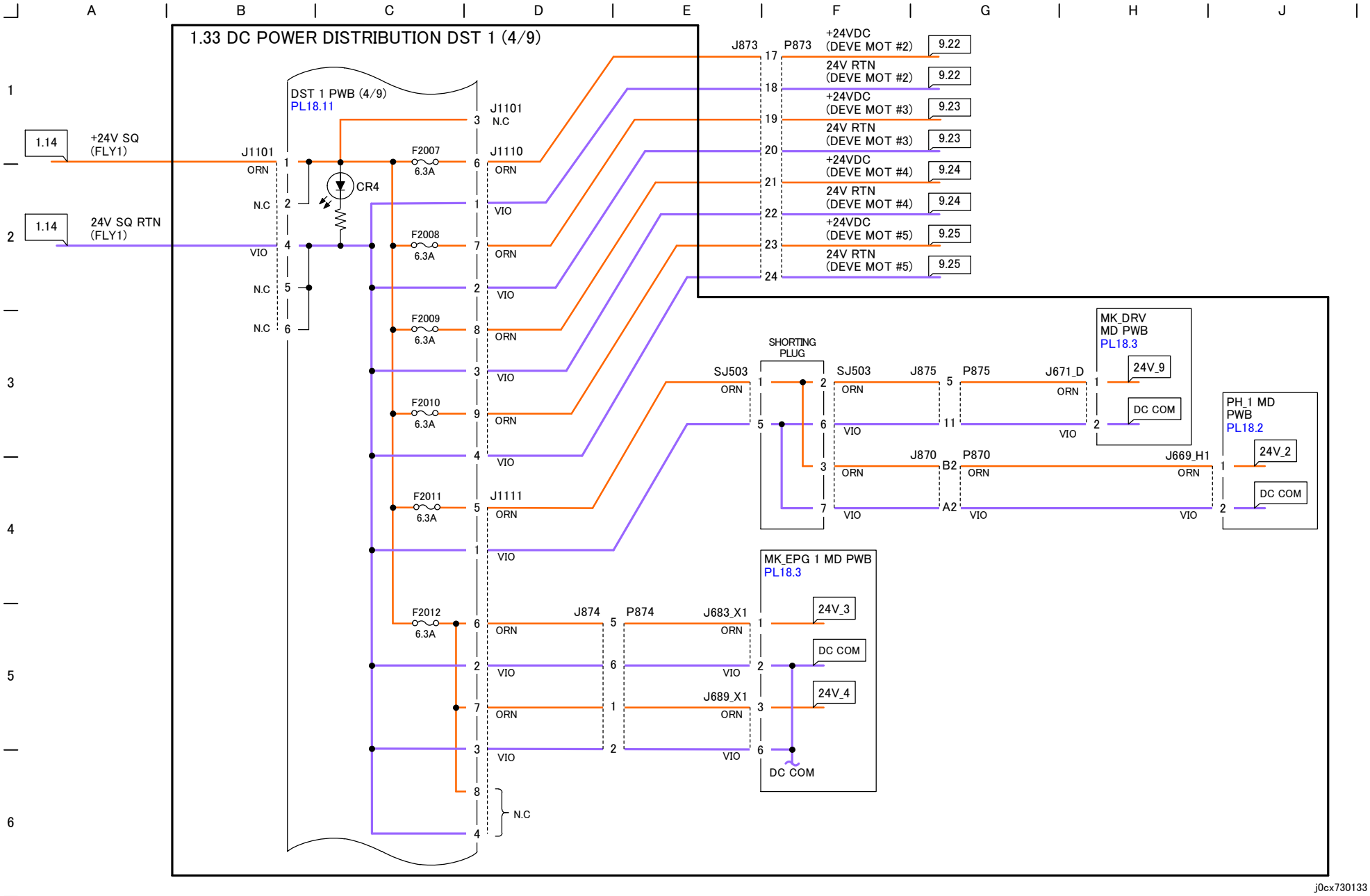
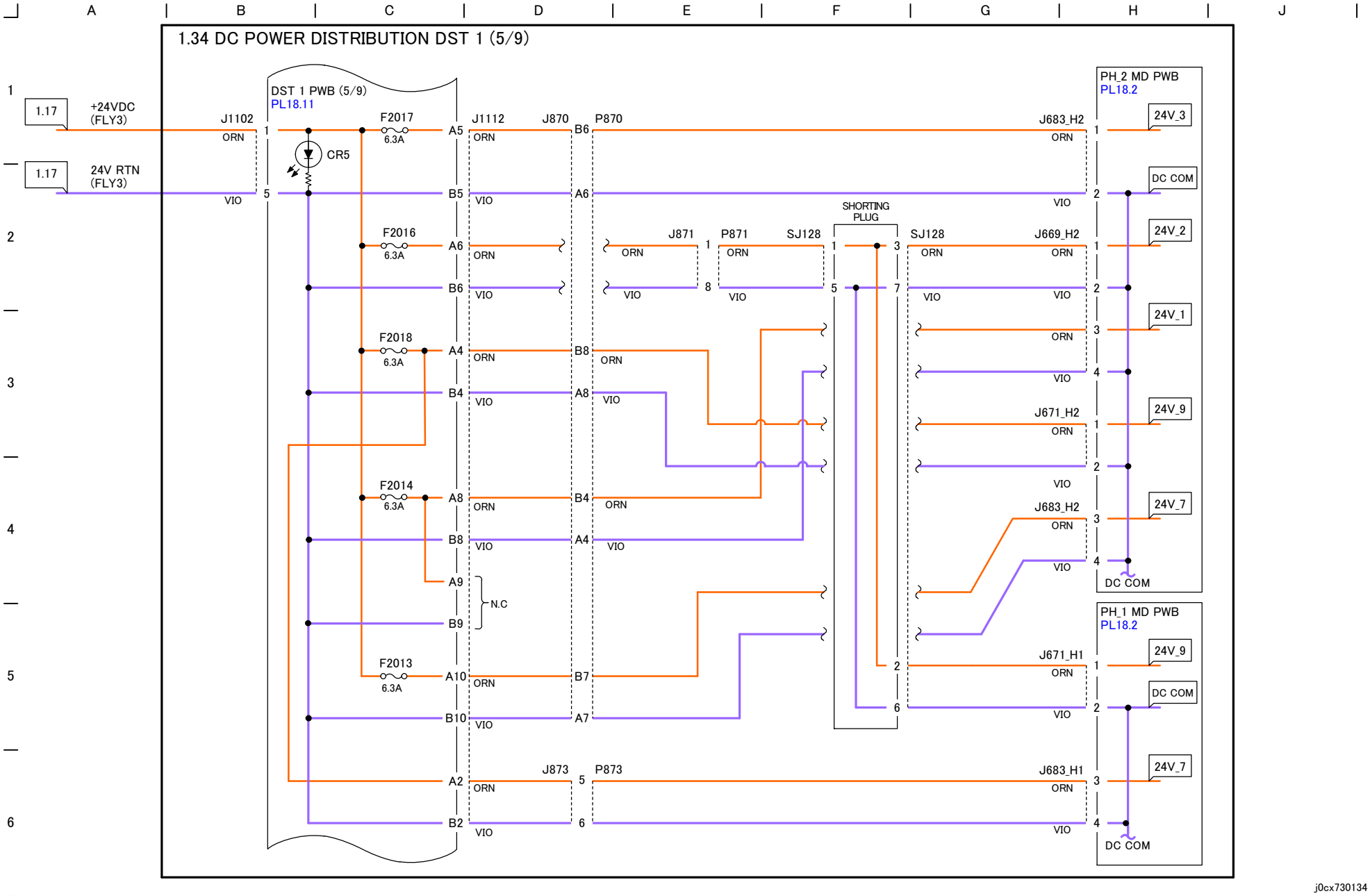
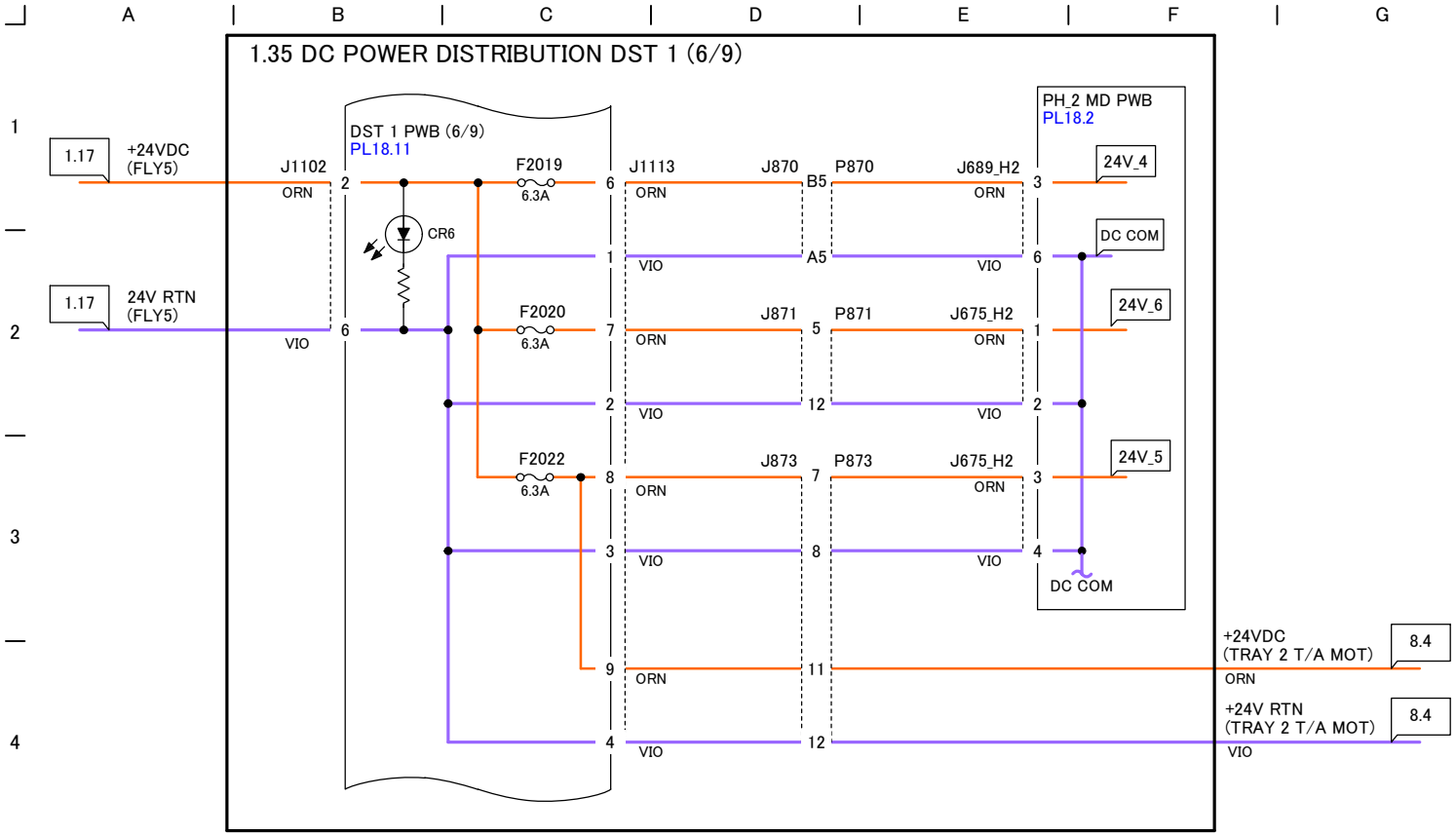
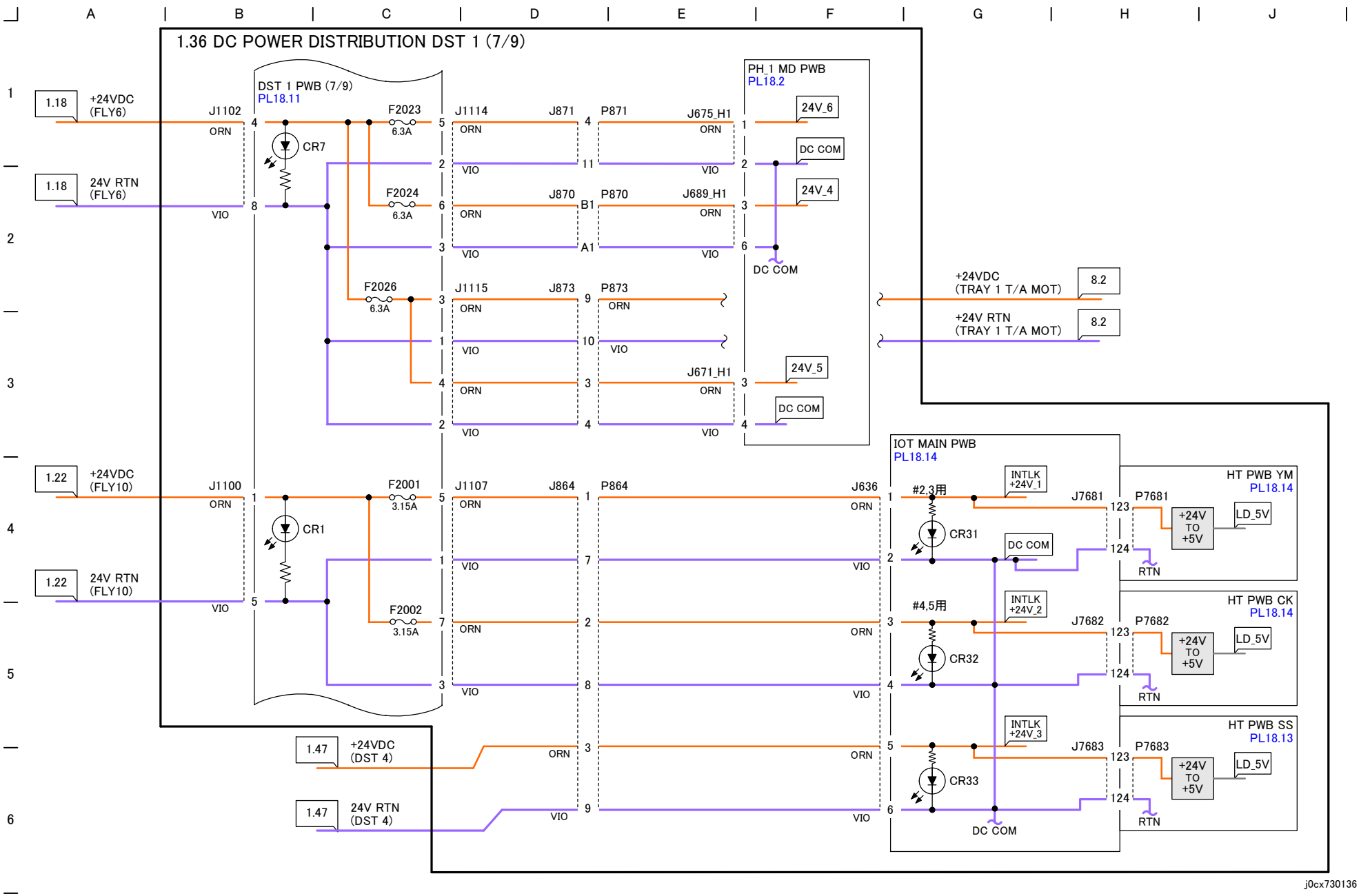
1.32 DC POWER DISTRIBUTION DST 1 (3/9)
DST 1 PWB (3/9)
PL18.11
1.14
+24VDC
(S24-1)
1.14
24V RTN
(S24-1)
1.16
+24VDC
(S24-2)
1.16
24V RTN
(S24-2)
J1100
ORN
4
8
VIO
F2036
6.3A
J1108
ORN
6
3
VIO
J869
B5
A5
P869
ORN
VIO
J675_X2
1
2
MK_EPG 2 MD
PWB
PL18.3
24V_6
DC COM
J1102
ORN
3
7
VIO
F2025
6.3A
J1114
ORN
4
1
VIO
B6
A6
ORN
VIO
J669_X1
3
4
MK_EPG 1 MD
PWB
PL18.3
24V_1
DC COM
F2021
6.3A
J1113
10
5
N.C

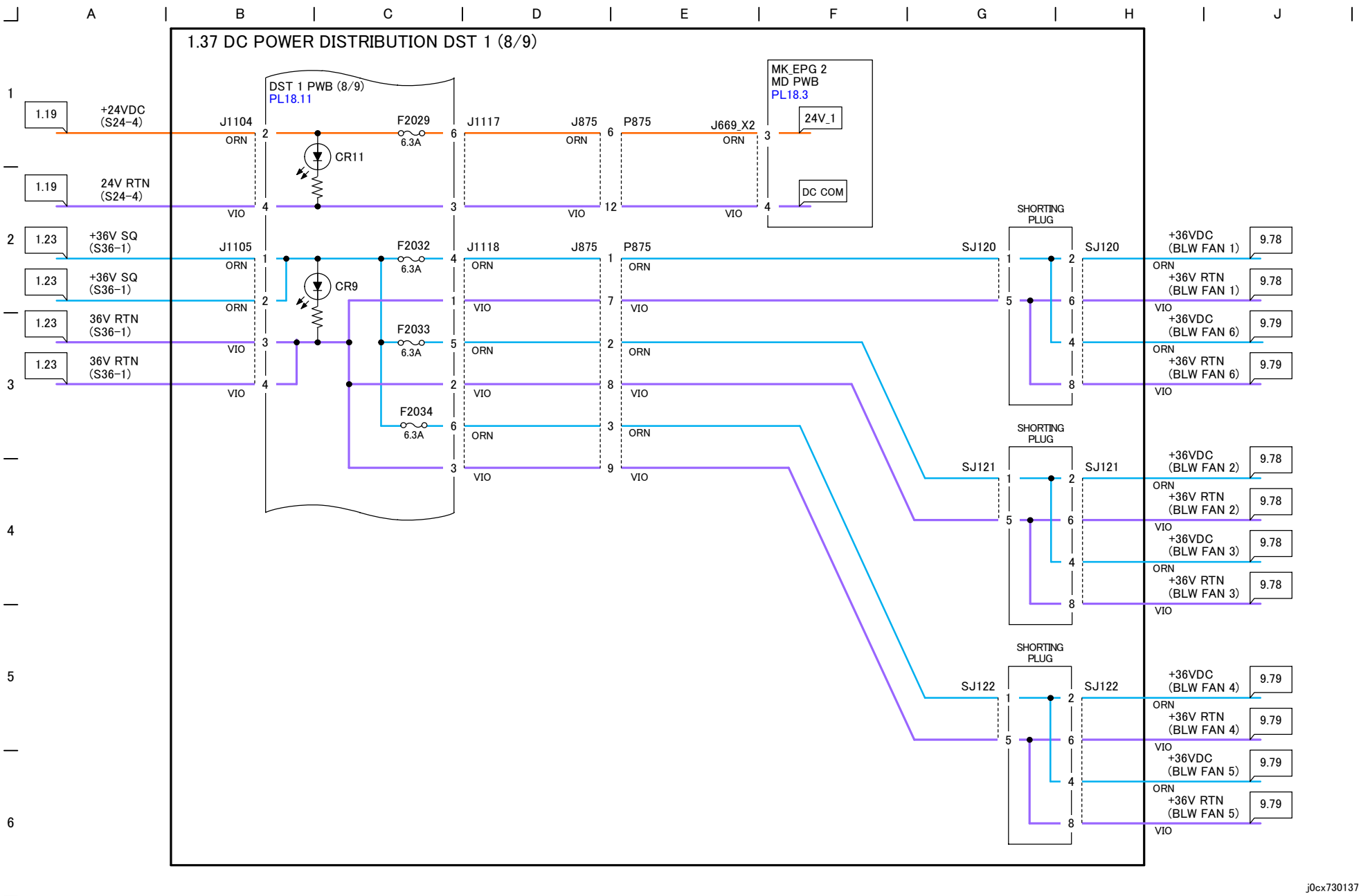

1.33 DC POWER DISTRIBUTION DST 1 (4/9)
DST 1 PWB (4/9)
PL18.11
1.14
+24V SQ (FLY1)
1.14
24V SQ RTN (FLY1)
J1101
CR4
F2007
6.3A
F2008
6.3A
F2009
6.3A
F2010
6.3A
F2011
6.3A
F2012
6.3A
J1110
J1111
J1101
N.C
J873
P873
+24VDC (DEVE MOT #2)
24V RTN (DEVE MOT #2)
+24VDC (DEVE MOT #3)
24V RTN (DEVE MOT #3)
+24VDC (DEVE MOT #4)
24V RTN (DEVE MOT #4)
+24VDC (DEVE MOT #5)
24V RTN (DEVE MOT #5)
9.22
9.23
9.24
9.25
SHORTING PLUG
SJ503
J875
P875
J671_D
MK_DRV MD PWB
PL18.3
24V_9
DC COM
PH_1 MD PWB
PL18.2
24V_2
J870
P870
J669_H1
J874
P874
J683_X1
J689_X1
MK_EPG 1 MD PWB
PL18.3
24V_3
24V_4
DC COM
ORN
VIO
j0cx730133

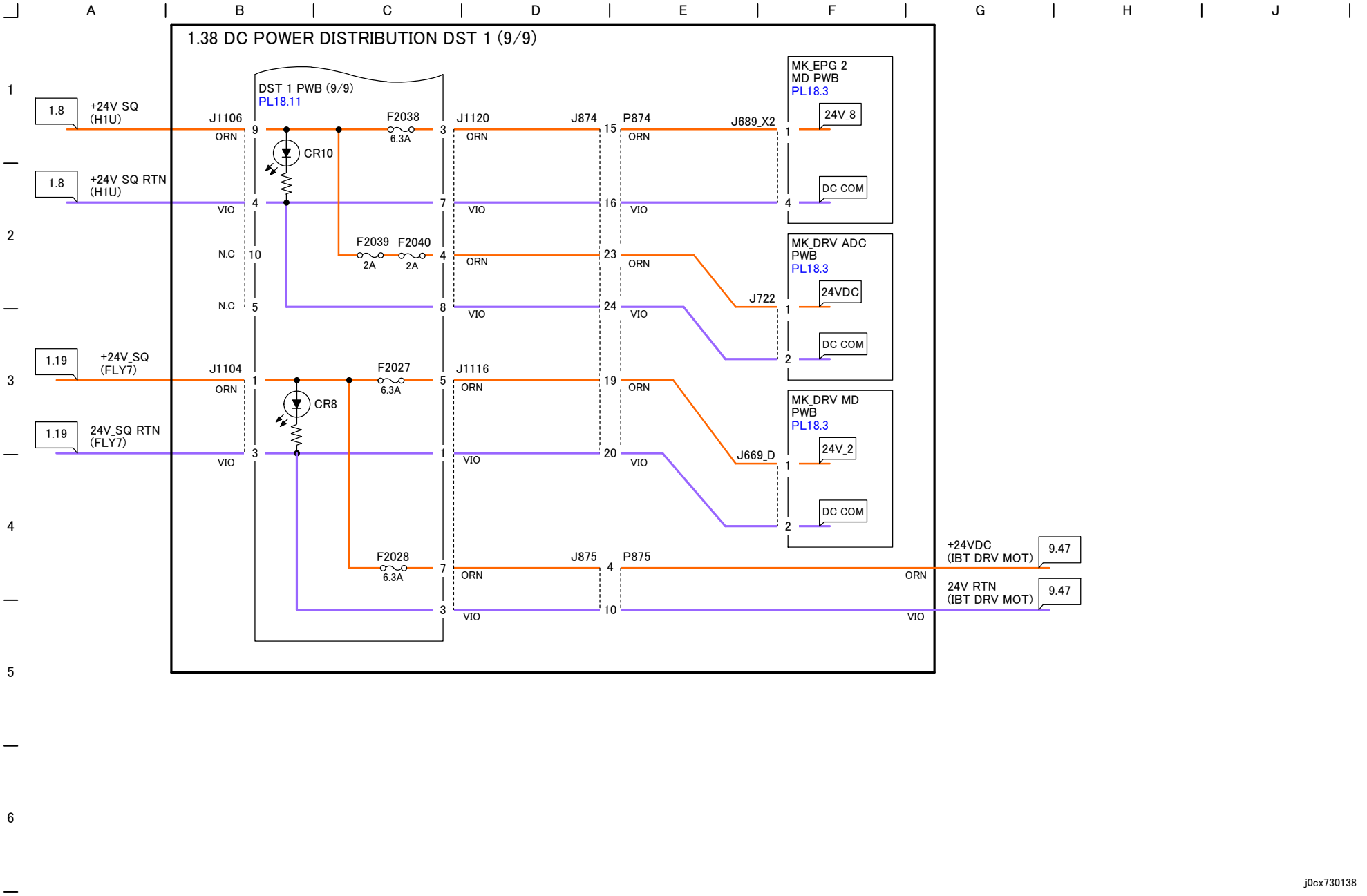

1.34 DC POWER DISTRIBUTION DST 1 (5/9)
DST 1 PWB (5/9)
PL18.11
1.17
+24VDC (FLY3)
1.17
24V RTN (FLY3)
J1102
ORN
VIO
CR5
F2017
6.3A
F2016
6.3A
F2018
6.3A
F2014
6.3A
F2013
6.3A
J1112
J870
P870
J871
P871
SJ128
SHORTING PLUG
J683_H2
J669_H2
J671_H2
J671_H1
J683_H1
J873
P873
N.C
PH_2 MD PWB
PL18.2
PH_1 MD PWB
PL18.2
24V_3
DC COM
24V_2
24V_1
24V_9
24V_7
j0cx730134


1.35 DC POWER DISTRIBUTION DST 1 (6/9)
DST 1 PWB (6/9)
PL18.11
PH_2 MD PWB
PL18.2
1.17
+24VDC
(FLY5)
1.17
24V RTN
(FLY5)
J1102
F2019
6.3A
F2020
6.3A
F2022
6.3A
CR6
J1113
J870
P870
J689_H2
J871
P871
J675_H2
J873
P873
J675_H2
24V_4
DC COM
24V_6
24V_5
DC COM
+24VDC
(TRAY 2 T/A MOT)
8.4
+24V RTN
(TRAY 2 T/A MOT)
8.4
ORN
VIO

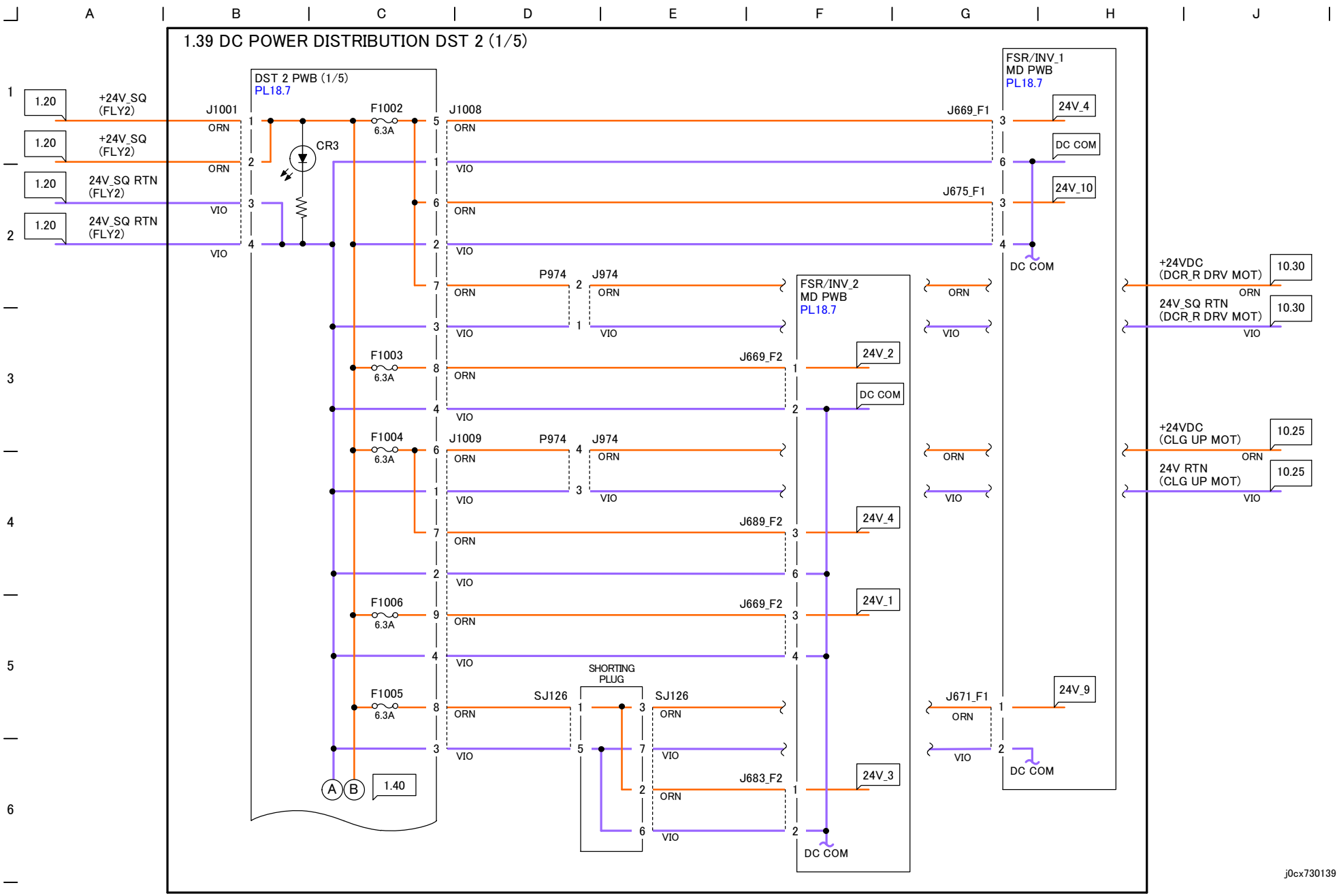
j0cx730135

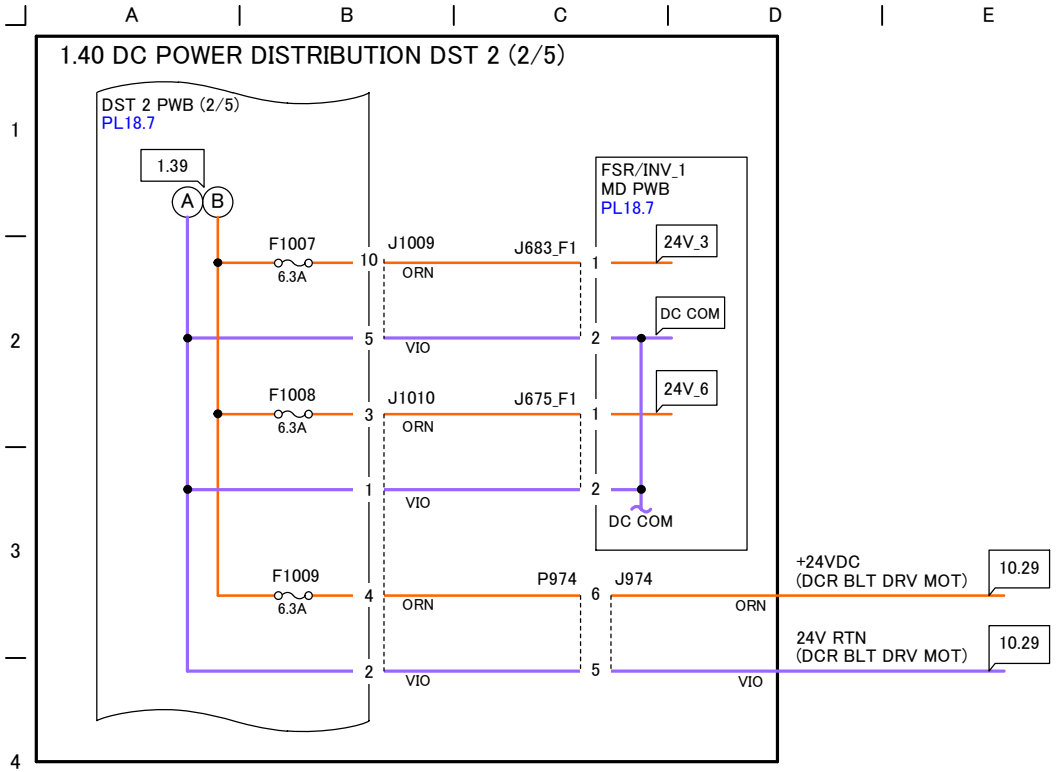

1.36 DC POWER DISTRIBUTION DST 1 (7/9)
DST 1 PWB (7/9)
PL18.11
PH_1 MD PWB
PL18.2
IOT MAIN PWB
PL18.14
HT PWB YM
PL18.14
HT PWB CK
PL18.14
HT PWB SS
PL18.13
1.18 +24VDC (FLY6)
1.18 24V RTN (FLY6)
1.22 +24VDC (FLY10)
1.22 24V RTN (FLY10)
1.47 +24VDC (DST 4)
1.47 24V RTN (DST 4)
+24VDC (TRAY 1 T/A MOT)
+24V RTN (TRAY 1 T/A MOT)
8.2
J1102
J1100
J1114
J1115
J1107
F2023
F2024
F2026
F2001
F2002
6.3A
3.15A
CR7
CR1
CR31
CR32
CR33
J871
P871
J675_H1
J870
P870
J689_H1
J873
P873
J671_H1
J864
P864
J636
24V_6
DC COM
24V_4
24V_5
#2,3用
#4,5用
INTLK +24V_1
INTLK +24V_2
INTLK +24V_3
J7681
J7682
J7683
P7681
P7682
P7683
+24V TO +5V
LD_5V
RTN
ORN
VIO
j0cx730136


1.37 DC POWER DISTRIBUTION DST 1 (8/9)
DST 1 PWB (8/9)
PL18.11
MK_EPG 2
MD PWB
PL18.3
24V_1
DC COM
1.19
+24VDC
(S24-4)
1.19
24V RTN
(S24-4)
J1104
F2029
6.3A
CR11
J1117
J875
P875
J669_X2
ORN
VIO
1.23
+36V SQ
(S36-1)
1.23
+36V SQ
(S36-1)
1.23
36V RTN
(S36-1)
1.23
36V RTN
(S36-1)
J1105
F2032
6.3A
CR9
F2033
6.3A
F2034
6.3A
J1118
SHORTING
PLUG
SJ120
SJ121
SJ122
+36VDC
(BLW FAN 1)
+36V RTN
(BLW FAN 1)
+36VDC
(BLW FAN 6)
+36V RTN
(BLW FAN 6)
+36VDC
(BLW FAN 2)
+36V RTN
(BLW FAN 2)
+36VDC
(BLW FAN 3)
+36V RTN
(BLW FAN 3)
+36VDC
(BLW FAN 4)
+36V RTN
(BLW FAN 4)
+36VDC
(BLW FAN 5)
+36V RTN
(BLW FAN 5)
9.78
9.79
j0cx730137

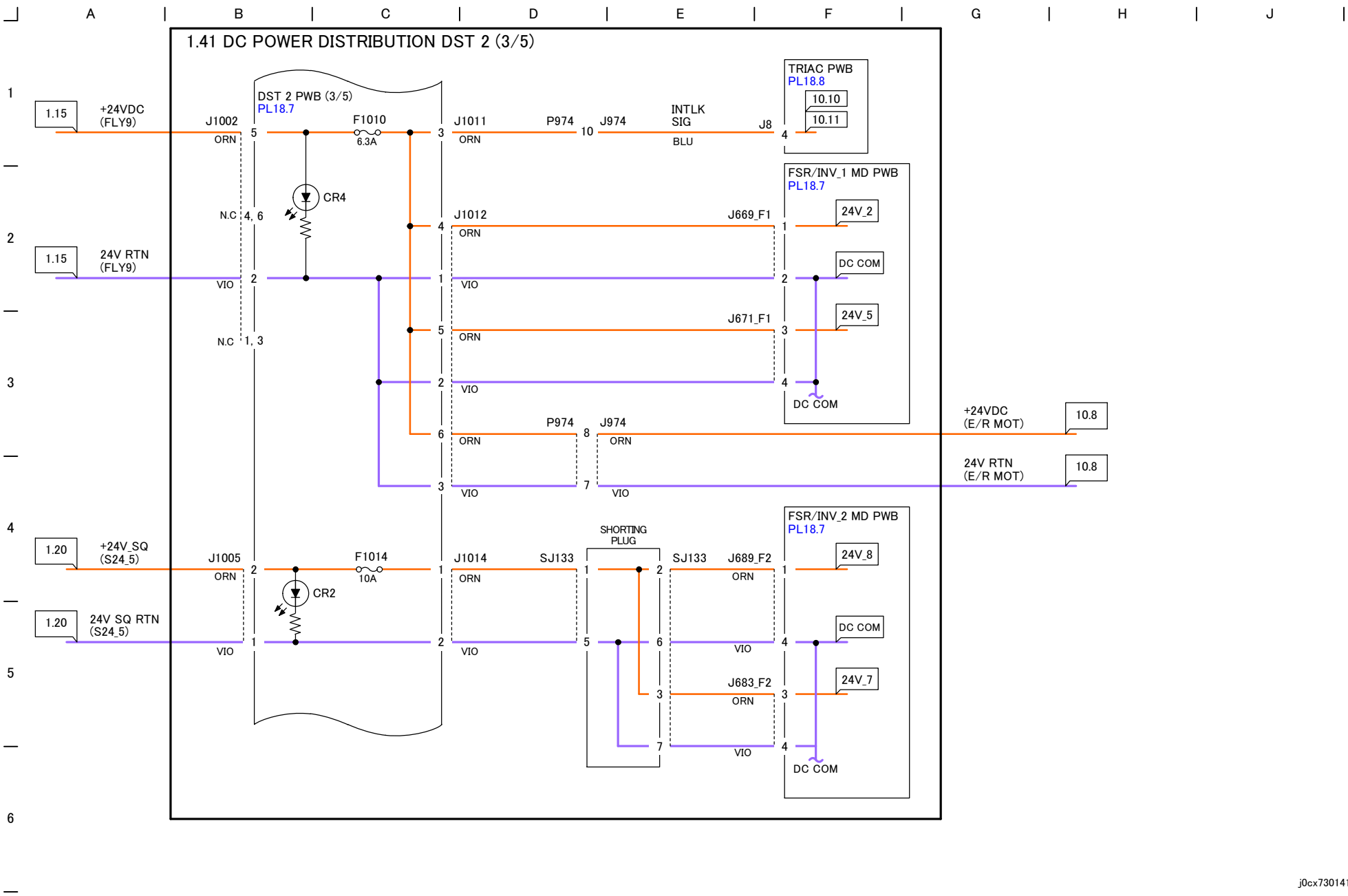

1.38 DC POWER DISTRIBUTION DST 1 (9/9)
DST 1 PWB (9/9)
PL18.11
1.8
+24V SQ
(H1U)
1.8
+24V SQ RTN
(H1U)
1.19
+24V_SQ
(FLY7)
1.19
24V_SQ RTN
(FLY7)
J1106
J1104
F2038
F2027
F2028
F2039
F2040
CR10
CR8
J1120
J1116
J875
J874
P874
P875
J689_X2
J722
J669_D
MK_EPG 2
MD PWB
PL18.3
24V_8
DC COM
MK_DRV ADC
PWB
PL18.3
24VDC
DC COM
MK_DRV MD
PWB
PL18.3
24V_2
DC COM
+24VDC
(IBT DRV MOT)
9.47
24V RTN
(IBT DRV MOT)
9.47
ORN
VIO
N.C
6.3A
2A

j0cx730138

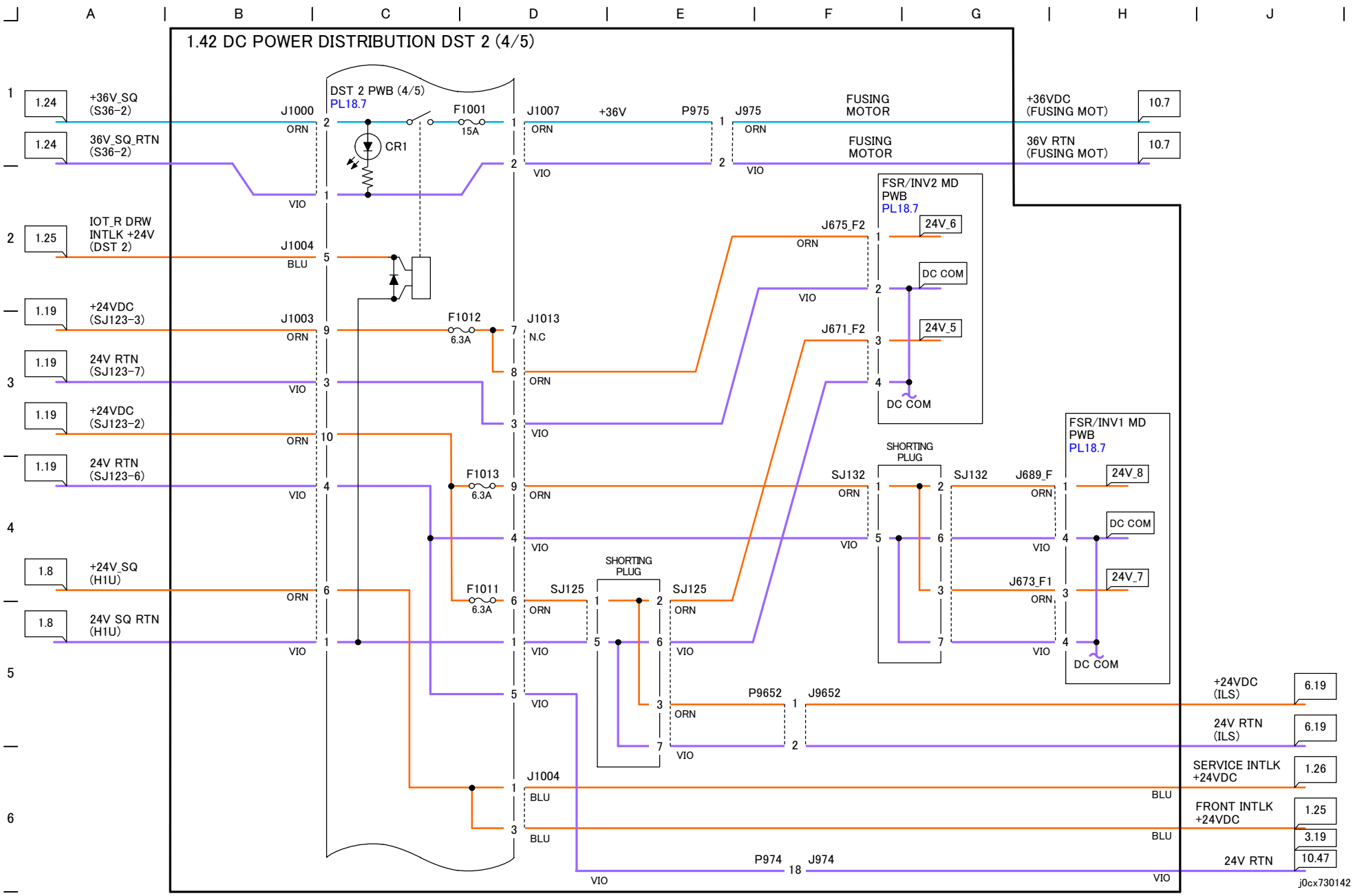

1.39 DC POWER DISTRIBUTION DST 2 (1/5)
DST 2 PWB (1/5)
PL18.7
FSR/INV_1
MD PWB
PL18.7
FSR/INV_2
MD PWB
PL18.7
1.20
+24V_SQ
(FLY2)
24V_SQ RTN
(FLY2)
J1001
J1008
J669_F1
J675_F1
J671_F1
J669_F2
J689_F2
J683_F2
J1009
P974
J974
SJ126
F1002
F1003
F1004
F1005
F1006
6.3A
CR3
SHORTING
PLUG
24V_4
DC COM
24V_10
24V_2
24V_1
24V_9
24V_3
+24VDC
(DCR_R DRV MOT)
24V_SQ RTN
(DCR_R DRV MOT)
+24VDC
(CLG UP MOT)
24V RTN
(CLG UP MOT)
10.30
10.25
1.40
ORN
VIO
j0cx730139

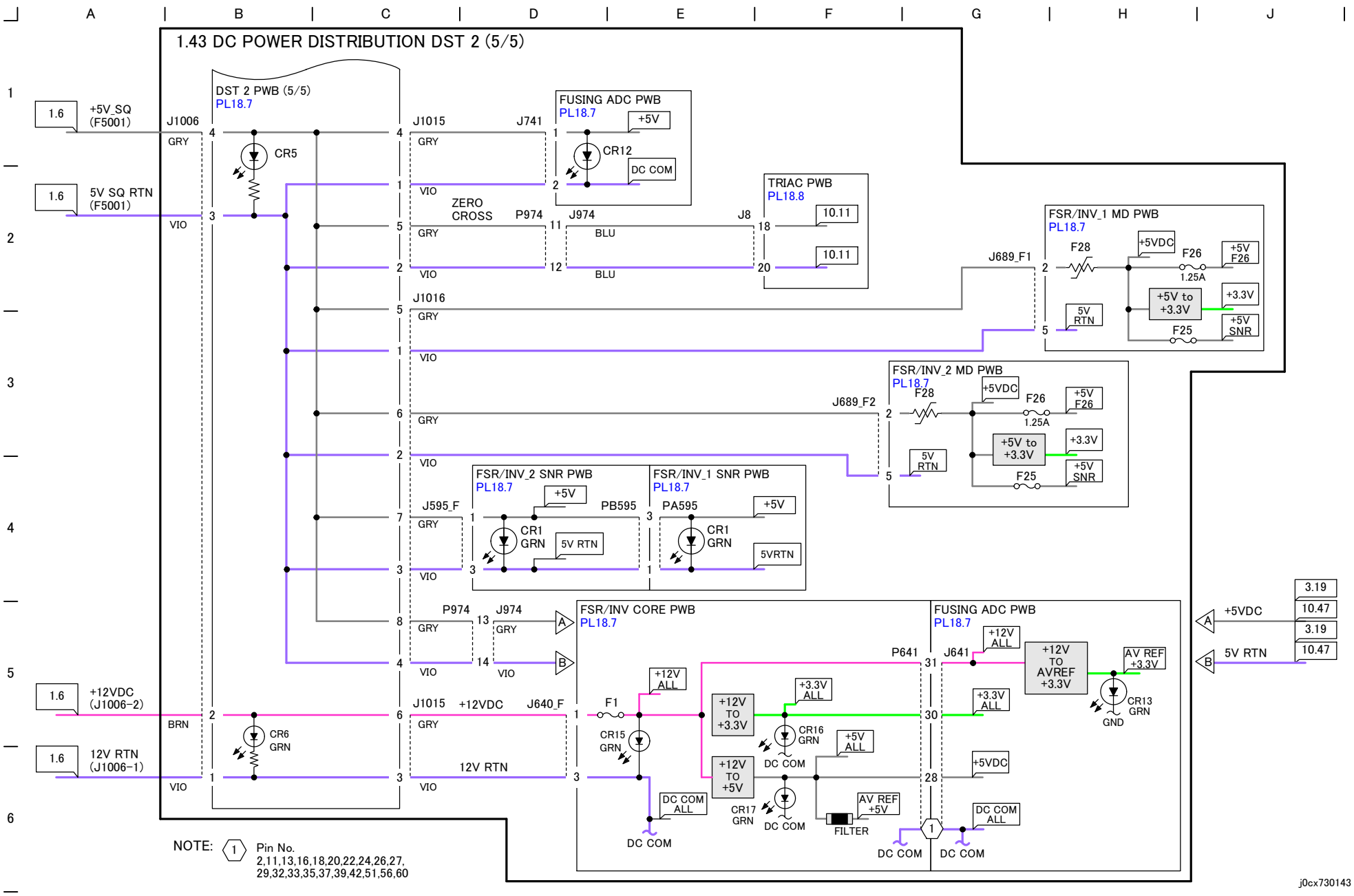

1.40 DC POWER DISTRIBUTION DST 2 (2/5)
DST 2 PWB (2/5)
PL18.7
1.39
A
B
FSR/INV_1
MD PWB
PL18.7
F1007
6.3A
10
J1009
ORN
J683_F1
1
24V_3
5
VIO
2
DC COM
F1008
6.3A
3
J1010
ORN
J675_F1
1
24V_6
1
VIO
2
DC COM
F1009
6.3A
4
ORN
P974
6
J974
ORN
+24VDC
(DCR BLT DRV MOT)
10.29
2
VIO
5
VIO
24V RTN
(DCR BLT DRV MOT)
10.29

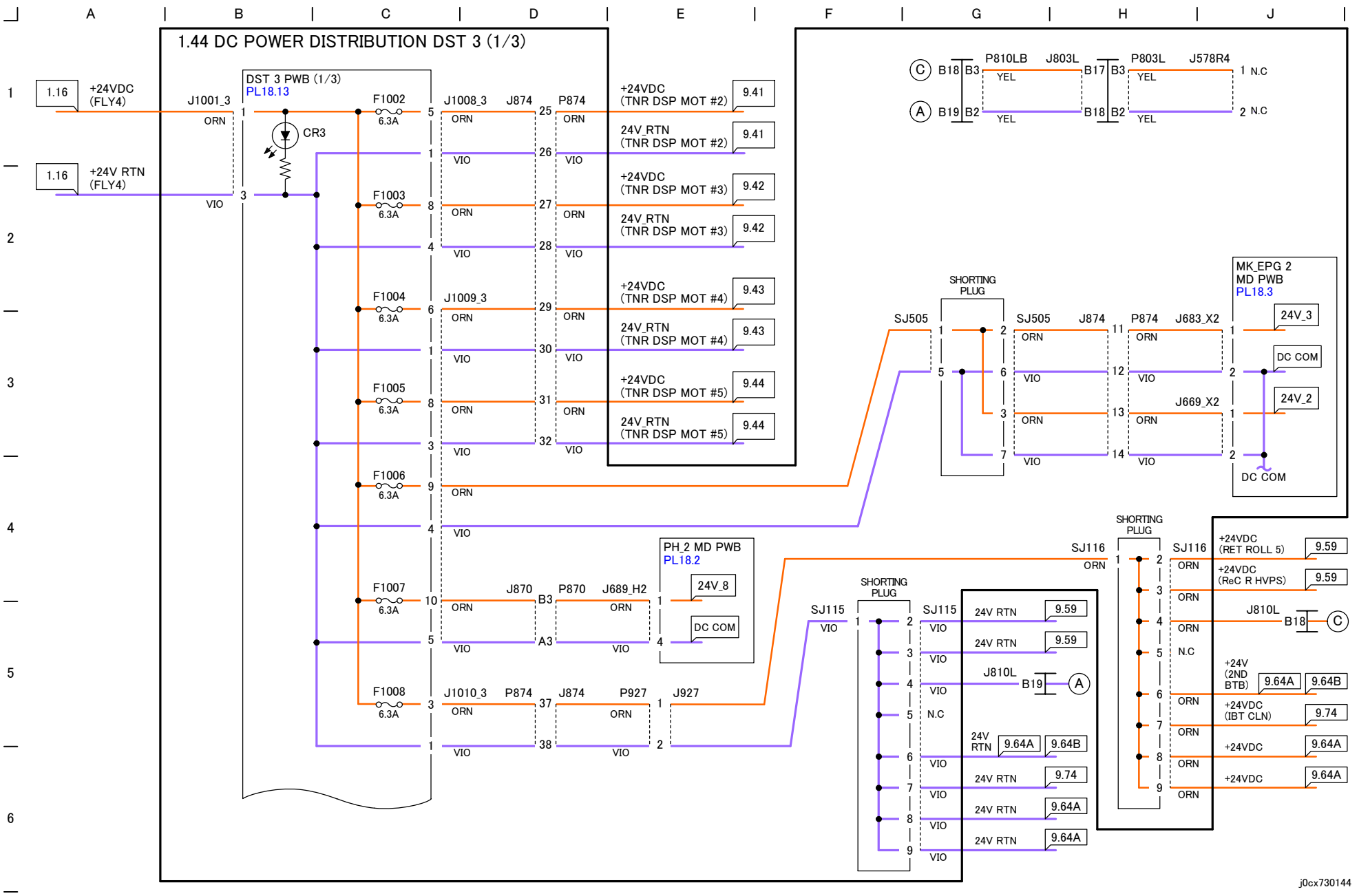
j0cx730140

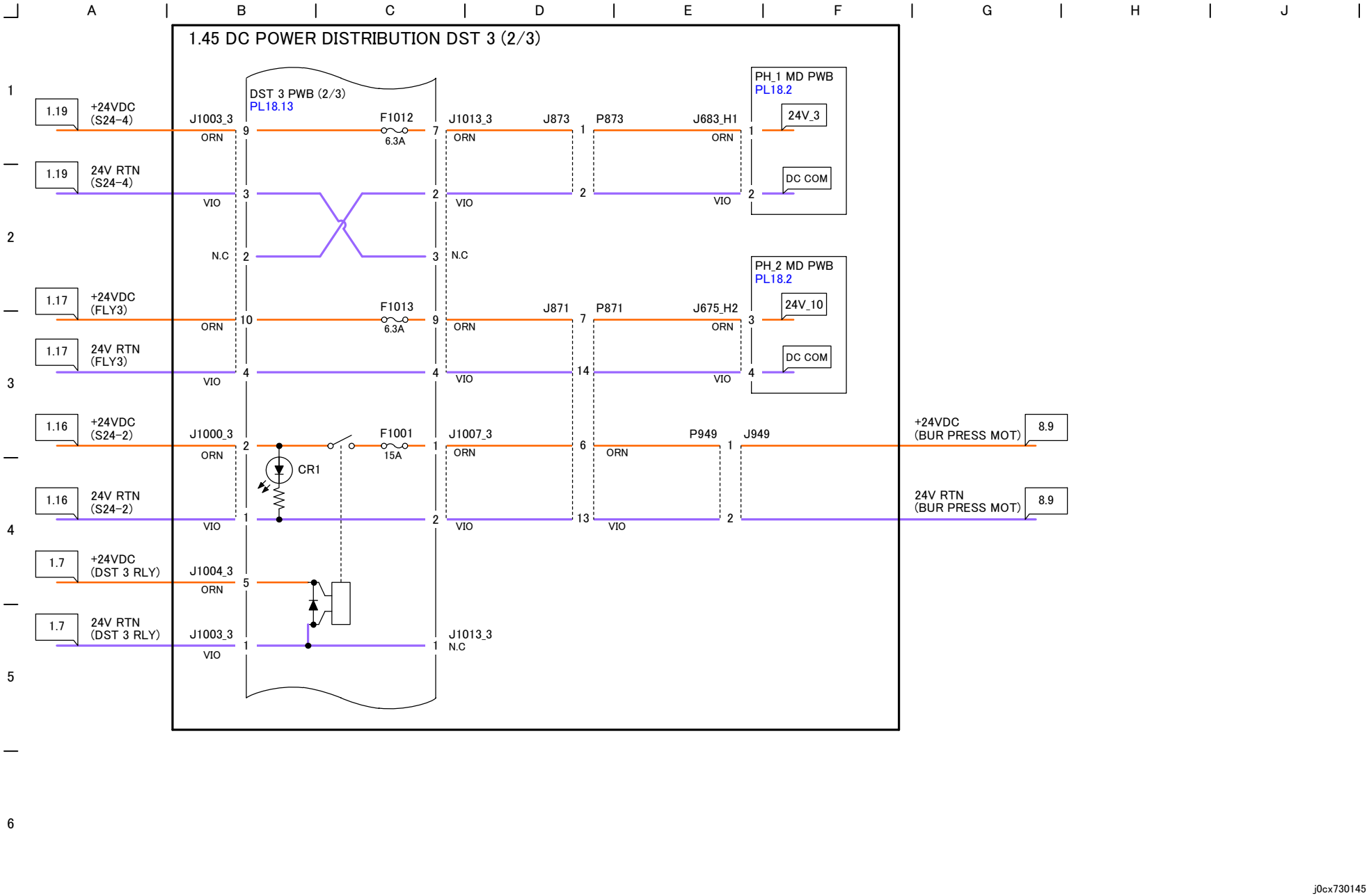

1.41 DC POWER DISTRIBUTION DST 2 (3/5)
DST 2 PWB (3/5)
PL18.7
1.15
+24VDC
(FLY9)
J1002
ORN
5
F1010
6.3A
3
J1011
ORN
P974
10
J974
INTLK
SIG
BLU
J8
4
TRIAC PWB
PL18.8
10.10
10.11
CR4
N.C
4, 6
FSR/INV_1 MD PWB
PL18.7
J1012
4
ORN
J669_F1
1
24V_2
1.15
24V RTN
(FLY9)
VIO
2
1
VIO
2
DC COM
24V_5
N.C
1, 3
5
ORN
J671_F1
3
2
VIO
4
DC COM
P974
J974
+24VDC
(E/R MOT)
10.8
6
ORN
8
ORN
24V RTN
(E/R MOT)
10.8
3
VIO
7
VIO
SHORTING
PLUG
FSR/INV_2 MD PWB
PL18.7
1.20
+24V_SQ
(S24_5)
J1005
ORN
2
F1014
10A
1
J1014
ORN
SJ133
1
2
SJ133
J689_F2
ORN
1
24V_8
CR2
1.20
24V SQ RTN
(S24_5)
VIO
1
2
VIO
5
6
VIO
4
DC COM
J683_F2
ORN
3
24V_7
3
7
VIO
4
DC COM

j0cx730141

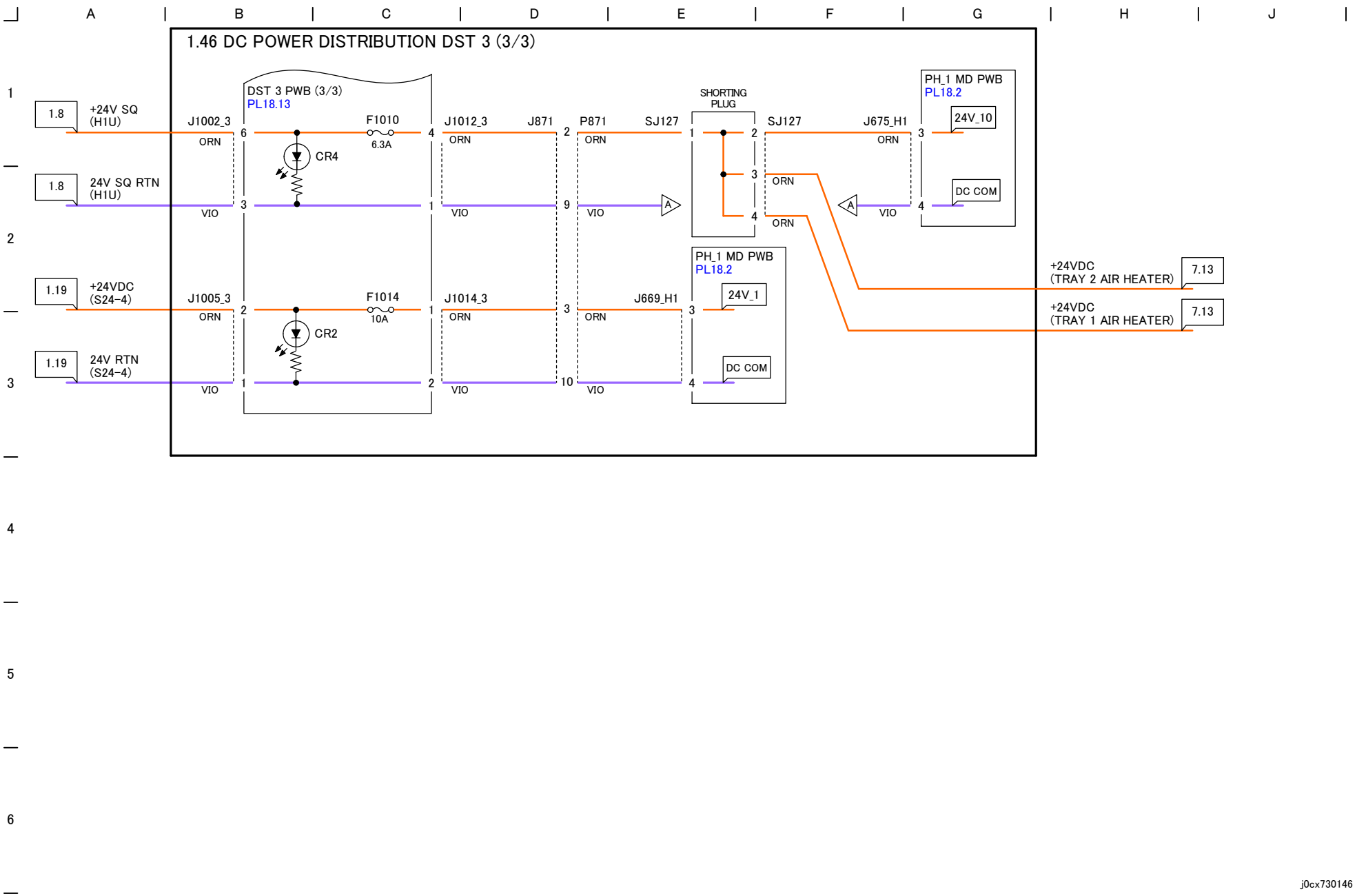

1.42 DC POWER DISTRIBUTION DST 2 (4/5)
DST 2 PWB (4/5)
PL18.7
1.24 +36V_SQ (S36-2)
1.24 36V_SQ_RTN (S36-2)
1.25 IOT_R DRW INTLK +24V (DST 2)
1.19 +24VDC (SJ123-3)
1.19 24V RTN (SJ123-7)
1.19 +24VDC (SJ123-2)
1.19 24V RTN (SJ123-6)
1.8 +24V_SQ (H1U)
1.8 24V SQ RTN (H1U)
J1000
J1003
J1004
F1001 15A
F1012 6.3A
F1013 6.3A
F1011 6.3A
CR1
J1007 +36V P975 J975
FUSING MOTOR
+36VDC (FUSING MOT) 10.7
36V RTN (FUSING MOT) 10.7
J1013 N.C
FSR/INV2 MD PWB
PL18.7
J675_F2
J671_F2
24V_6
DC COM
24V_5
DC COM
FSR/INV1 MD PWB
PL18.7
SHORTING PLUG
SJ132
J689_F
24V_8
DC COM
24V_7
J673_F1
DC COM
SHORTING PLUG
SJ125
SJ125
P9652 J9652
+24VDC (ILS) 6.19
24V RTN (ILS) 6.19
SERVICE INTLK +24VDC 1.26
FRONT INTLK +24VDC 1.25
3.19
P974 18 J974
24V RTN 10.47
j0cx730142


1.43 DC POWER DISTRIBUTION DST 2 (5/5)
DST 2 PWB (5/5)
PL18.7
1.6
+5V_SQ
(F5001)
1.6
5V SQ RTN
(F5001)
1.6
+12VDC
(J1006-2)
1.6
12V RTN
(J1006-1)
J1006
GRY
VIO
BRN
CR5
CR6
GRN
J1015
J741
FUSING ADC PWB
PL18.7
+5V
CR12
DC COM
ZERO
CROSS
P974
J974
J8
TRIAC PWB
PL18.8
10.11
10.11
BLU
J1016
J689_F1
J689_F2
FSR/INV_1 MD PWB
PL18.7
FSR/INV_2 MD PWB
PL18.7
F28
+5VDC
F26
1.25A
+5V
F26
+5V to
+3.3V
+3.3V
5V
RTN
+5V
SNR
F25
FSR/INV_2 SNR PWB
PL18.7
FSR/INV_1 SNR PWB
PL18.7
J595_F
PB595
PA595
CR1
GRN
5V RTN
5VRTN
FSR/INV CORE PWB
PL18.7
FUSING ADC PWB
PL18.7
P641
J641
+12V
ALL
+3.3V
ALL
+5V
ALL
+5VDC
+12V
TO
+3.3V
+12V
TO
+5V
+12V
TO
AVREF
+3.3V
AV REF
+3.3V
CR13
GRN
GND
CR15
GRN
CR16
GRN
CR17
GRN
DC COM
AV REF
+5V
FILTER
DC COM
ALL
F1
J640_F
12V RTN
+12VDC
3.19
10.47
3.19
10.47
+5VDC
5V RTN
NOTE:
Pin No.
2,11,13,16,18,20,22,24,26,27,
29,32,33,35,37,39,42,51,56,60
j0cx730143

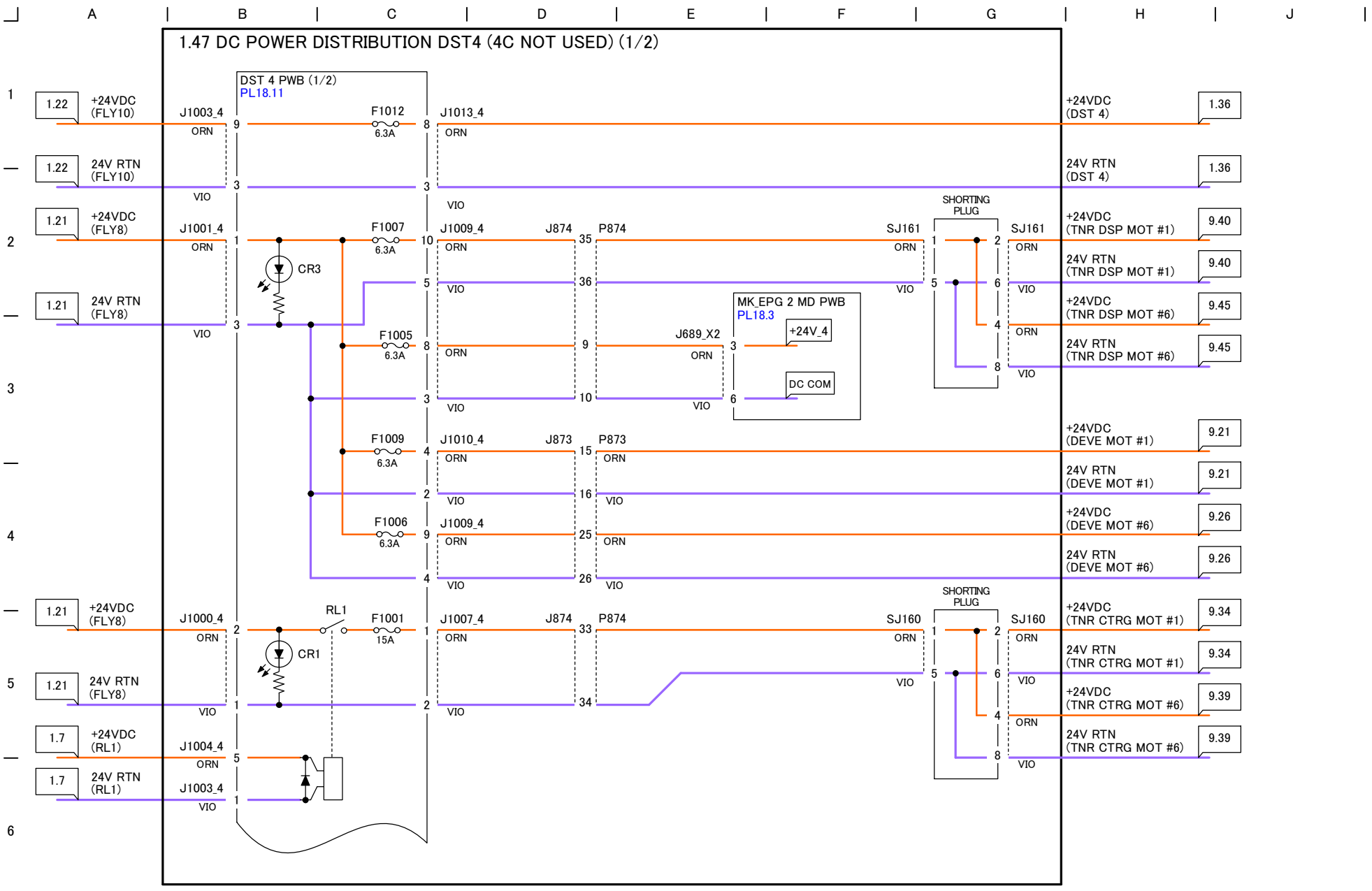

1.44 DC POWER DISTRIBUTION DST 3 (1/3)
DST 3 PWB (1/3)
PL18.13
1.16 +24VDC (FLY4)
1.16 +24V RTN (FLY4)
J1001_3
CR3
F1002 6.3A
F1003 6.3A
F1004 6.3A
F1005 6.3A
F1006 6.3A
F1007 6.3A
F1008 6.3A
J1008_3 J874 P874
J1009_3
J1010_3 P874 J874 P927 J927
+24VDC (TNR DSP MOT #2) 9.41
24V_RTN (TNR DSP MOT #2) 9.41
+24VDC (TNR DSP MOT #3) 9.42
24V_RTN (TNR DSP MOT #3) 9.42
+24VDC (TNR DSP MOT #4) 9.43
24V_RTN (TNR DSP MOT #4) 9.43
+24VDC (TNR DSP MOT #5) 9.44
24V_RTN (TNR DSP MOT #5) 9.44
PH_2 MD PWB
PL18.2
24V_8
DC COM
J870 P870 J689_H2
P810LB J803L P803L J578R4
B18 B3 B17 B3
B19 B2 B18 B2
YEL
1 N.C
2 N.C
SHORTING PLUG
SJ505 SJ505 J874 P874 J683_X2 J669_X2
MK_EPG 2 MD PWB
PL18.3
24V_3
DC COM
24V_2
SJ115 SJ115
24V RTN 9.59
J810L B19 A
24V RTN 9.64A 9.64B
24V RTN 9.74
24V RTN 9.64A
24V RTN 9.64A
SJ116 SJ116
+24VDC (RET ROLL 5) 9.59
+24VDC (ReC R HVPS) 9.59
J810L B18 C
N.C
+24V (2ND BTB) 9.64A 9.64B
+24VDC (IBT CLN) 9.74
+24VDC 9.64A
+24VDC 9.64A
ORN
VIO
j0cx730144

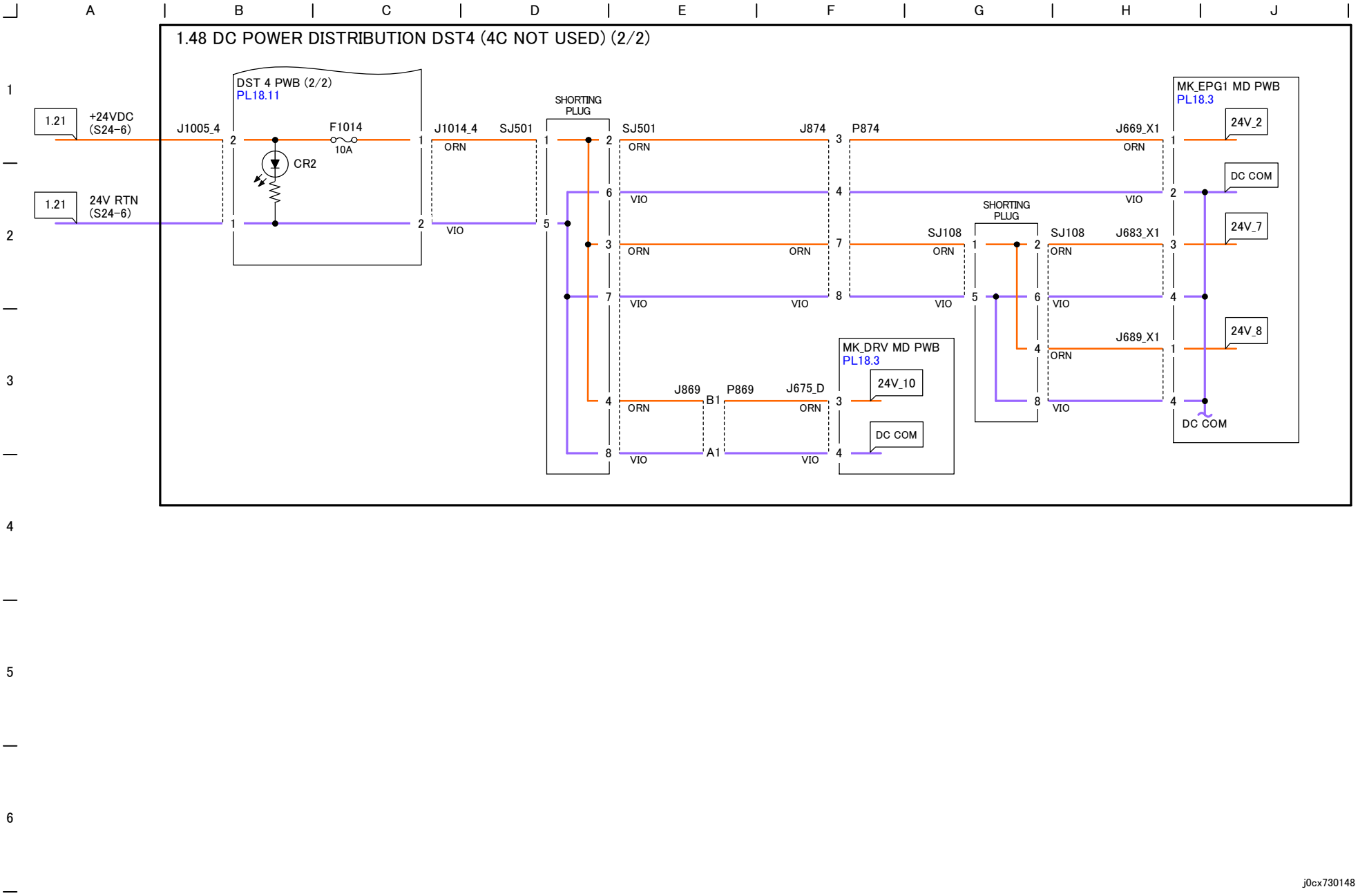

1.45 DC POWER DISTRIBUTION DST 3 (2/3)
DST 3 PWB (2/3)
PL18.13
PH_1 MD PWB
PL18.2
PH_2 MD PWB
PL18.2
1.19 +24VDC (S24-4)
1.19 24V RTN (S24-4)
1.17 +24VDC (FLY3)
1.17 24V RTN (FLY3)
1.16 +24VDC (S24-2)
1.16 24V RTN (S24-2)
1.7 +24VDC (DST 3 RLY)
1.7 24V RTN (DST 3 RLY)
J1003_3
J1000_3
J1004_3
F1012
6.3A
F1013
6.3A
F1001
15A
CR1
J1013_3
J873
P873
J683_H1
J871
P871
J675_H2
J1007_3
P949
J949
24V_3
DC COM
24V_10
DC COM
+24VDC (BUR PRESS MOT)
8.9
24V RTN (BUR PRESS MOT)
8.9
ORN
VIO
N.C

j0cx730145

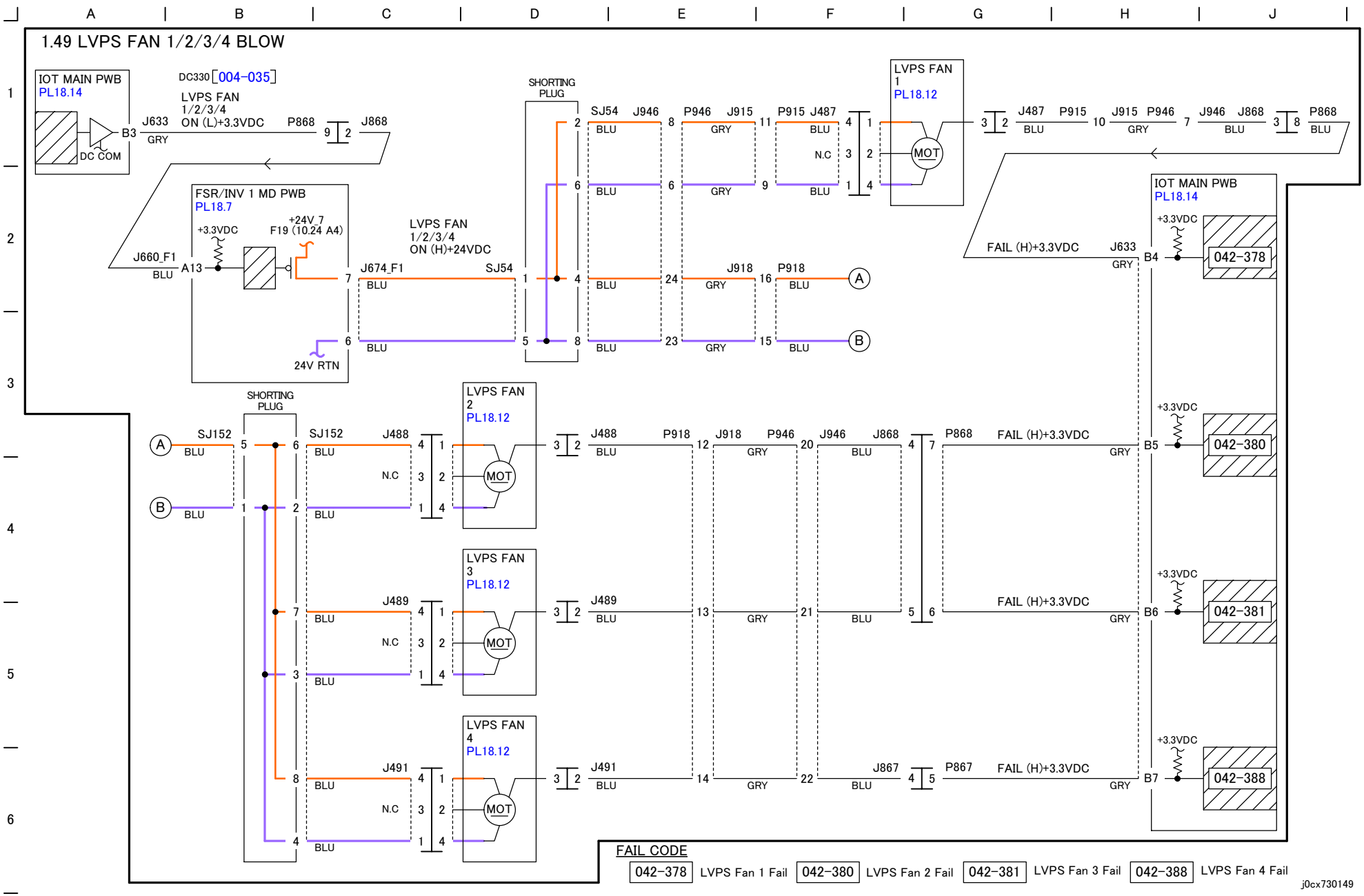

A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
1.46 DC POWER DISTRIBUTION DST 3 (3/3)
1.8
+24V SQ
(H1U)
1.8
24V SQ RTN
(H1U)
1.19
+24VDC
(S24-4)
1.19
24V RTN
(S24-4)
DST 3 PWB (3/3)
PL18.13
J1002_3
ORN
VIO
F1010
6.3A
CR4
J1005_3
ORN
VIO
F1014
10A
CR2
J1012_3
J871
ORN
VIO
J1014_3
ORN
VIO
P871
SJ127
ORN
VIO
J669_H1
ORN
VIO
SHORTING
PLUG
SJ127
J675_H1
ORN
VIO
PH_1 MD PWB
PL18.2
24V_10
DC COM
PH_1 MD PWB
PL18.2
24V_1
DC COM
+24VDC
(TRAY 2 AIR HEATER)
7.13
+24VDC
(TRAY 1 AIR HEATER)
7.13

j0cx730146


1.47 DC POWER DISTRIBUTION DST4 (4C NOT USED) (1/2)
DST 4 PWB (1/2)
PL18.11
1.22 +24VDC (FLY10)
1.22 24V RTN (FLY10)
1.21 +24VDC (FLY8)
1.21 24V RTN (FLY8)
1.21 +24VDC (FLY8)
1.21 24V RTN (FLY8)
1.7 +24VDC (RL1)
1.7 24V RTN (RL1)
J1003_4
J1001_4
J1000_4
J1004_4
F1012 6.3A
F1007 6.3A
F1005 6.3A
F1009 6.3A
F1006 6.3A
F1001 15A
CR3
CR1
RL1
J1013_4
J1009_4
J1010_4
J1007_4
J874
P874
P873
SJ161
SJ160
SHORTING PLUG
MK_EPG 2 MD PWB
PL18.3
J689_X2
+24V_4
DC COM
+24VDC (DST 4) 1.36
24V RTN (DST 4) 1.36
+24VDC (TNR DSP MOT #1) 9.40
24V RTN (TNR DSP MOT #1) 9.40
+24VDC (TNR DSP MOT #6) 9.45
24V RTN (TNR DSP MOT #6) 9.45
+24VDC (DEVE MOT #1) 9.21
24V RTN (DEVE MOT #1) 9.21
+24VDC (DEVE MOT #6) 9.26
24V RTN (DEVE MOT #6) 9.26
+24VDC (TNR CTRG MOT #1) 9.34
24V RTN (TNR CTRG MOT #1) 9.34
+24VDC (TNR CTRG MOT #6) 9.39
24V RTN (TNR CTRG MOT #6) 9.39
j0cx730147

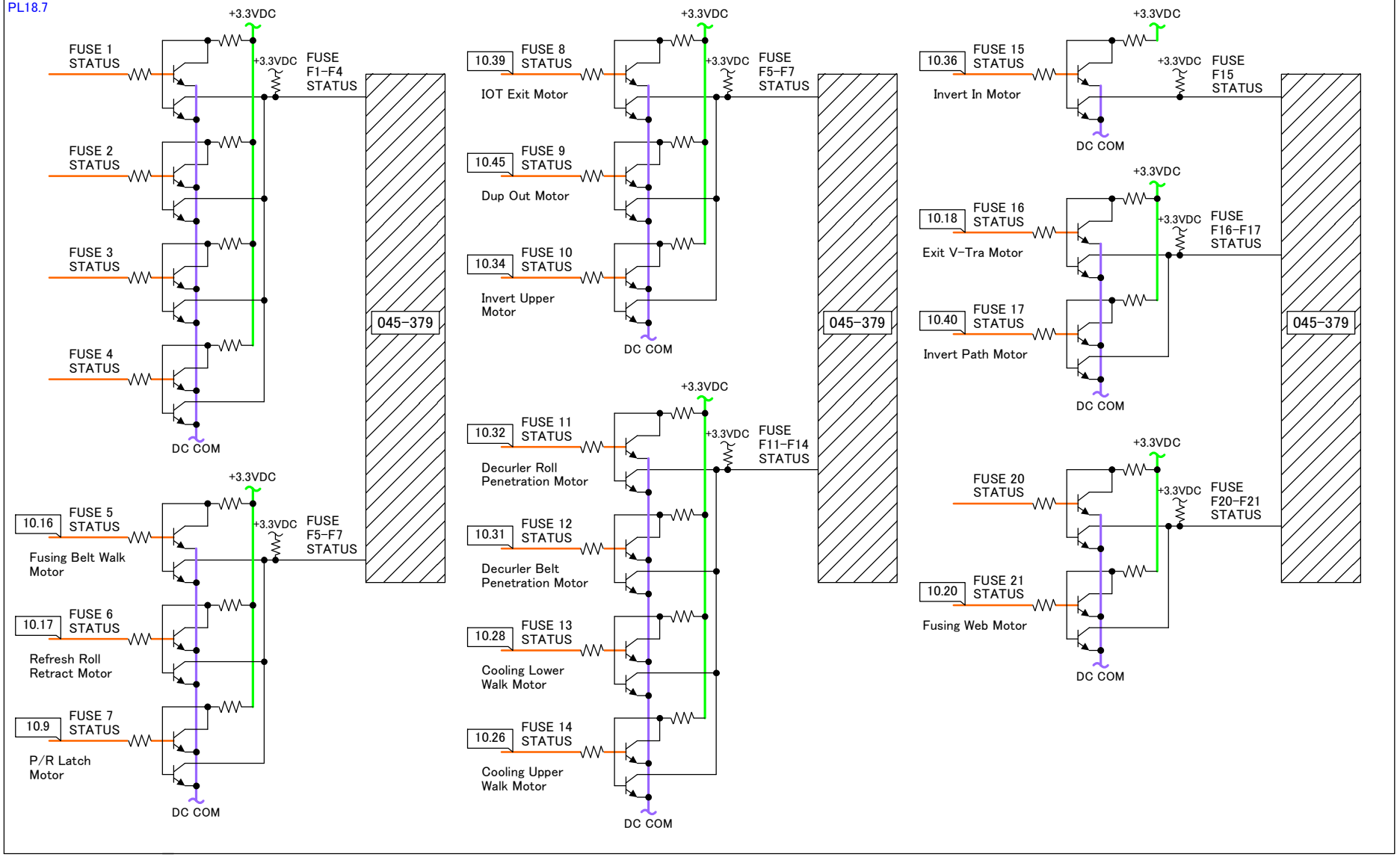

A
B
C
D
E
F
G
H
J
1
2
3
4
5
6
1.48 DC POWER DISTRIBUTION DST4 (4C NOT USED) (2/2)
1.21
+24VDC
(S24-6)
1.21
24V RTN
(S24-6)
J1005_4
DST 4 PWB (2/2)
PL18.11
F1014
10A
CR2
J1014_4
SJ501
ORN
VIO
SHORTING
PLUG
SJ501
J874
P874
J669_X1
MK_EPG1 MD PWB
PL18.3
24V_2
DC COM
24V_7
24V_8
SJ108
J683_X1
J689_X1
J869
B1
P869
J675_D
MK_DRV MD PWB
PL18.3
24V_10
DC COM
A1

j0cx730148


1.49 LVPS FAN 1/2/3/4 BLOW
IOT MAIN PWB
PL18.14
DC330 [004-035]
LVPS FAN
1/2/3/4
ON (L)+3.3VDC
J633
GRY
B3
P868
J868
DC COM
FSR/INV 1 MD PWB
PL18.7
+3.3VDC
+24V_7
F19 (10.24 A4)
J660_F1
BLU
A13
24V RTN
LVPS FAN
1/2/3/4
ON (H)+24VDC
J674_F1
SJ54
SHORTING
PLUG
LVPS FAN
1
PL18.12
MOT
N.C
J487
P915
J915
P946
J946
J868
P868
FAIL (H)+3.3VDC
042-378
LVPS FAN
2
PL18.12
SJ152
J488
P918
J918
P946
J946
J868
P868
042-380
LVPS FAN
3
PL18.12
J489
042-381
LVPS FAN
4
PL18.12
J491
J867
P867
042-388
FAIL CODE
042-378 LVPS Fan 1 Fail
042-380 LVPS Fan 2 Fail
042-381 LVPS Fan 3 Fail
042-388 LVPS Fan 4 Fail
j0cx730149

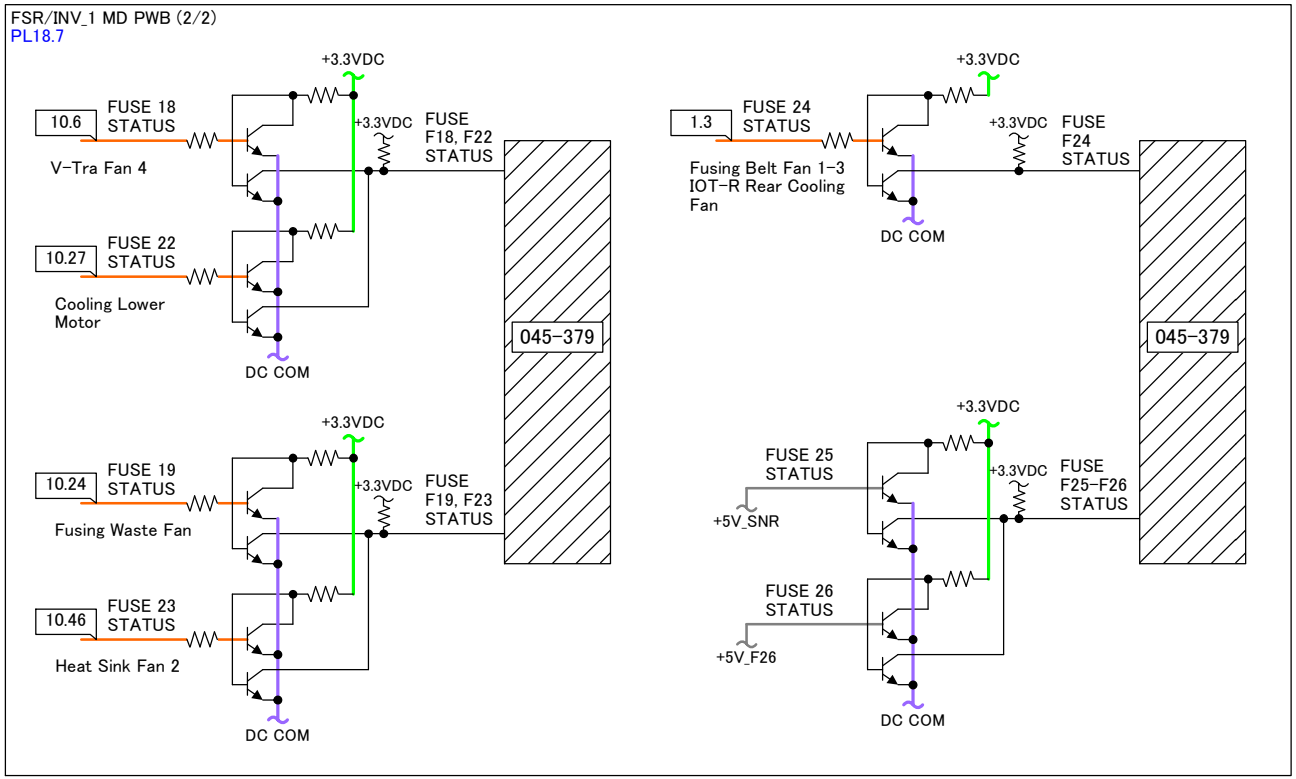
1.50 FSR/INV_1 MD PWB FUSE STATUS (1/2)

FSR/INV_1 MD PWB (1/2)
PL18.7



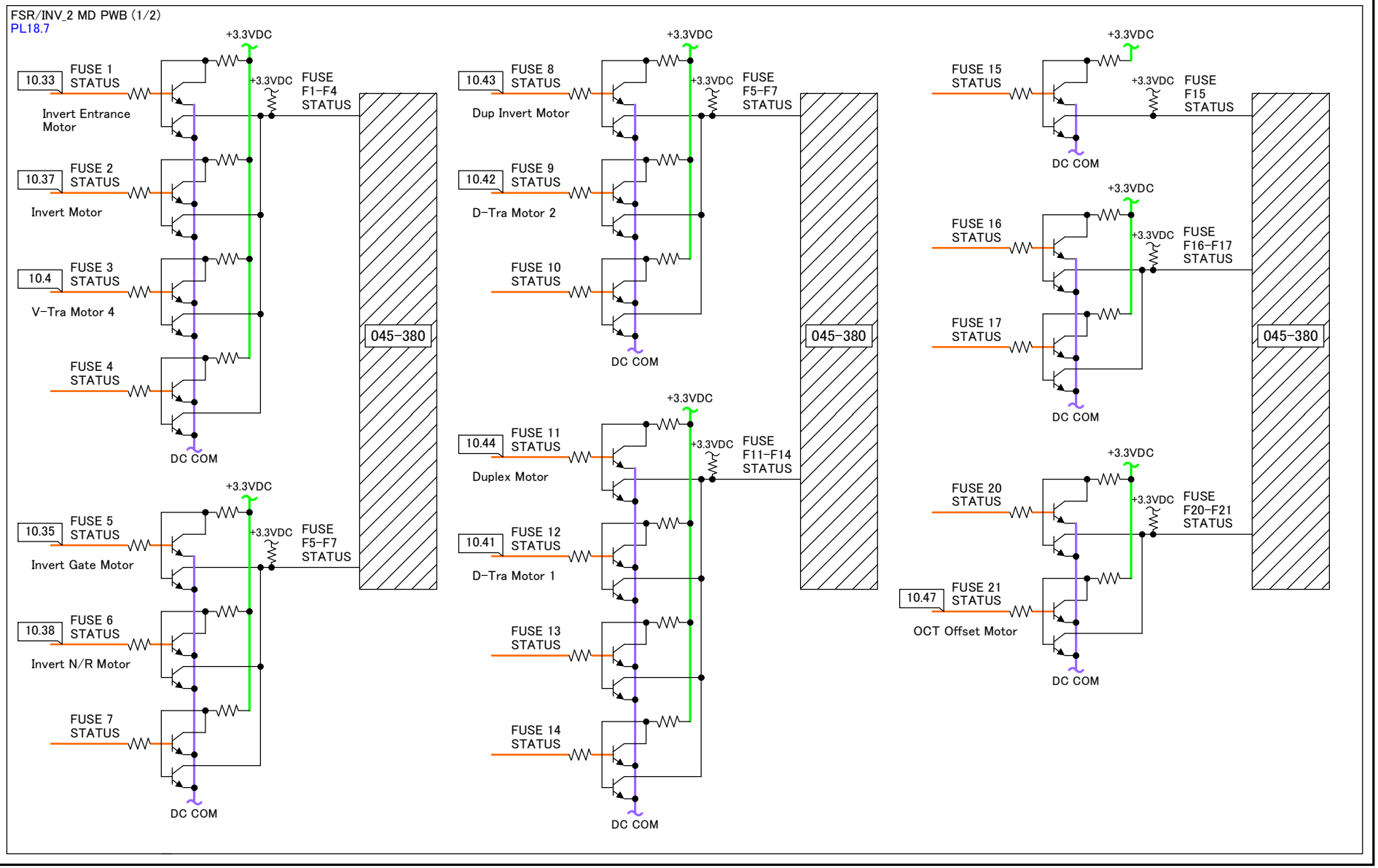
j0cx730150

1.51 FSR/INV_1 MD PWB FUSE STATUS (2/2)



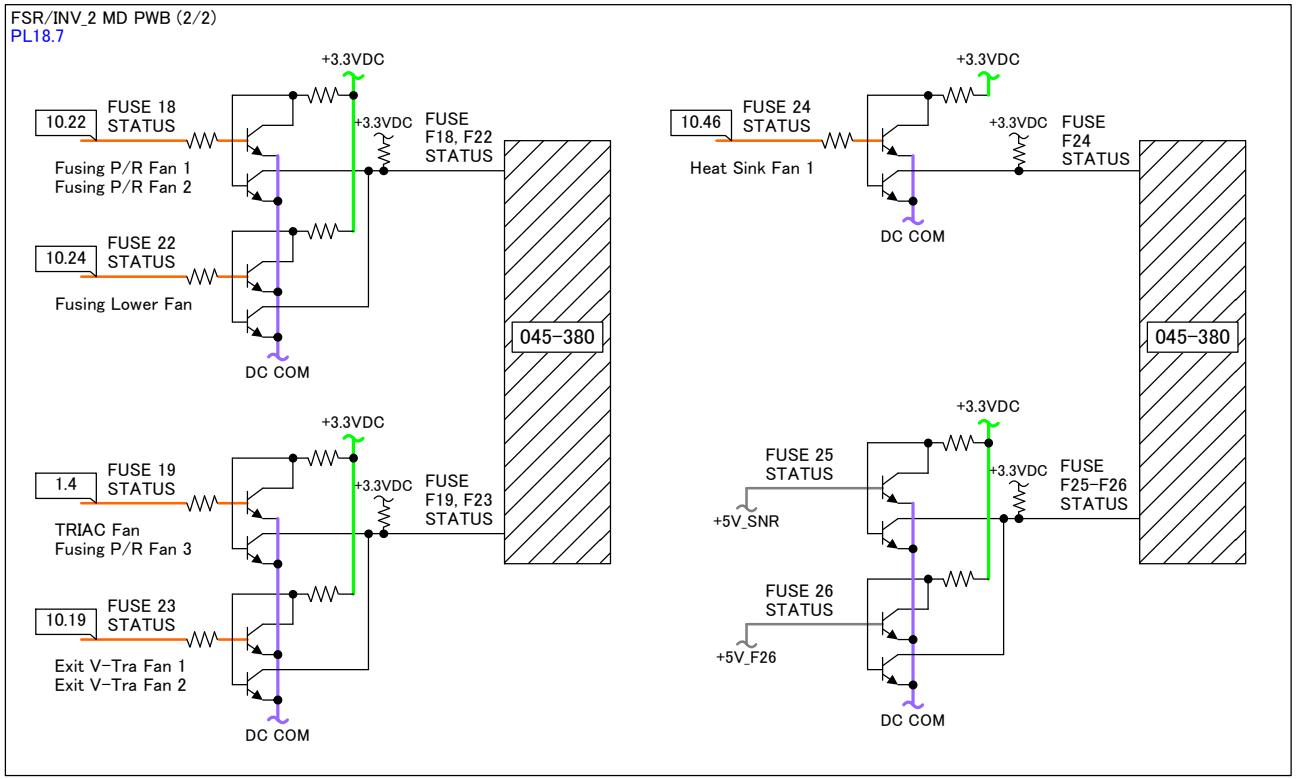
j0cx730151

1.52 FSR/INV_2 MD PWB FUSE STATUS (1/2)



j0cx730152

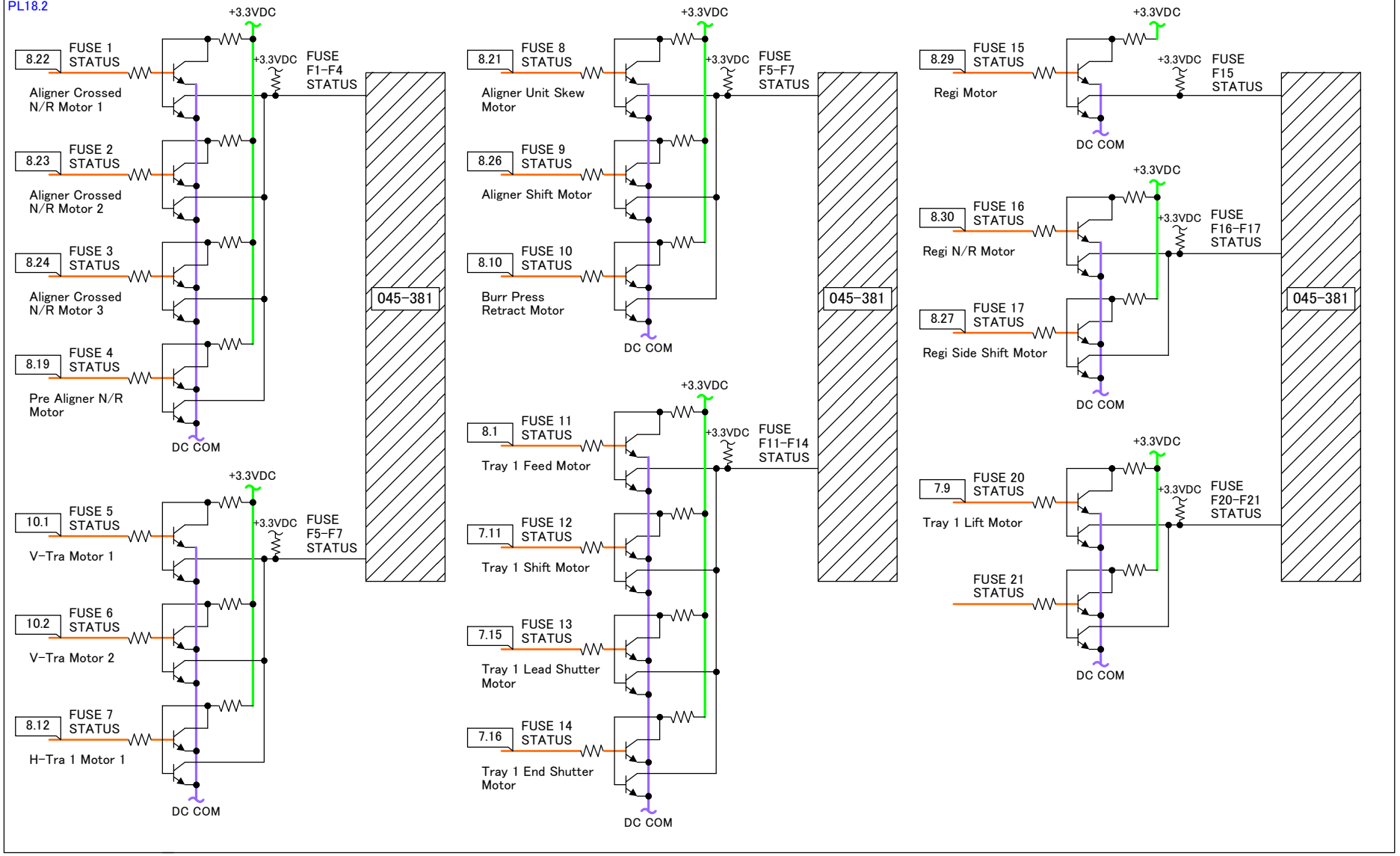
1.53 FSR/INV_2 MD PWB FUSE STATUS (2/2)



j0cx730153

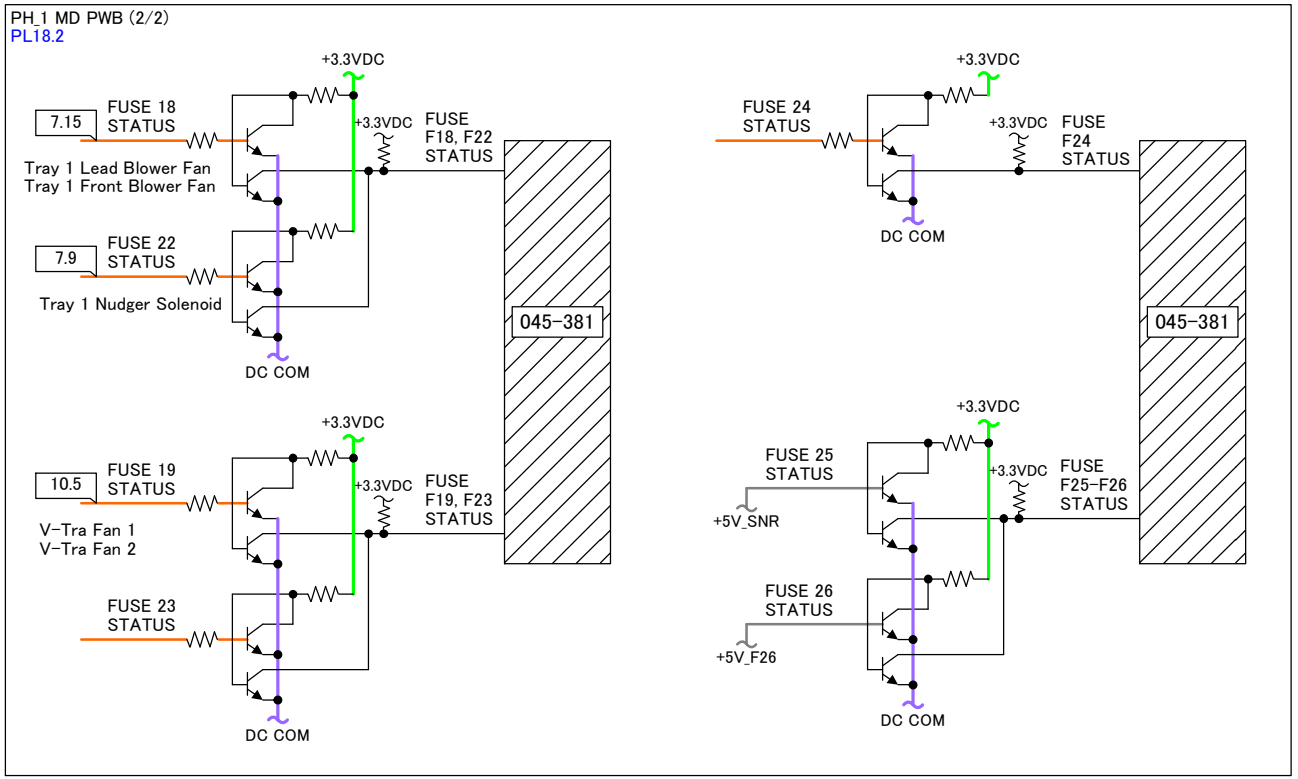
1.54 PH_1 MD PWB FUSE STATUS (1/2)

PH_1 MD PWB (1/2)
PL18.2



j0cx730154

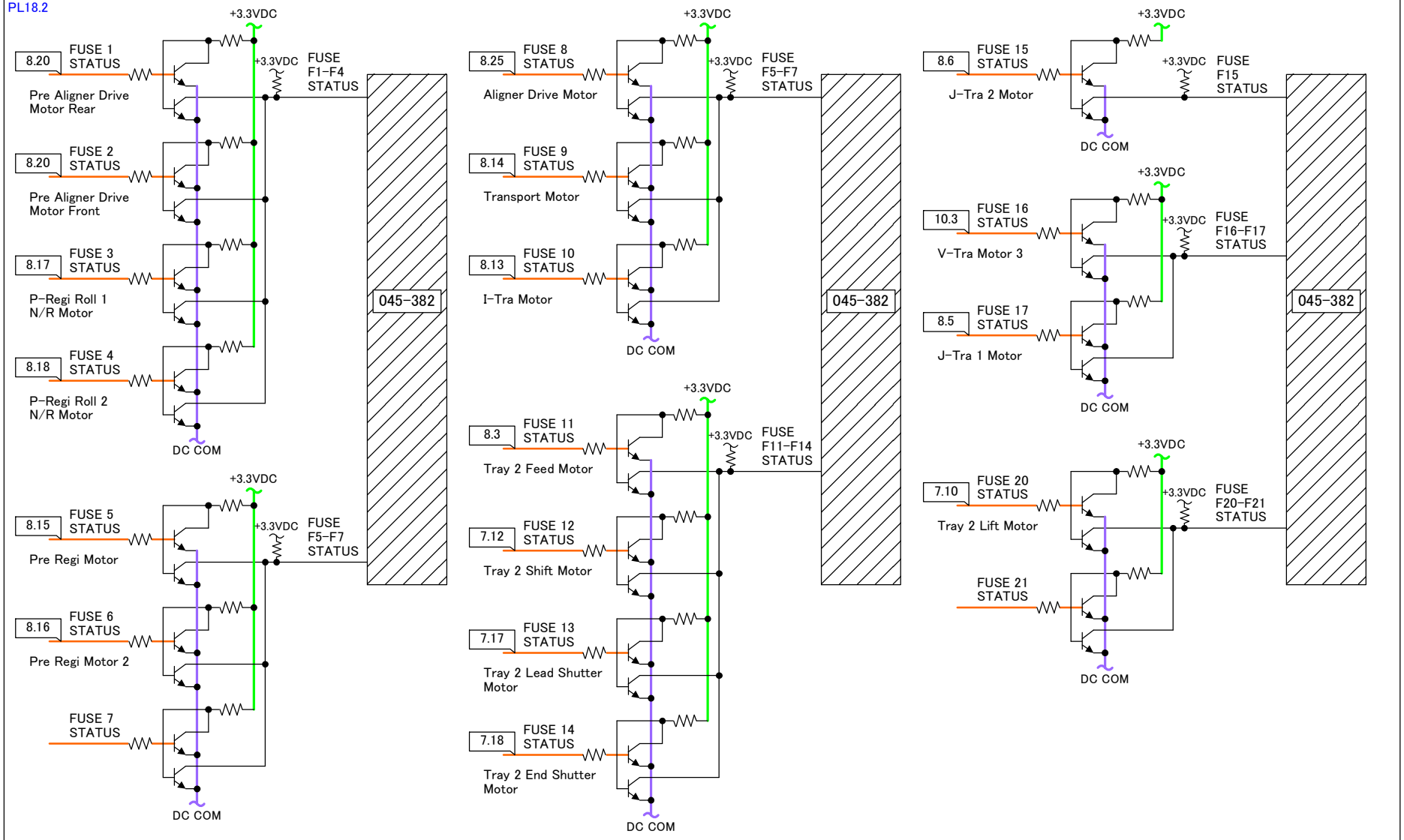
1.55 PH_1 MD PWB FUSE STATUS (2/2)



j0cx730155

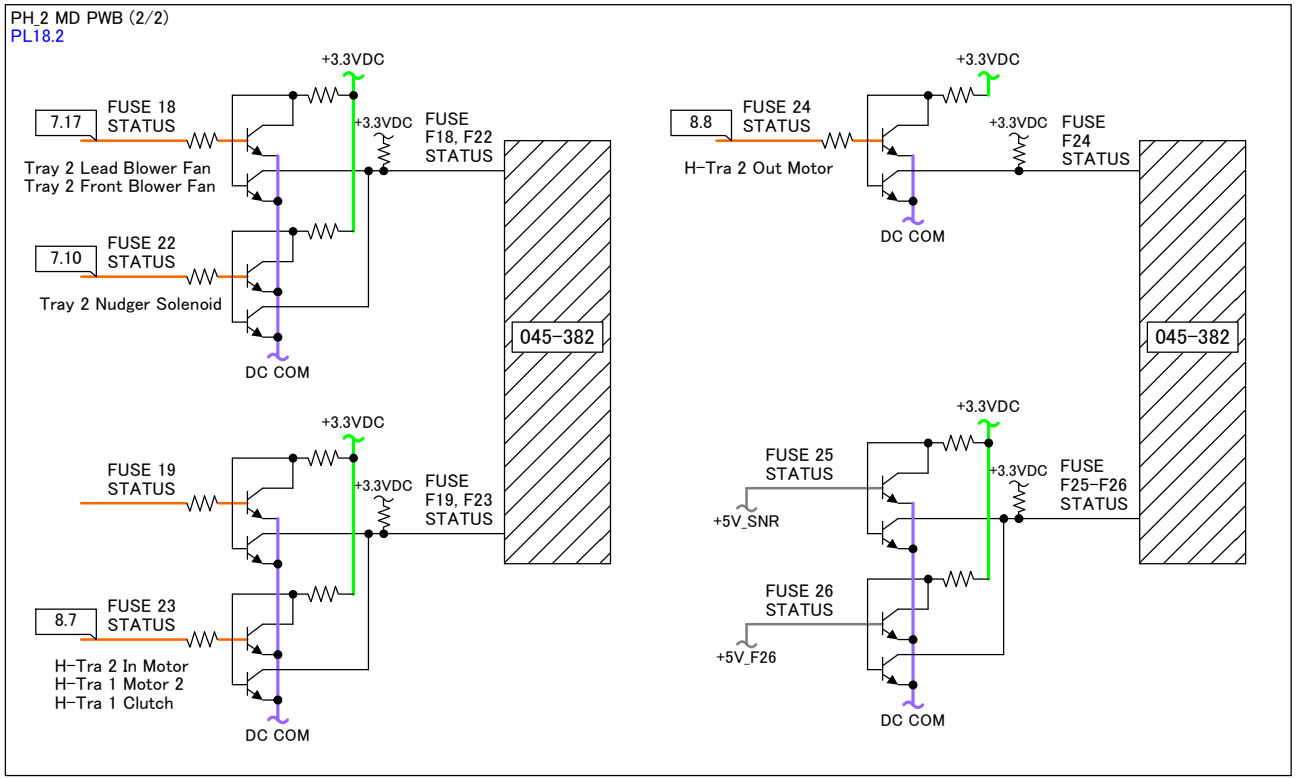
1.56 PH_2 MD PWB FUSE STATUS (1/2)

PH_2 MD PWB (1/2)
PL18.2



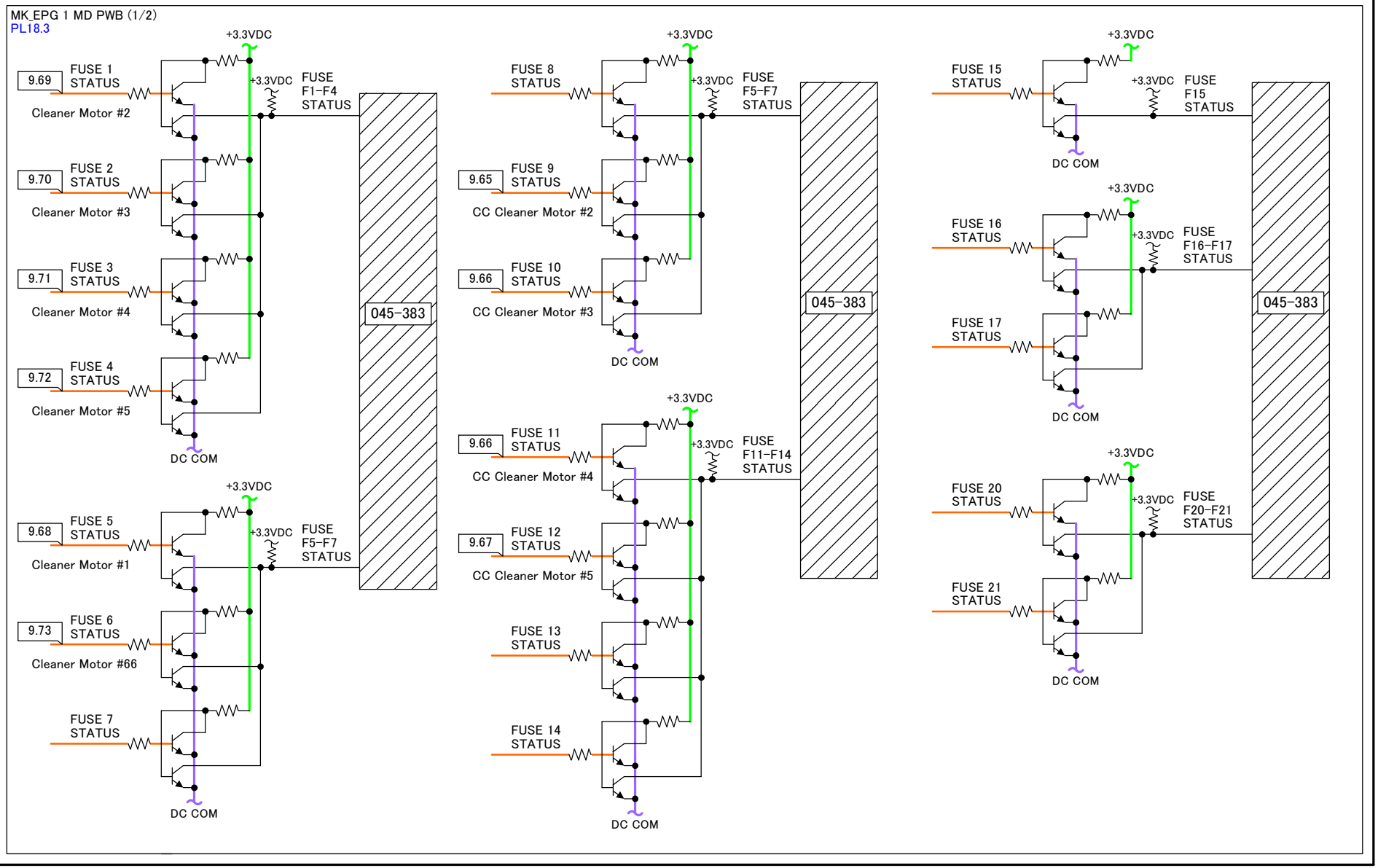
j0cx730156

1.57 PH_2 MD PWB FUSE STATUS (2/2)



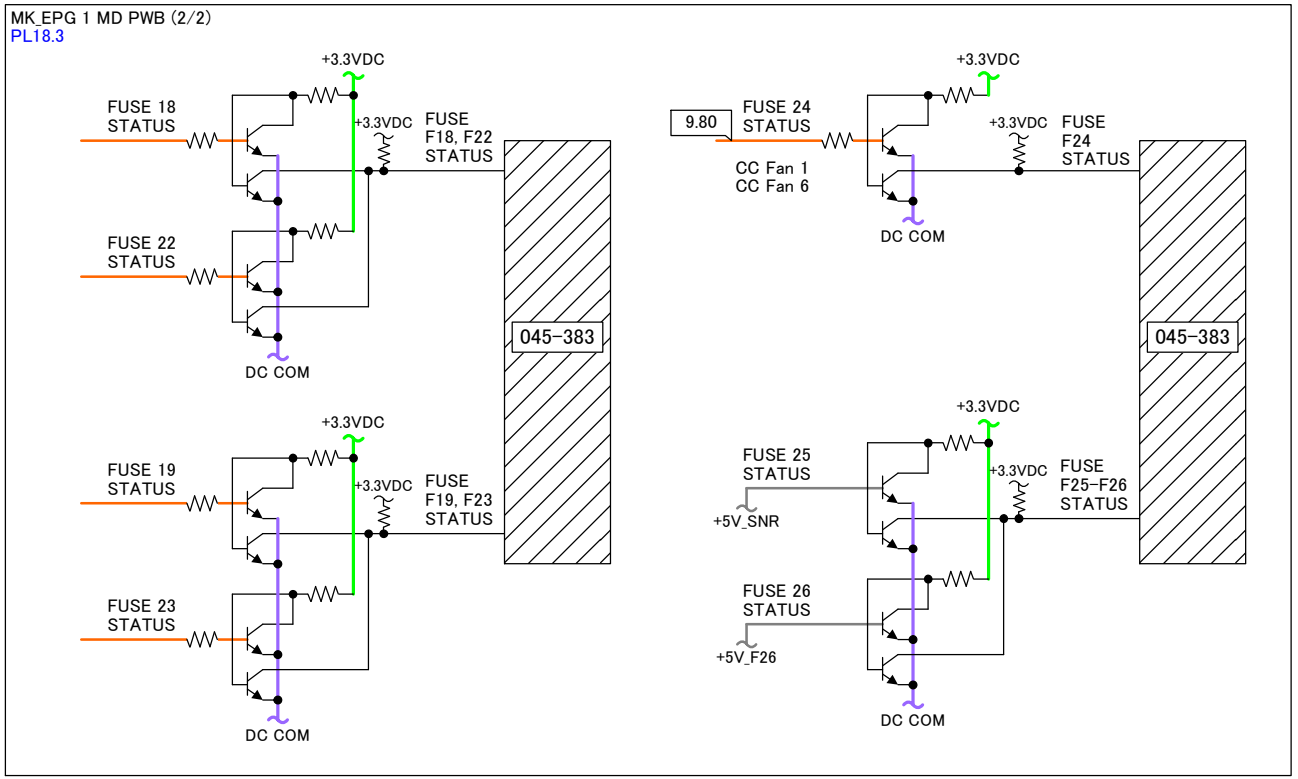
j0cx730157

1.58 MK_EPG 1 MD PWB FUSE STATUS (1/2)



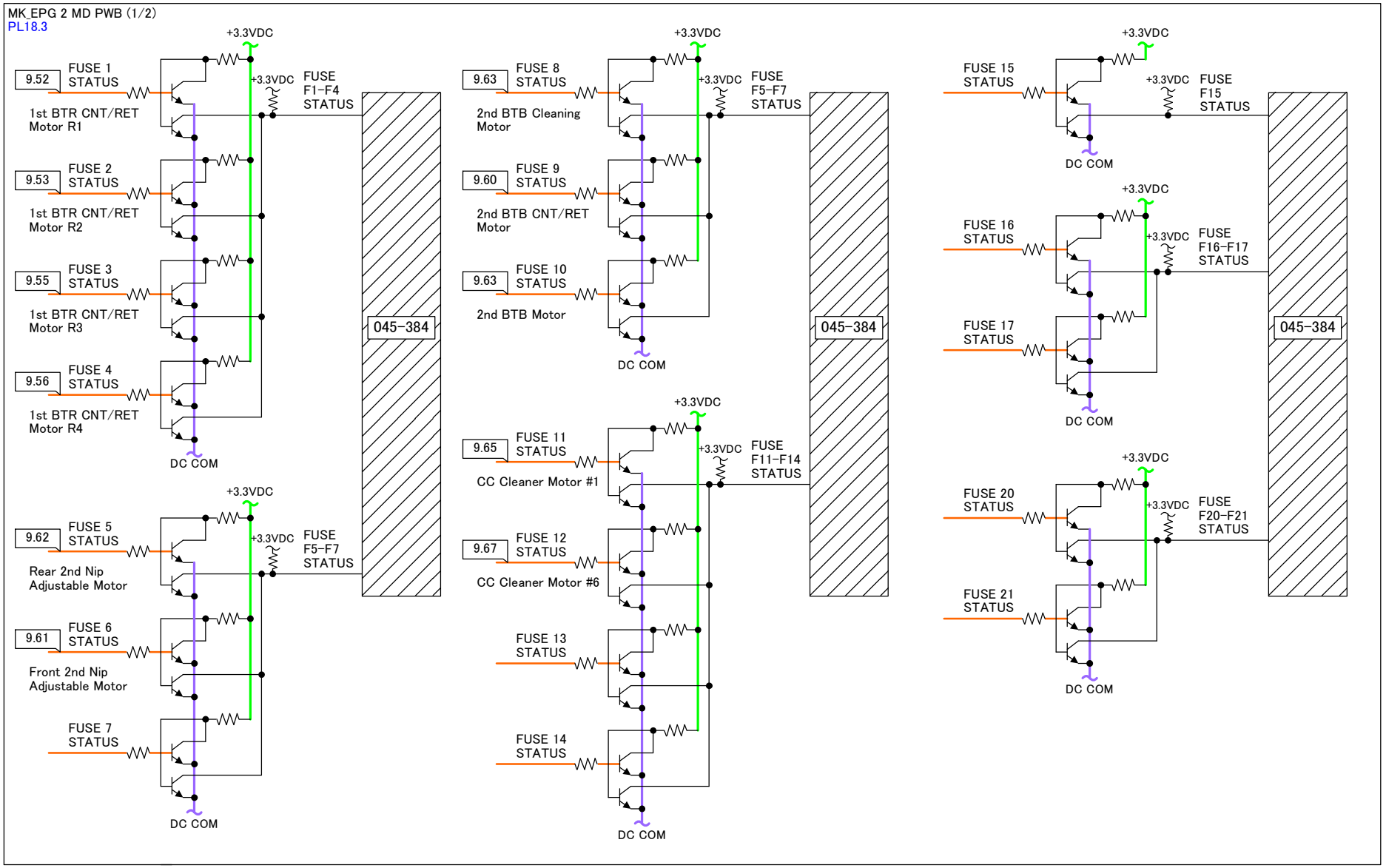
j0cx730158

1.59 MK_EPG 1 MD PWB FUSE STATUS (2/2)



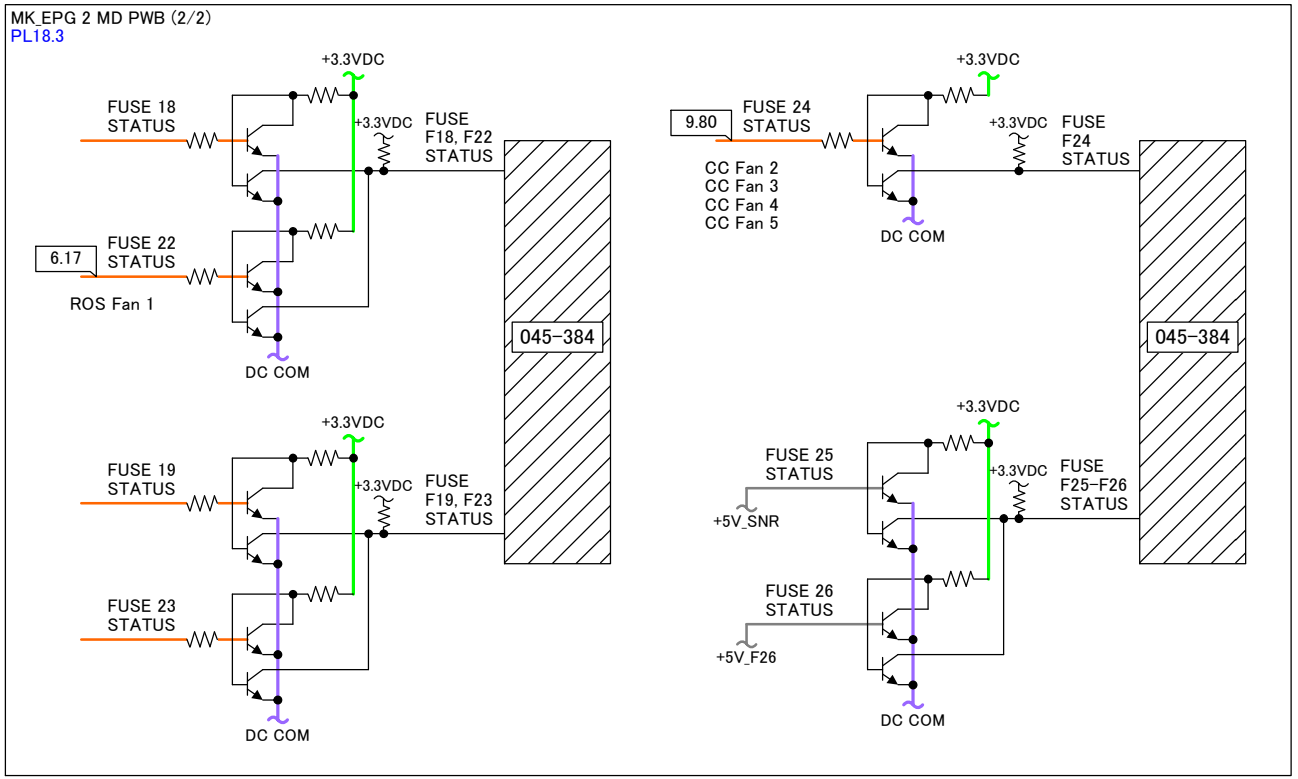
j0cx730159

1.60 MK_EPG 2 MD PWB FUSE STATUS (1/2)



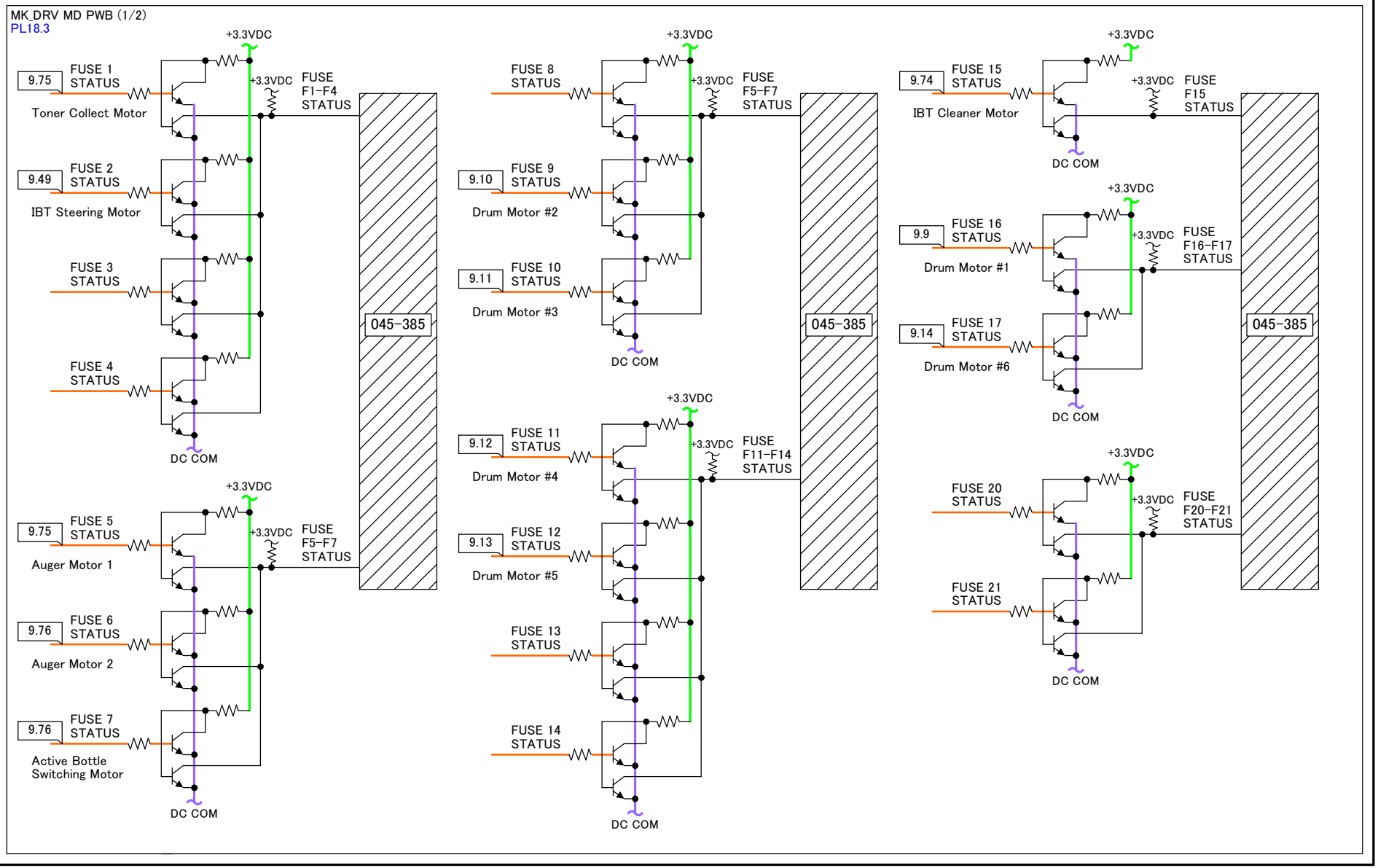
j0cx730160

1.61 MK_EPG 2 MD PWB FUSE STATUS (2/2)



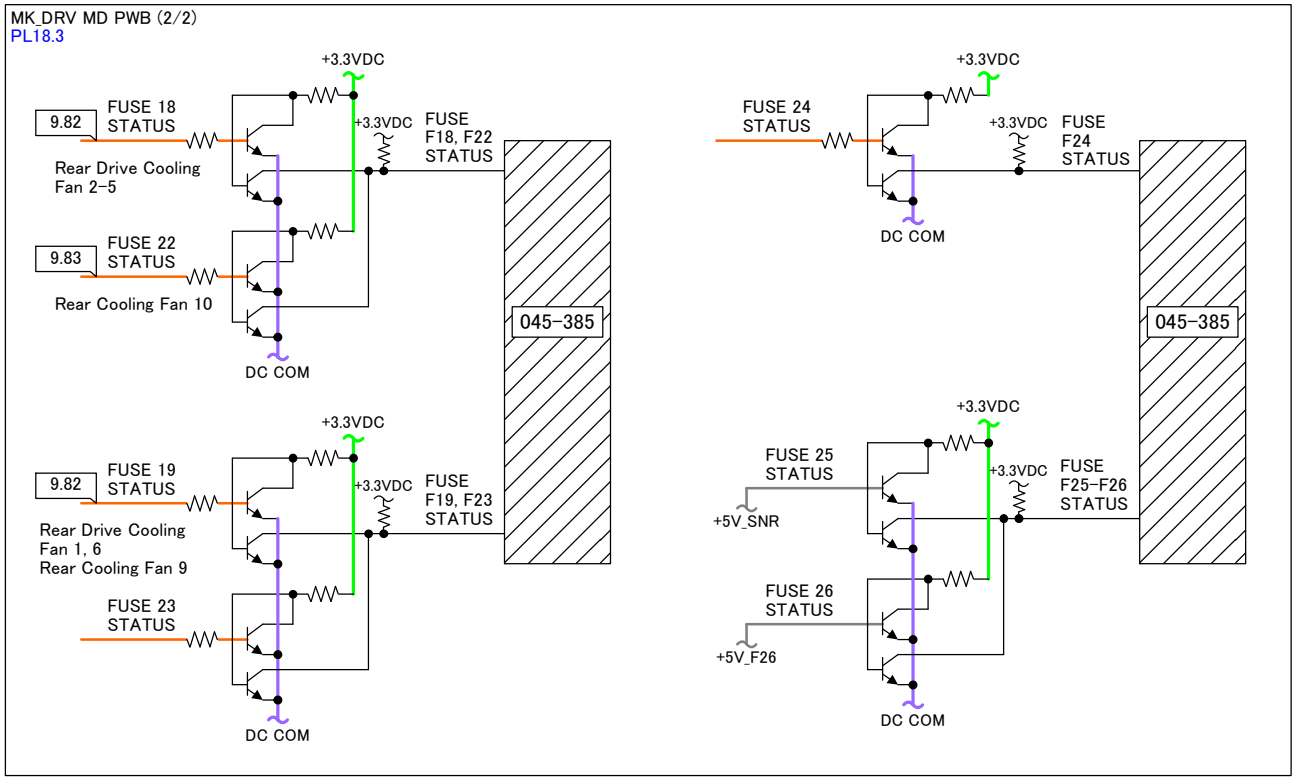
j0cx730161

1.62 MK_DRV MD PWB FUSE STATUS (1/2)



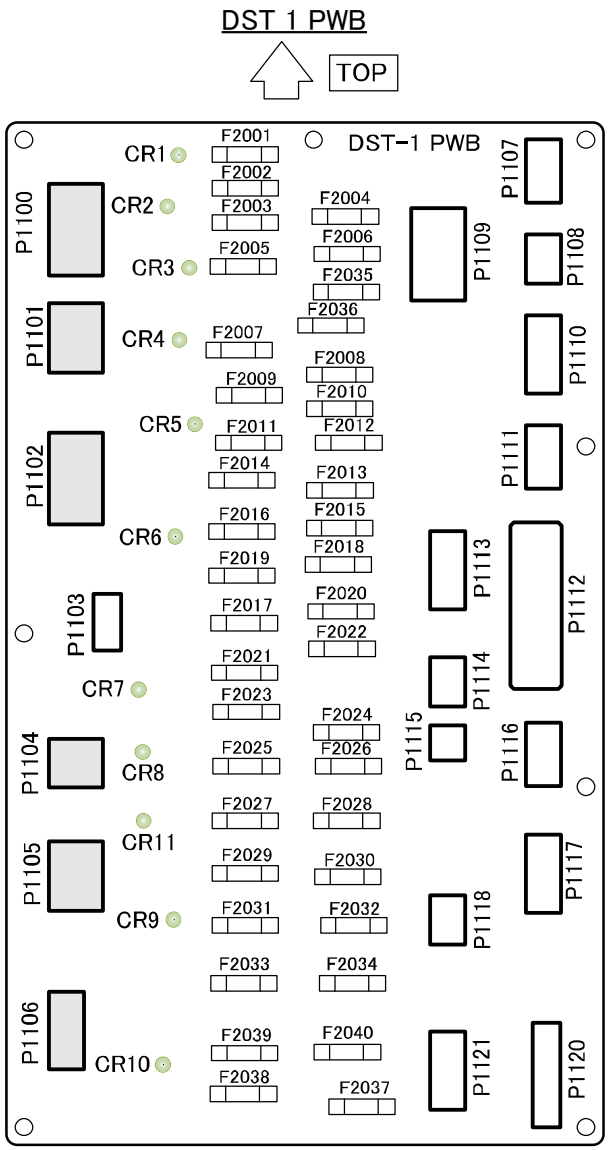
j0cx730162

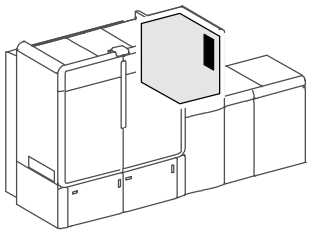
1.63 MK_DRV MD PWB FUSE STATUS (2/2)



j0cx730163

1.64 FUSE LOCATION & PWB LED STATUS (1/19)





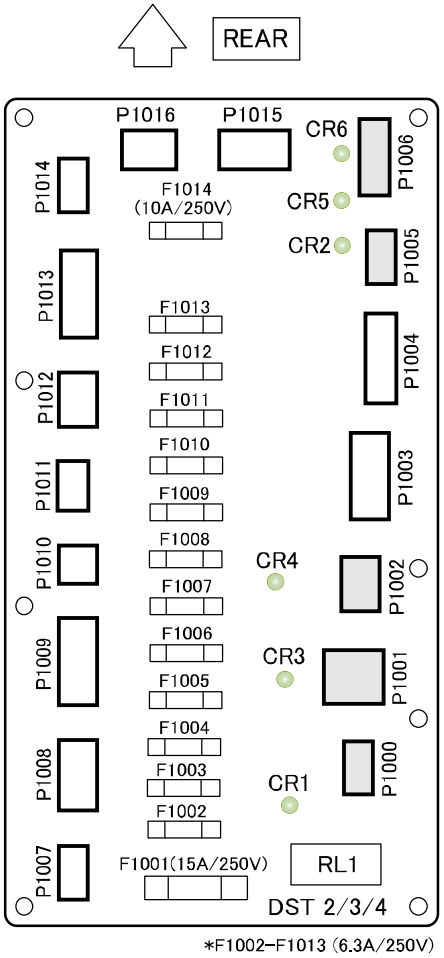
Status and meaning of DST-1 PWB LED

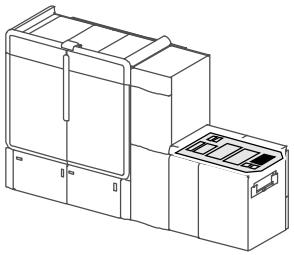
LED No.	Color	Power	Status	Meaning
CR1	GRN	+24VDC	ON	+24V is supplied to P1100-1 pin.
			OFF	+24V is not supplied to P1100-1 pin.
CR2	GRN	+24VDC	ON	+24V is supplied to P1100-2 pin.
			OFF	+24V is not supplied to P1100-2 pin.
CR3	GRN	+24VDC	ON	+24V is supplied to P1100-3 pin.
			OFF	+24V is not supplied to P1100-3 pin.
CR4	GRN	+24VDC	ON	+24V is supplied to P1101-1 and 2 pin.
			OFF	+24V is not supplied to P1101-1 and 2 pin.
CR5	GRN	+24VDC	ON	+24V is supplied to P1102-1 pin.
			OFF	+24V is not supplied to P1102-1 pin.
CR6	GRN	+24VDC	ON	+24V is supplied to P1102-2 pin.
			OFF	+24V is not supplied to P1102-2 pin.
CR7	GRN	+24VDC	ON	+24V is supplied to P1102-4 pin.
			OFF	+24V is not supplied to P1102-4 pin.
CR8	GRN	+24VDC	ON	+24V is supplied to P1104-1 pin.
			OFF	+24V is not supplied to P1104-1 pin.
CR9	GRN	+36VDC	ON	+36V is supplied to P1105-1 and 2 pin.
			OFF	+36V is not supplied to P1105-1 and 2 pin.
CR10	GRN	+24VDC	ON	+24V is supplied to P1106-9 and 10 pin.
			OFF	+24V is not supplied to P1106-9 and 10 pin.
CR11	GRN	+24VDC	ON	+24V is supplied to P1104-2 pin.
			OFF	+24V is not supplied to P1104-2 pin.

Fuse	Rated Current/ Voltage
F2001-F2003	3.15A/250V
F2004-F2038	6.3A/250V
F2039-F2040	2A/250V

1.65 FUSE LOCATION & PWB LED STATUS (2/19)

DST2/3/4 PWB





Status and meaning of DST 2/3/4 PWB LED

LED No.	Color	Power	Status	Meaning
CR1	GRN	+36VDC	ON	+36V is supplied to P1000-2 pin.
			OFF	+36V is not supplied to P1000-2 pin.
CR2	GRN	+24VDC	ON	+24V is supplied to P1005-2 pin.
			OFF	+24V is not supplied to P1005-2 pin.
CR3	GRN	+24VDC	ON	+24V is supplied to P1001-1 and 2 pin.
			OFF	+24V is not supplied to P1001-1 and 2 pin.
CR4	GRN	+24VDC	ON	+24V is supplied to P1002-5 and 6 pin.
			OFF	+24V is not supplied to P1002-5 and 6 pin.
CR5	GRN	+5VDC	ON	+5V is supplied to P1006-4 pin.
			OFF	+5V is not supplied to P1006-4 pin.
CR6	GRN	+12VDC	ON	+12V is supplied to P1006-2 pin.
			OFF	+12V is not supplied to P1006-2 pin.

Fuse	Rated Current/ Voltage
F1001	15A/250V
F1002-F1013	6.3A/250V
F1014	10A/250V

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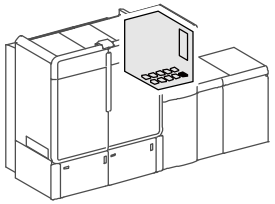
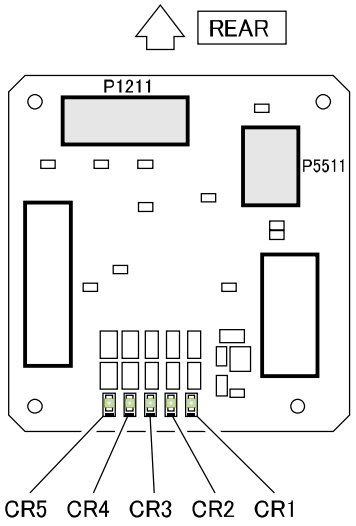
1.66 FUSE LOCATION & PWB LED STATUS (3/19)

LED POWER PWB



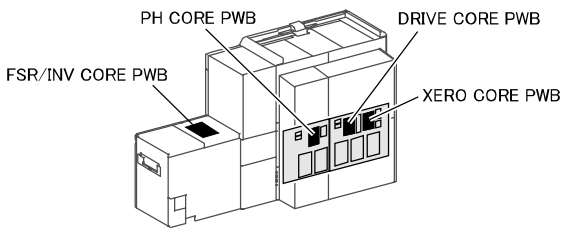


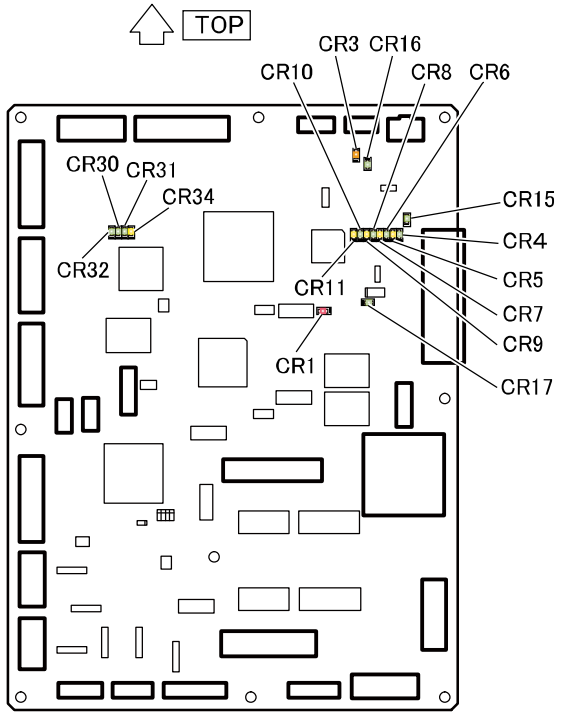
Status and meaning of LED POWER PWB LED

LED No.	Color	Power	Status	Meaning
CR1	GRN	+5VDC	ON	+5V is supplied to P5511-1 pin.
			OFF	+5V is not supplied to P5511-1 pin.
CR2	GRN	+5VDC	ON	+5V is supplied to P5511-2 pin.
			OFF	+5V is not supplied to P5511-2 pin.
CR3	GRN	+5VDC	ON	+5V is supplied to P5511-3 pin.
			OFF	+5V is not supplied to P5511-3 pin.
CR4	GRN	+12VDC	ON	+12V is supplied to P1211-4 pin.
			OFF	+12V is not supplied to P1211-4 pin.
CR5	GRN	+12VDC	ON	+12V is supplied to P1211-5 pin.
			OFF	+12V is not supplied to P1211-5 pin.

1.67 FUSE LOCATION & PWB LED STATUS (4/19)

CORE PWB





Status and meaning of CORE PWB LED

LED No.	Color	Mode	Status	Meaning
CR1	RED	Print/Download	ON	Reset
		Print/Download	Flashing	Reset (Software does not clear watchdog.)
		Print/Download	OFF	OK
CR3	ORN	Print/Download	ON	CircLink communicating
		Print/Download	Flashing	–
		Print/Download	OFF	CircLink not communicating
CR4	GRN	Print/Download	ON	Lit when sending packet
		Print/Download	OFF	OK
CR5	YEL	Print/Download	ON	Lit when receiving packet
		Print/Download	OFF	OK
CR6	GRN	Print	ON	Lit when CircLink receiving error detected
		Print/Download	OFF	OK
CR7	YEL	Print	ON	Lit when IOT Main PWB Communication Fail detected
		Download	ON	Lit when erasing internal ROM
		Print/Download	OFF	OK
CR8	GRN	Print	ON	Lit when FSR/INV_CORE PWB Communication Fail detected
		Download	ON	Lit when erasing external ROM
		Print/Download	OFF	OK
CR9	YEL	Print	ON	Lit when PH_CORE PWB Communication Fail detected
		Download	ON	Lit when programming external ROM
		Print/Download	OFF	OK
CR10	GRN	Print	ON	Lit when MK DRV_CORE PWB Communication Fail detected
		Download	ON	Lit when programming external ROM
		Print/Download	OFF	OK
CR11	YEL	Print	ON	Lit when MK DRV_CORE PWB Communication Fail detected
		Download	ON	Always lit during operation in Download Mode
		Print/Download	OFF	OK
CR15	GRN	Print/Download	ON	+12V is normally applied.
		Print/Download	OFF	+12V is not normally applied.

LED No.	Color	Mode	Status	Meaning
CR16	GRN	Print/Download	ON	+3.3V normal
		Print/Download	OFF	+3.3V error
CR17	GRN	Print/Download	ON	+5V normal
		Print/Download	OFF	+5V error
CR34	YEL	Print/Download	ON	FPGA Config is configured by ADC PWB (Normal)
		Print/Download	OFF	FPGA Config is configured by DIP SW (error as DIP SW is not equipped)

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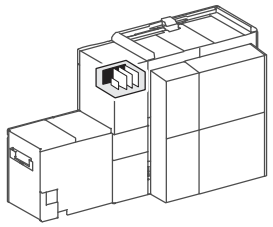
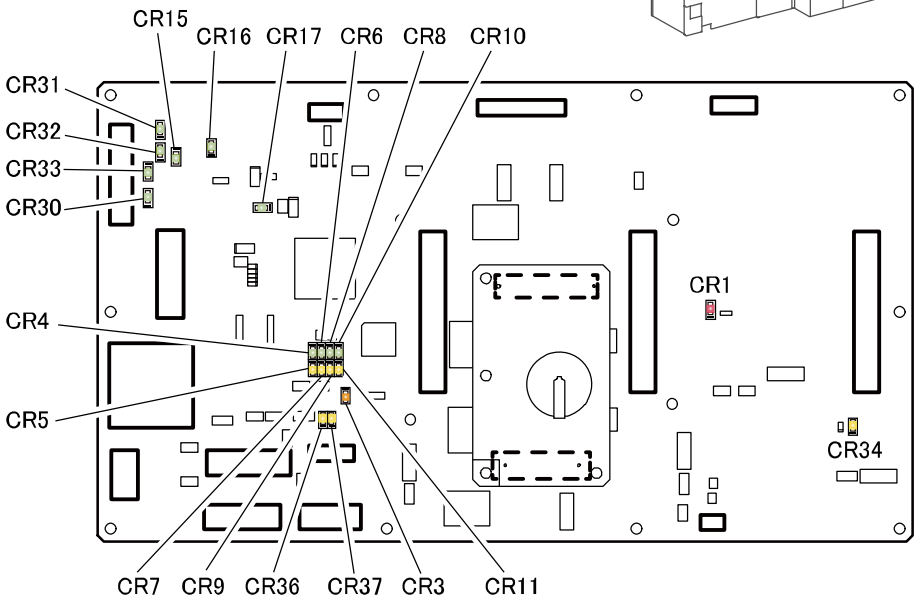
1.68 FUSE LOCATION & PWB LED STATUS (5/19)

IOT MAIN PWB



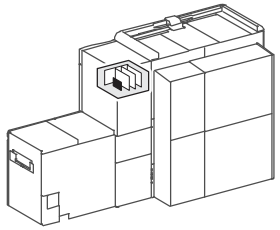


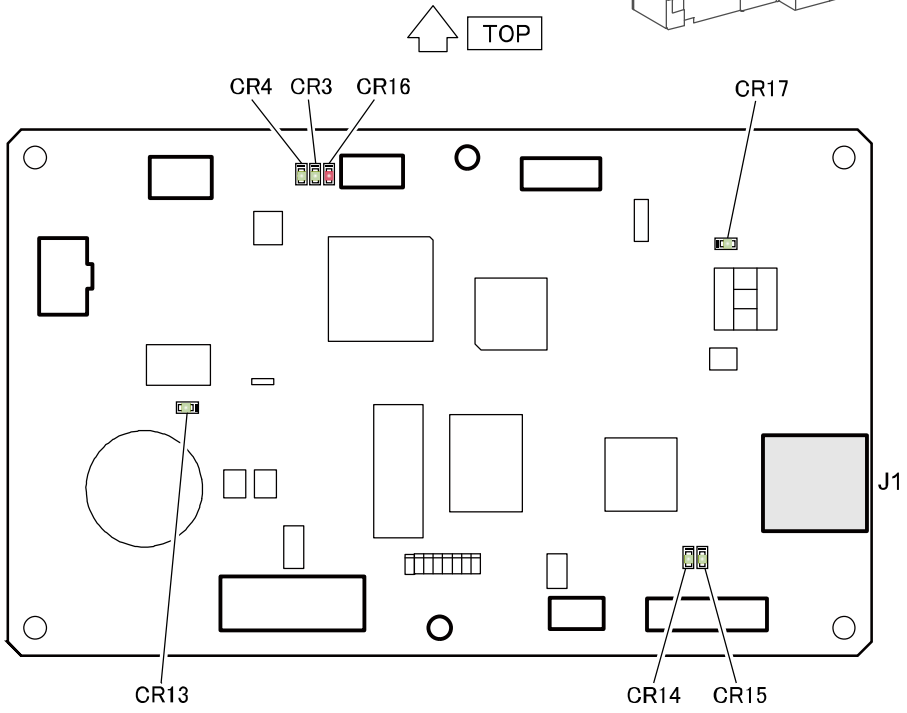
Status and meaning of IOT MAIN PWB LED

LED No.	Color	Mode	Status	Meaning
CR1	RED	Print/Download	ON	Reset
		Print/Download	Flashing	Reset (Software does not clear watchdog.)
		Print/Download	OFF	OK
CR3	ORN	Print/Download	ON	CircLink communicating
		Print/Download	Flashing	-
		Print/Download	OFF	OK
CR4	GRN	Print/Download	ON	Lit when sending packet
		Print/Download	OFF	OK
CR5	YEL	Print/Download	ON	Lit when receiving packet
		Print/Download	OFF	OK
CR6	GRN	Print	ON	Lit when CircLink receiving error detected
		Print/Download	OFF	OK
CR7	YEL	Print	ON	Lit when IOT Main PWB Communication Fail detected
		Download	ON	Lit when erasing internal ROM
		Print/Download	OFF	OK
CR8	GRN	Print	ON	Lit when FSR/INV_CORE PWB Communication Fail detected
		Download	ON	Lit when erasing external ROM
		Print/Download	OFF	OK
CR9	YEL	Print	ON	Lit when PH_CORE PWB Communication Fail detected
		Download	ON	Lit when programming internal ROM
		Print/Download	OFF	OK
CR10	GRN	Print	ON	Lit when MK EPG_CORE PWB Communication Fail detected
		Download	ON	Lit when programming external FROM
		Print/Download	OFF	OK
CR11	YEL	Print	ON	Lit when MK DRV_CORE PWB Communication Fail detected
		Download	ON	Always lit during operation in Download Mode
		Print/Download	OFF	OK
CR15	GRN	Print/Download	ON	+12V normal
		Print/Download	OFF	+12V error
CR16	GRN	Print/Download	ON	+3.3V normal
		Print/Download	OFF	+3.3V error
CR17	GRN	Print/Download	ON	+5V normal
		Print/Download	OFF	+5V error
CR30	GRN	Print/Download	ON	+12V HT normal
		Print/Download	OFF	+12V HT error
CR31	GRN	Print/Download	ON	INTLK +24V-1 normal
		Print/Download	OFF	INTLK +24V-1 error
CR32	GRN	Print/Download	ON	INTLK +24V-2 normal
		Print/Download	OFF	INTLK +24V-2 error
CR33	GRN	Print/Download	ON	INTLK +24V-3 normal
		Print/Download	OFF	INTLK +24V-3 error
CR36	YEL	Print/Download	ON	Sending packets from IOT to SYS
		Print/Download	OFF	No communication from IOT to SYS
CR37	YEL	Print/Download	ON	Sending packets from SYS to IOT
		Print/Download	OFF	No communication from SYS to IOT

1.69 FUSE LOCATION & PWB LED STATUS (6/19)

SYS PWB





Status and meaning of SYS PWB LED

LED No.	Color	Mode	Status	Meaning
CR3	GRN	Print/Download	Flashing	Soft operation is normal after turning ON red switch (Emergency SW)
		Print/Download	OFF	Soft operation is error after turning ON red switch (Emergency SW)
CR4	GRN	Print/Download	Flashing	Soft operation is normal after turning ON white switch (Main SW)
		Print/Download	OFF	Soft operation is error after turning ON white switch (Main SW)
CR13	GRN	Print/Download	ON	+5 VDC to +3.3 VDC are generated on PWB
		Print/Download	OFF	+5 VDC to +3.3 VDC are not generated on PWB
CR14	GRN	Print/Download	ON	When communication is in full-duplex mode during Ethernet communication
		Print/Download	OFF	When not in above state
CR15	GRN	Print/Download	ON	・ When the PHY is receivable in full duplex mode during Ethernet communication ・ When the PHY is receivable in non-full duplex mode during Ethernet communication
		Print/Download	OFF	When not in above state
CR16	RED	Print/Download	ON	Reset
		Print/Download	OFF	OK
CR17	GRN	Print/Download	ON	When communication with CircLink is possible
		Print/Download	OFF	When communication with CircLink is not possible

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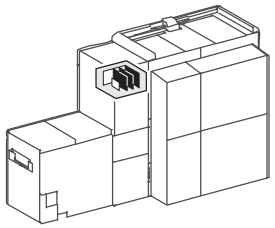
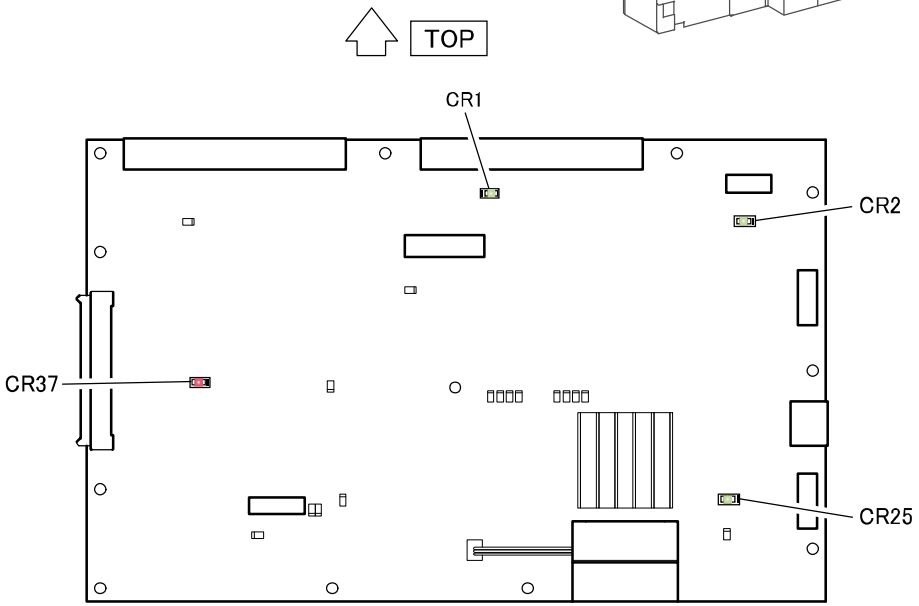
1.70 FUSE LOCATION & PWB LED STATUS (7/19)

HALFTONE PWB



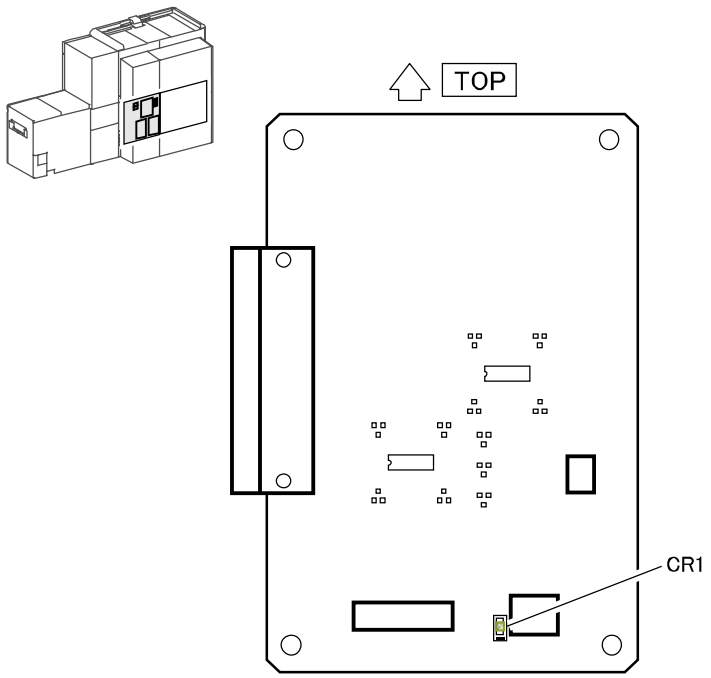


Status and meaning of HALFTONE PWB LED

LED No.	Color	Status	Meaning
CR1	Yellow Green	OK	ROS connector (PA764) is connected.
		OFF	ROS connector (PA764) is not connected.
CR2	Yellow Green	OK	ROS connector (PA764) is connected.
		OFF	ROS connector (PA764) is not connected.
CR25	Yellow Green	OK	CDI HSS I/F link up of the color is completed.
		OFF	CDI HSS I/F link up of the color is not completed.
		Flashing	CDI HSS I/F error of the color is detected.
CR37	RED	OK	Halftone PWB is reset.
		OFF	Reset of Halftone PWB is cancelled.

1.71 FUSE LOCATION & PWB LED STATUS (8/19)

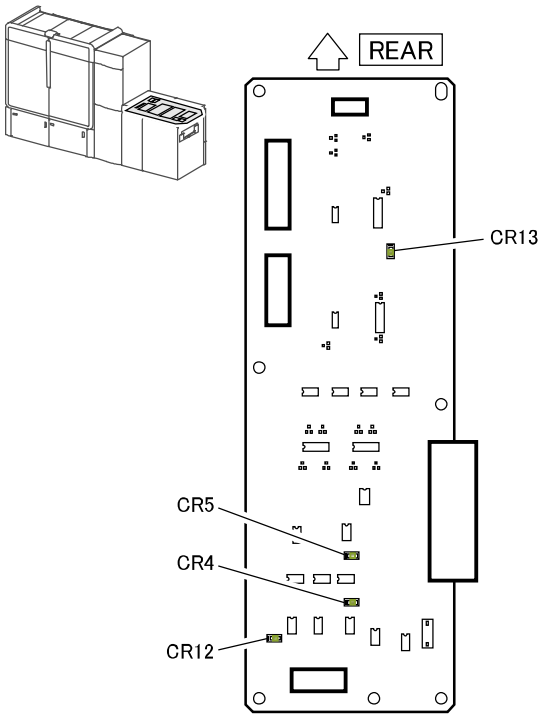
PH ADC PWB



Status and meaning of PH ADC PWB LED

LED No.	Color	Status	Meaning
CR1	GRN	ON	+5V normal
		OFF	+5V error

FSG ADC PWB



Status and meaning of FSG ADC PWB LED

LED No.	Color	Status	Meaning
CR4	GRN	ON	One of the thermistors of I/R STS 3, E/R STS 3, and H/R STS 3 is disconnected.
CR5	GRN	ON	One of the thermistors of I/R STS 3, E/R STS 3, and H/R STS 3 is 230 degrees C or more. (Latch)
CR12	GRN	ON	+5V normal
		OFF	+5V error
CR13	GRN	ON	AVREF+3.3V normal
		OFF	• +3.3VDC is not supplied. • Regulator U25 defective • +12VDC is not supplied from CORE PWB.

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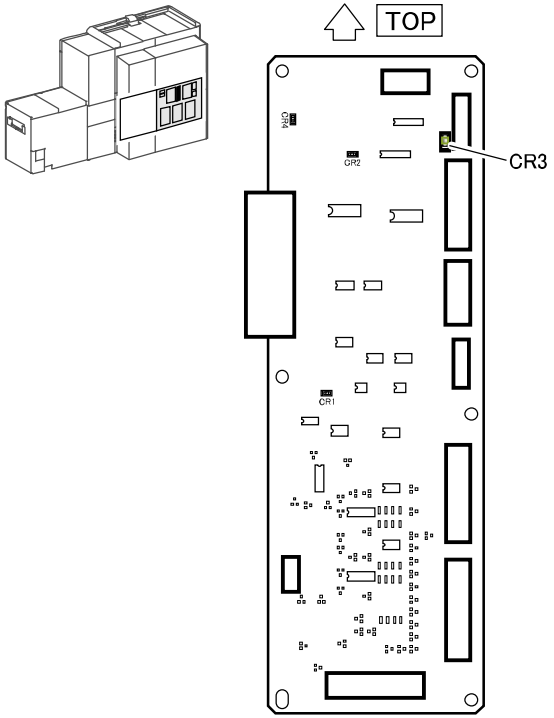
A | B | C | D | E | F | G | H | J

1.72 FUSE LOCATION & PWB LED STATUS (9/19)

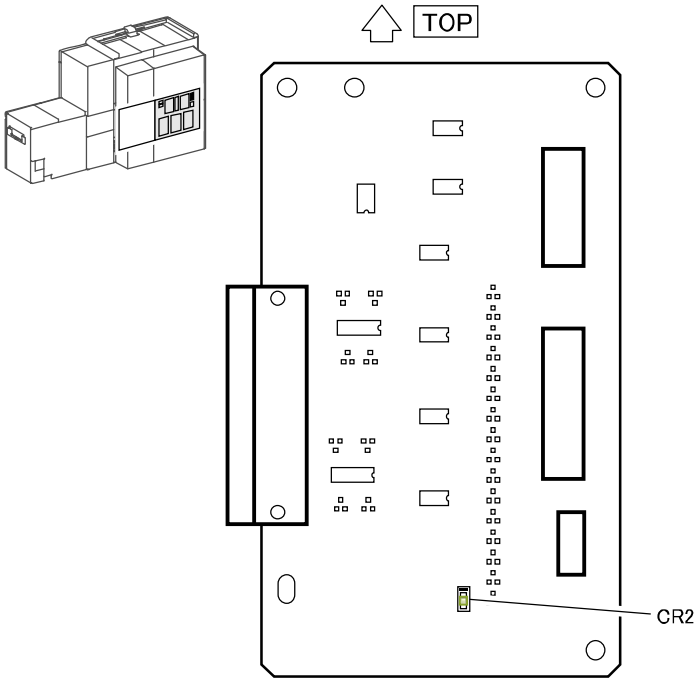
MK DRV ADC PWB



Status and meaning of MK DRV ADC PWB LED

LED No.	Color	Status	Meaning
CR3	GRN	ON	+5V normal
		OFF	+5V error

MK EPG ADC PWB

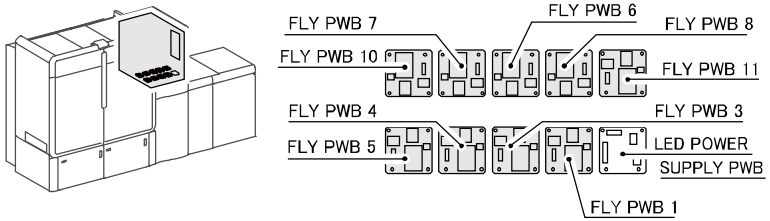


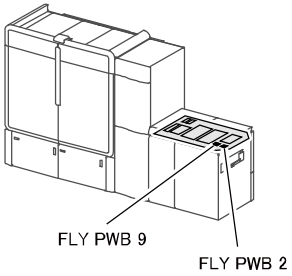
Status and meaning of MK EPG ADC PWB LED

LED No.	Color	Status	Meaning
CR2	GRN	ON	AVREF+3.3V normal
		OFF	・ +3.3VDC is not supplied. ・ Regulator U10 defective ・ +12VDC is not supplied from CORE PWB.

1.73 FUSE LOCATION & PWB LED STATUS (10/19)

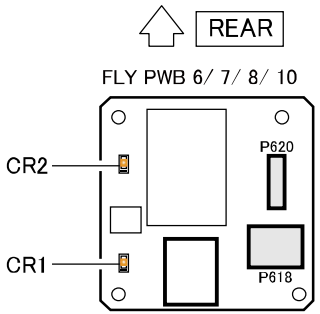
FLY PWB

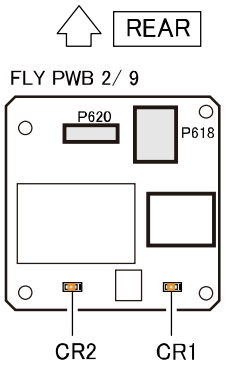


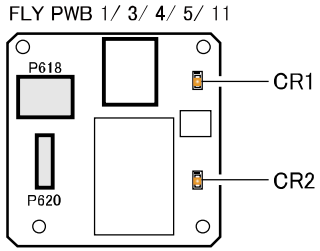


Status and meaning of FLY PWB LED

LED No.	Color	Status	Meaning
CR1	ORN	ON	+24V normal
		OFF	・ +24VDC is not supplied. ・ P618-1 – 4 connection failure ・ Relay K1 operation failure/poor contact ・ P620-4/P618-2/P618-4 connection failure
CR2	ORN	ON	Relay K1 driving voltage normal
		OFF	・ Relay K1 driving voltage not applied. ・ P620-4/P618-4 connection failure







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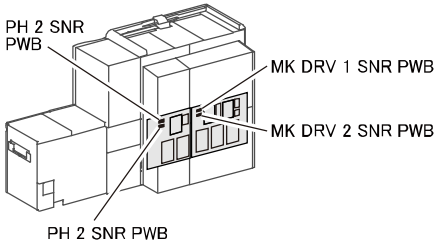
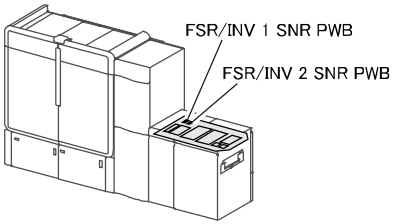
1.74 FUSE LOCATION & PWB LED STATUS (11/19)

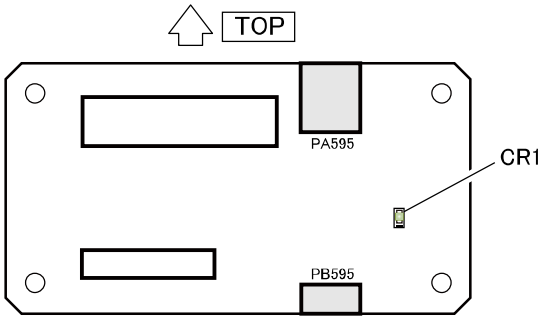
SENSOR PWB

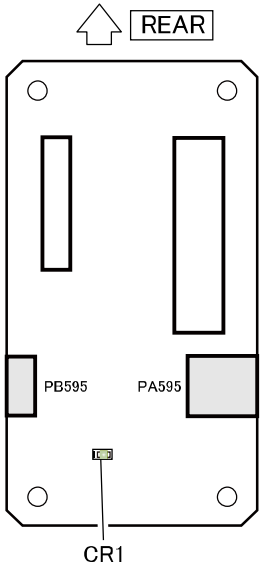




Status and meaning of SNR PWB LED

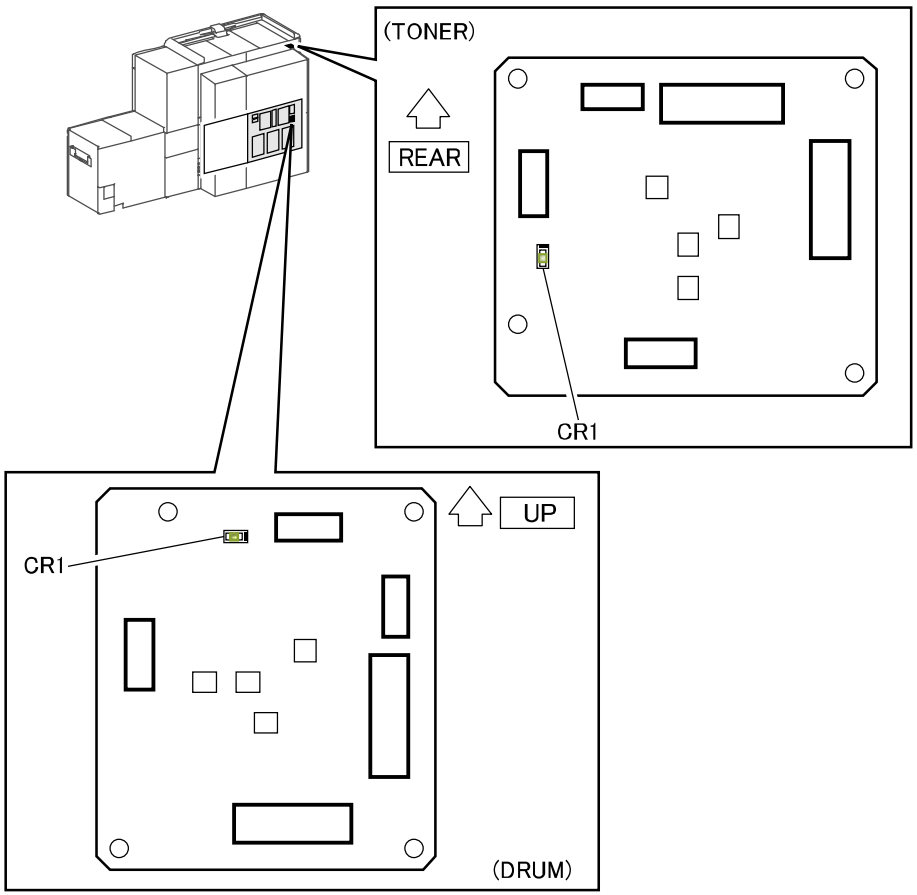
LED No.	Color	Status	Meaning
CR1	GRN	ON	+5V normal
		OFF	• +5VDC is not supplied. • PA595-3/PA595-1 is not connected correctly.





1.75 FUSE LOCATION & PWB LED STATUS (12/19)

CRUM PWB



Status and meaning of CRUM PWB LED

LED No.	Color	Status	Meaning
CR1	GRN	ON	+3.3V normal
		OFF	+3.3VDC is not supplied.

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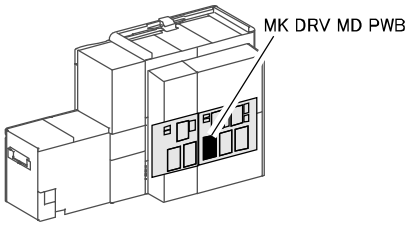
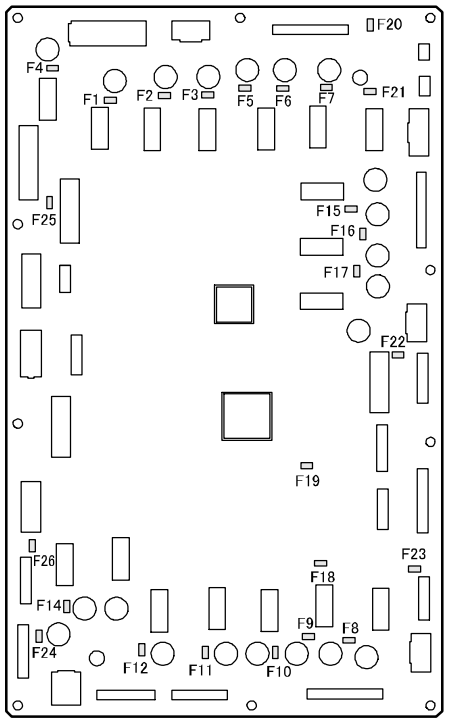
1.76 FUSE LOCATION & PWB LED STATUS (13/19)

MK DRV MD PWB



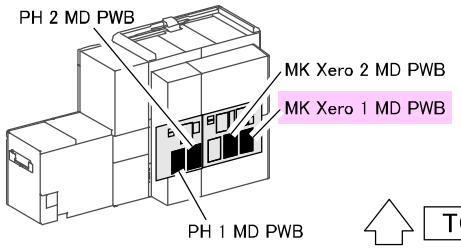


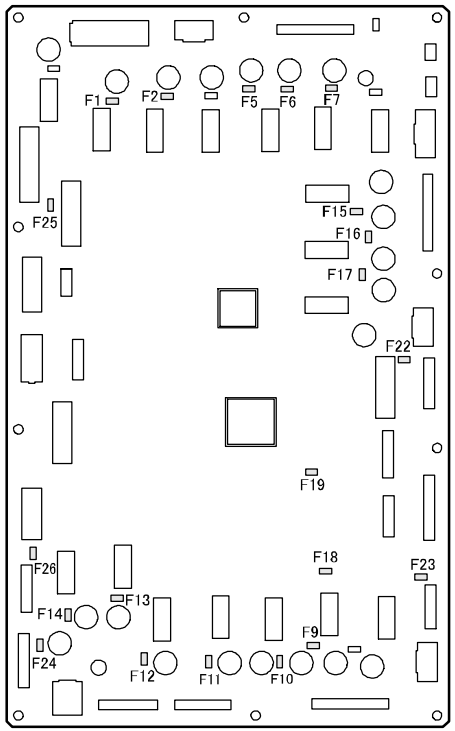
Status and meaning of +24V system FUSE MK DRV MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	No	Toner Collect Motor	9.75
F2	No	IBT Steering Motor	9.49
F3	–	Not connected	–
F4	–	Not connected	–
F5	No	Auger Motor 1	9.75
F6	No	Auger Motor 2	9.76
F7	No	Active Bottle Switching Motor	9.76
F8	–	Not connected	–
F9	No	Drum Motor #2	9.10
F10	No	Drum Motor #3	9.11
F11	No	Drum Motor #4	9.12
F12	No	Drum Motor #5	9.13
F14	–	Not connected	–
F15	No	IBT Cleaner Motor	9.74
F16	No	Drum Motor #1	9.9
F17	No	Drum Motor #6	9.14
F18	Yes	Rear Drive Cooling Fan 2-5	9.82
		Rear Drive Cooling Fan 1, 6	9.82
F19	Yes	Rear Cooling Fan 9	9.83
F20	–	Not connected	–
F21	–	Not connected	–
F22	Yes	Rear Cooling Fan 10	9.83
F23	–	Not connected	–
F24	–	Not connected	–
F25	–	Not connected	–
F26	–	Not connected	–

1.77 FUSE LOCATION & PWB LED STATUS (14/19)

MK EPG 1 MD PWB





Status and meaning of MK EPG 1 MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	No	Cleaner Motor #2	9.69
F2	No	Cleaner Motor #3	9.70
F3	No	Cleaner Motor #4	9.71
F4	No	Cleaner Motor #5	9.72
F5	No	Cleaner Motor #1	9.68
F6	No	Cleaner Motor #6	9.73
F7	–	Not connected	–
F8	–	Not connected	–
F9	No	CC Cleaner Motor #2	9.66
F10	No	CC Cleaner Motor #3	9.66
F11	No	CC Cleaner Motor #4	9.66
F12	No	CC Cleaner Motor #5	9.67
F13	–	Not connected	–
F14	–	Not connected	–
F15	–	Not connected	–
F16	–	Not connected	–
F17	–	Not connected	–
F18	–	Not connected	–
F19	–	Not connected	–
F20	–	Not connected	–
F21	–	Not connected	–
F22	–	Not connected	–
F23	–	Not connected	–
F24	No	CC Fan 1	9.80
		CC Fan 6	9.80
F25	–	Not connected	–
F26	–	Not connected	–

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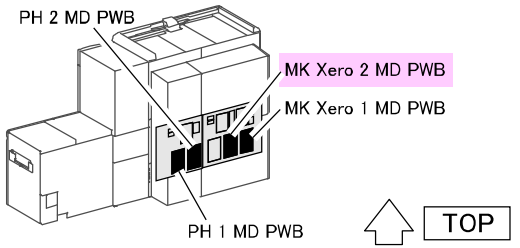
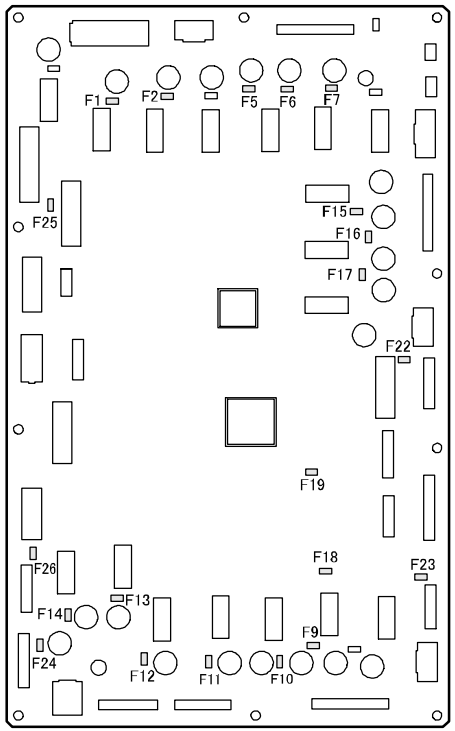
1.78 FUSE LOCATION & PWB LED STATUS (15/19)

MK EPG 2 MD PWB



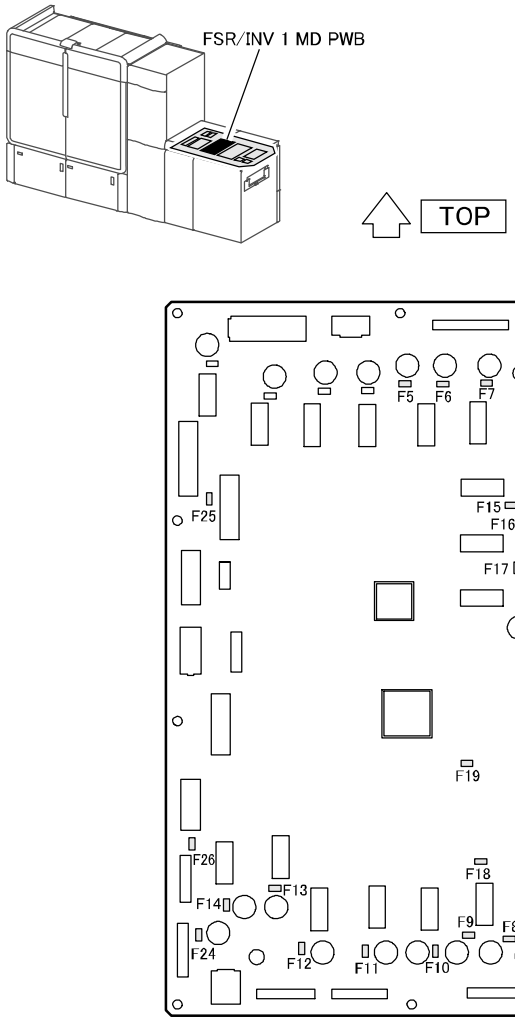


Status and meaning of MK EPG 2 MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	No	1st BTR CNT/RET Motor R1	9.52
F2	No	1st BTR CNT/RET Motor R2	9.53
F3	No	1st BTR CNT/RET Motor R3	9.55
F4	No	1st BTR CNT/RET Motor R4	9.56
F5	No	Rear 2nd Nip Adjustable Motor	9.62
F6	No	Front 2nd Nip Adjustable Motor	9.61
F7	–	Not connected	–
F8	No	2nd BTB Cleaning Motor	9.63
F9	No	2nd BTB CNT/RET Motor	9.60
F10	No	2nd BTB Motor	9.63
F11	No	CC Cleaner Motor #1	9.65
F12	No	CC Cleaner Motor #6	9.67
F13	–	Not connected	–
F14	–	Not connected	–
F15	–	Not connected	–
F16	–	Not connected	–
F17	–	Not connected	–
F18	–	Not connected	–
F19	–	Not connected	–
F20	–	Not connected	–
F21	–	Not connected	–
F22	No	ROS Fan 1	6.17
F23	–	Not connected	–
F24	No	CC Fan 2/3/4/5	9.80/9.81
F25	–	Not connected	–
F26	–	Not connected	–

1.79 FUSE LOCATION & PWB LED STATUS (16/19)

FSR/INV 1 MD PWB



Status and meaning of FSR/INV 1 MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	–	Not connected	–
F2	–	Not connected	–
F3	–	Not connected	–
F4	–	Not connected	–
F5	No	Fusing Belt Walk Motor	10.16
F6	No	Refresh Roll Retract Motor	10.17
F7	No	P/R Latch Motor	10.9
F8	No	IOT Exit Motor	10.39
F9	No	Dup Out Motor	10.45
F10	No	Invert Upper Motor	10.34
F11	No	Decurler Roll Penetration Motor	10.32
F12	No	Decurler Belt Penetration Motor	10.31
F13	No	Cooling Lower Walk Motor	10.28
F14	No	Cooling Upper Walk Motor	10.26
F15	No	Invert In Motor	10.36
F16	No	Exit V-Tra Motor	10.18
F17	No	Invert Path Motor	10.40
F18	Yes	V-Tra Fan 4	10.6
F19	Yes	Fusing Waste Fan	10.24
F20	–	Not connected	–
F21	Yes	Fusing Web Motor	10.20
F22	No	Cooling Lower Motor	10.27
F23	No	Heat Sink Fan 2	10.46
F24	No	Fusing Belt Fan 1-3	10.21
	No	IOT-R Rear Cooling Fan	10.46
F25	–	Not connected	–
F26	–	Not connected	–

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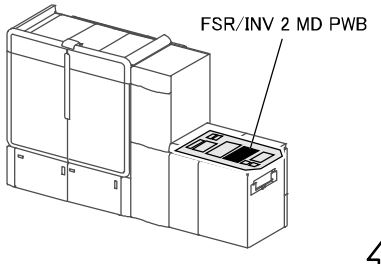
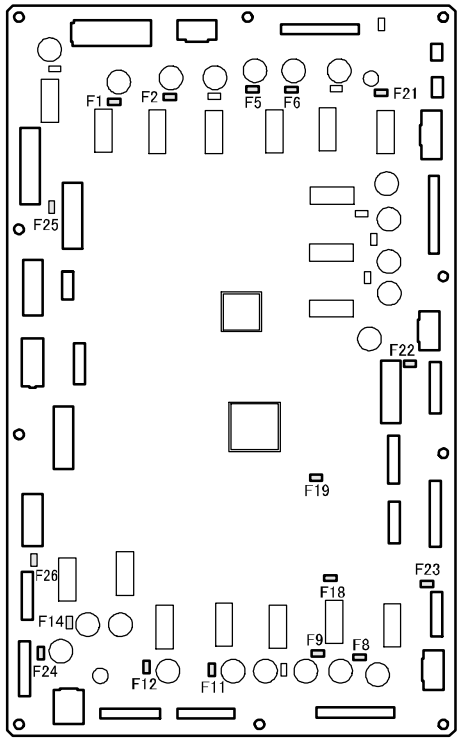
1.80 FUSE LOCATION & PWB LED STATUS (17/19)

FSR/INV 2 MD PWB



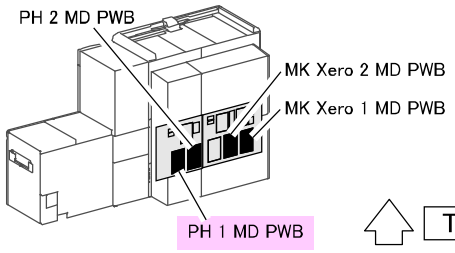


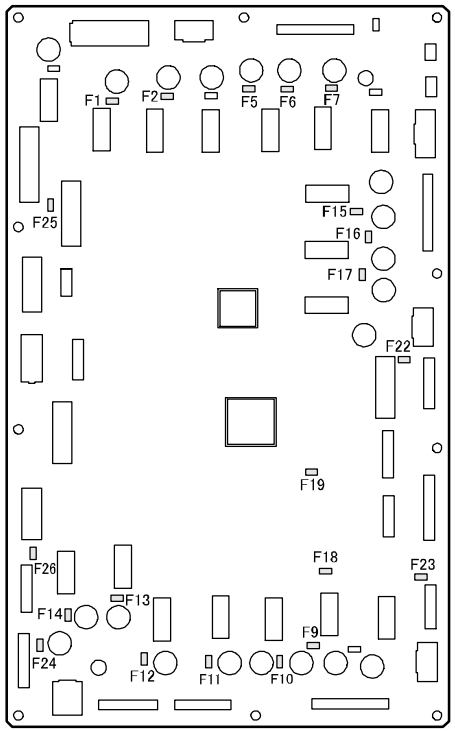
Status and meaning of FSR/INV 2 MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	No	Invert Entrance Motor	10.33
F2	No	Invert Motor	10.37
F3	No	V-Tra Motor 4	10.4
F4	–	Not connected	–
F5	No	Invert Gate Motor	10.35
F6	No	Invert N/R Motor	10.38
F7	–	Not connected	–
F8	No	Dup Invert Motor	10.43
F9	No	D-Tra Motor 2	10.42
F10	–	Not connected	–
F11	No	Duplex Motor	10.44
F12	No	D-Tra Motor 1	10.41
F14	–	Not connected	–
F15	–	Not connected	–
F16	–	Not connected	–
F17	–	Not connected	–
F18	Yes	Fusing P/R Fan 1	10.22
		Fusing P/R Fan 2	
F19	Yes	TRIAC Fan	1.4
	–	Fusing P/R Fan 3	10.22
F20	–	Not connected	–
F21	Yes	OCT Offset Motor	10.47
F22	No	Fusing Lower Fan	10.24
F23	No	Exit V-Tra Fan 1	10.19
	No	Exit V-Tra Fan 2	
F24	No	Heat Sink Fan 1	10.46
F25	–	Not connected	–
F26	–	Not connected	–

1.81 FUSE LOCATION & PWB LED STATUS (18/19)

PH 1 MD PWB





Status and meaning of PH 1 MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	No	Aligner Crossed N/R Motor 1	8.22
F2	No	Aligner Crossed N/R Motor 2	8.23
F3	No	Aligner Crossed N/R Motor 3	8.24
F4	No	Pre Aligner N/R Motor	8.19
F5	No	V-Tra Motor 1	10.1
F6	No	V-Tra Motor 2	10.2
F7	No	H-Tra 1 Motor 1	8.12
F8	No	Aligner Unit Skew Motor	8.21
F9	No	Aligner Shift Motor	8.26
F10	No	Burr Press Retract Motor	8.10
F11	No	Tray 1 Feed Motor	8.1
F12	No	Tray 1 Shift Motor	7.11
F13	No	Tray 1 Lead Shutter Motor	7.15
F14	No	Tray 1 End Shutter Motor	7.16
F15	No	Regi Motor	8.29
F16	No	Regi N/R Motor	8.30
F17	No	Regi Side Shift Motor	8.27
F18	Yes	Tray 1 Lead Blower Fan	7.15
		Tray 1 Front Blower Fan	7.19
F19	Yes	V-Tra Fan 1	10.5
		V-Tra Fan 2	
F20	Yes	Tray 1 Lift Motor	7.9
F21	–	Not connected	–
F22	No	Tray 1 Nudger Solenoid	7.9
F23	–	Not connected	–
F24	–	Not connected	–
F25	–	Not connected	–
F26	–	Not connected	–

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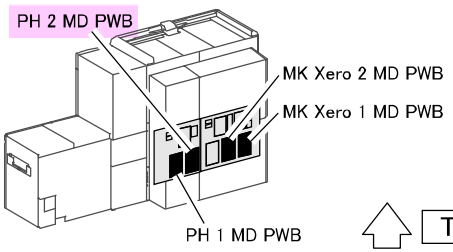
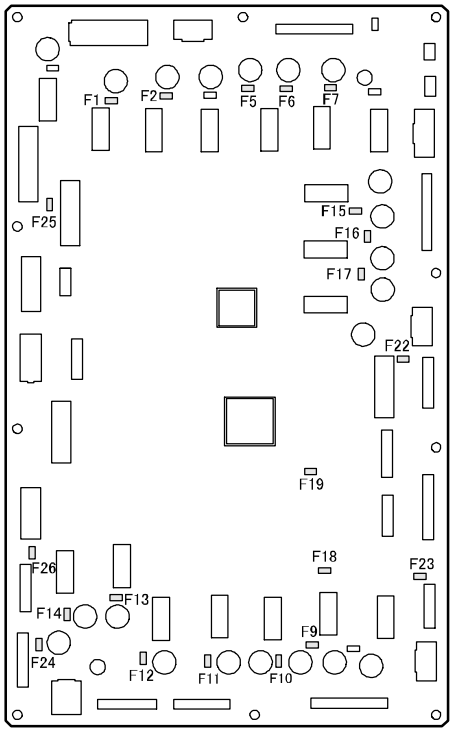
1.82 FUSE LOCATION & PWB LED STATUS (19/19)

PH 2 MD PWB





Status and meaning of PH 2 MD PWB LED

FUSE No.	ON/OFF	Connection destination part name	CH No.
F1	No	Pre Aligner Drive Motor Rear	8.20
F2	No	Pre Aligner Drive Motor Front	8.20
F3	No	P-Regi Roll 1 N/R Motor	8.17
F4	No	P-Regi Roll 2 N/R Motor	8.18
F5	No	Pre Regi Motor	8.15
F6	No	Pre Regi Motor 2	8.16
F7	–	Not connected	–
F8	No	Aligner Drive Motor	8.25
F9	No	Transport Motor	8.14
F10	No	I-Tra Motor	8.13
F11	No	Tray 2 Feed Motor	8.3
F12	No	Tray 2 Shift Motor	7.12
F13	No	Tray 2 Lead Shutter Motor	7.17
F14	No	Tray 2 End Shutter Motor	7.18
F15	No	J-Tra 2 Motor	8.6
F16	No	V-Tra Motor 3	10.3
F17	No	J-Tra 1 Motor	8.5
F18	Yes	Tray 2 Lead Blower Fan	7.17
		Tray 2 Front Blower Fan	7.20
F19	–	Not connected	–
F20	Yes	Tray 2 Lift Motor	7.10
F21	–	Not connected	–
F22	No	Tray 2 Nudger Solenoid	7.10
F23	No	H-Tra 2 In Motor	8.7
		H-Tra 1 Motor 2	8.11
		H-Tra 1 clutch	8.11
F24	No	H-Tra 2 Out Motor	8.8
F25	–	Not connected	–
F26	–	Not connected	–

1.83 POWER MANAGEMENT

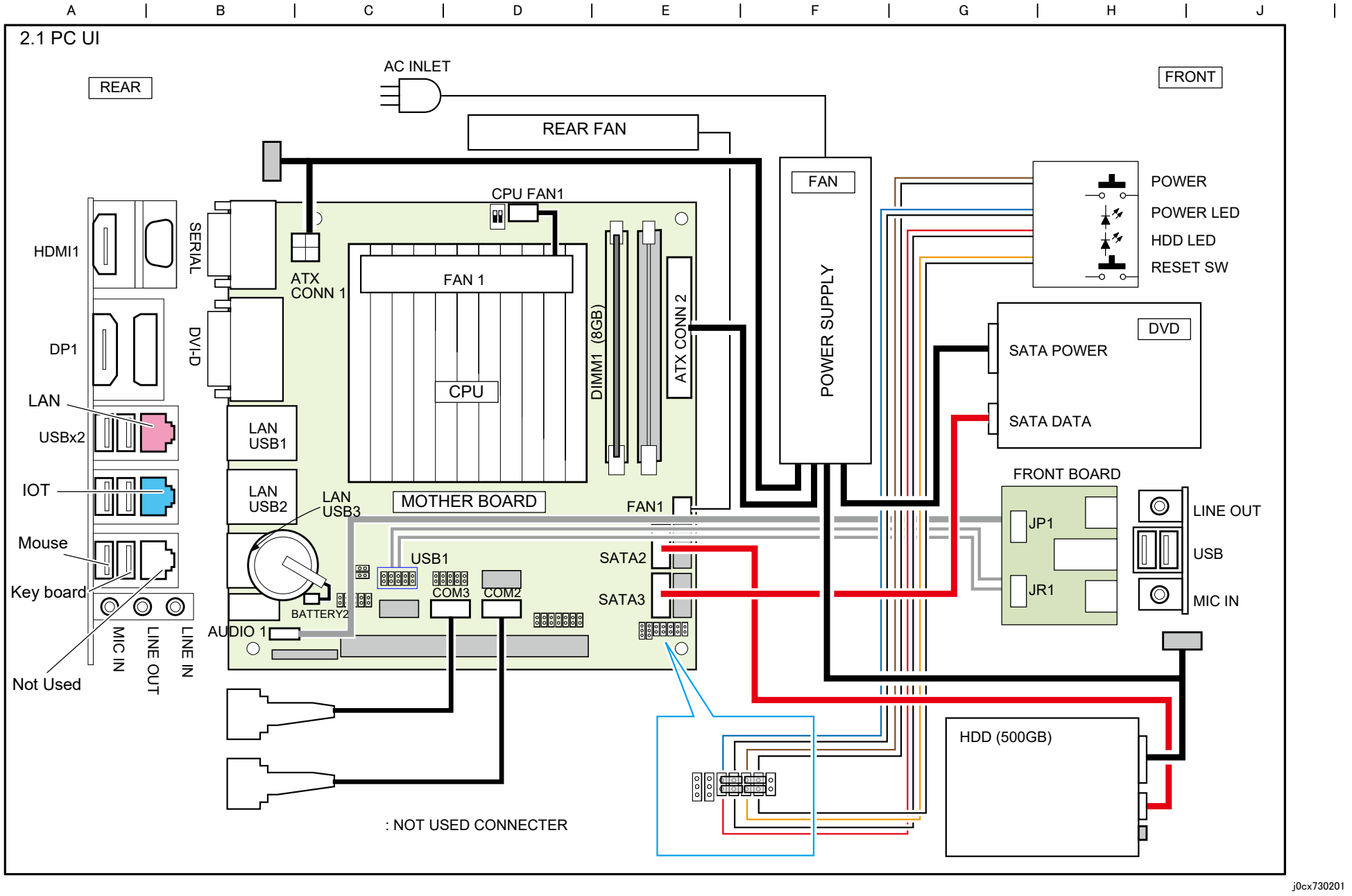
Information concerning C13-related signal

BSD CH	PWB	P/J No.	Pin No.	Signal name	Discription	OFF conditions (Fail)		OFF conditions (Jam)			OFF conditions (Others)
						FPGA-related Fail occurs*1	Fail other than what is described on the left occurs	Tray 1 Jam	Tray 2 Jam	Jam inside IOT other than what is described on the left	Fusing_Exit_Drawer Open
CH1.5	FSR/INV_2 MD PWB	J690_F2	A8	LVPS S24-1 ENABLED	24V Power Supply LVPS S24-1 output enable signal	OFF	ON in Diag Mode			OFF*7	
			A9	LVPS S24-2 ENABLED	24V Power Supply LVPS S24-2 output enable signal	OFF	ON in Diag Mode			OFF*7	
			A10	LVPS S24-3 ENABLED	24V Power Supply LVPS S24-3 output enable signal	OFF	ON in Diag Mode			OFF*7	
			B8	LVPS S24-4 ENABLED	24V Power Supply LVPS S24-4 output enable signal	OFF	ON in Diag Mode			OFF*7	
			B9	LVPS S24-5 ENABLED	24V Power Supply LVPS S24-5 output enable signal	OFF	ON in Diag Mode			OFF*7	
			A10	LVPS S24-6 ENABLED	24V Power Supply LVPS S24-6 output enable signal	OFF	ON in Diag Mode			OFF*7	
CH1.5	FSR/INV1 MD PWB	J690_F1	A8	LVPS S36-1 ENABLED	BLOWER FAN 36V Power Supply LVPS S36-1 output enable signal	OFF	*2				
			A9	LVPS S36-2 ENABLED	BLOWER FAN 36V Power Supply LVPS S36-2 output enable signal	OFF	ON in Diag Mode			OFF*7	OFF*8
CH1.27	PH1 MD PWB	J674_H1	2	TRAY_1_INTLK ON +24VDC	TRAY 1 24V Interlock Relay (FLY#6) ON signal	OFF	*3	OFF*5			
CH1.27	PH2 MD PWB	J674_H2	2	TRAY_2_INTLK ON +24VDC	TRAY 2 24V Interlock Relay (FLY#5) ON signal	OFF	*4		OFF*6		

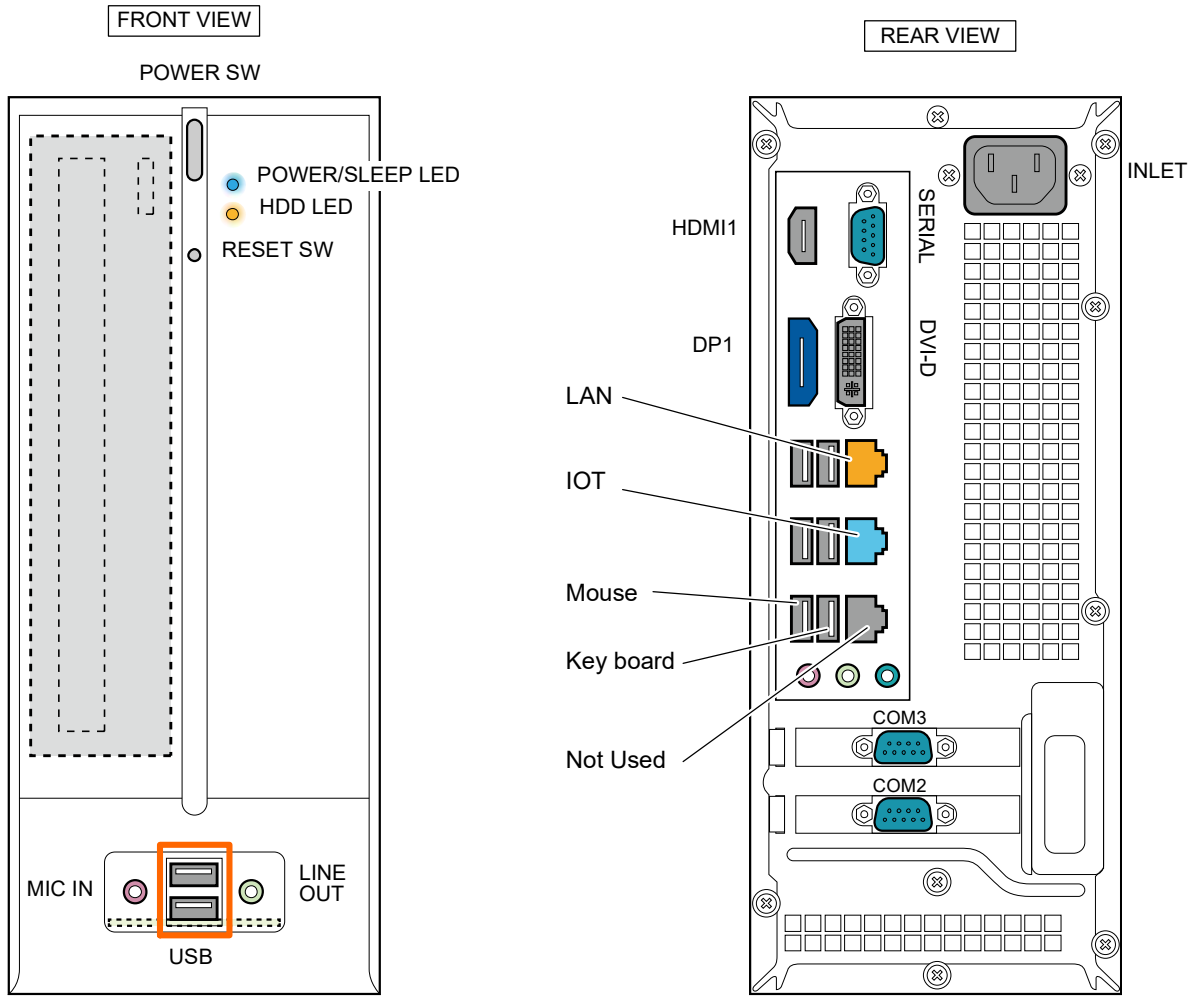
*1	FPGA Fail-#*(045-332,333,335,336,341) Driver FPGA Fail-#*-*(045-337,339,340,354,355,356,357) Dora Communication Fail-#*-*(045-365,366,367,368,369,370,371) When above Fail occurs, it remains OFF even if it transits to Diag mode.
*2	OFF only when Fan Assy Blower Fail - #*(042-366 - 371) occurs. (ON in Diag Mode)
*3	OFF only when Tray 1 Local Fail occurs. (ON in Diag Mode)
*4	OFF only when Tray 2 Local Fail occurs. (ON in Diag Mode)
*5	ON temporarily for lift up operation after Tray 1 Jam Clear is completed but OFF again when lift up is completed. ON again after that when Tray 1 job is accepted.

*6	ON temporarily for lift up operation after Tray 2 Jam Clear is completed but OFF again when lift up is completed. ON again after that when Tray 2 job is accepted.
*7	ON after Jam Clear is completed.
*8	OFF when the latch handle of the Fusing unit or Exit Drawer unit is released regardless of other conditions.

j0cx730183

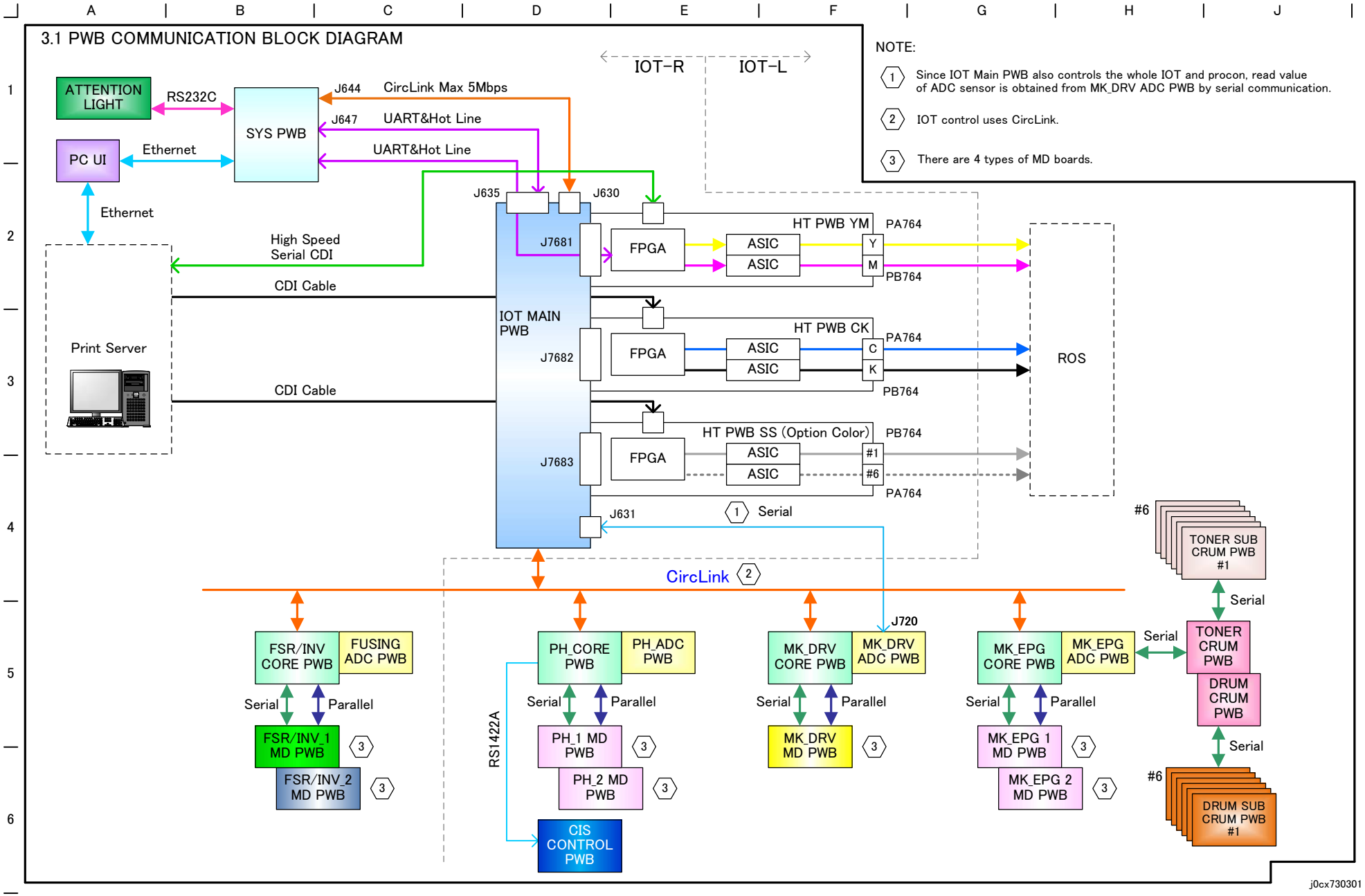

2.1 PC UI
REAR
FRONT
AC INLET
REAR FAN
FAN
POWER SUPPLY
POWER
POWER LED
HDD LED
RESET SW
CPU FAN1
FAN 1
CPU
DIMM1 (8GB)
ATX CONN 2
ATX CONN 1
SERIAL
DVI-D
HDMI1
DP1
LAN
USBx2
IOT
Mouse
Key board
Not Used
MIC IN
LINE OUT
LINE IN
LAN USB1
LAN USB2
LAN USB3
MOTHER BOARD
FAN1
USB1
COM3
COM2
BATTERY2
AUDIO 1
SATA2
SATA3
DVD
SATA POWER
SATA DATA
FRONT BOARD
JP1
JR1
LINE OUT
USB
MIC IN
HDD (500GB)
: NOT USED CONNECTER
j0cx730201

2.2 PC-UI CONNECTION DIAGRAM



j0cx730202

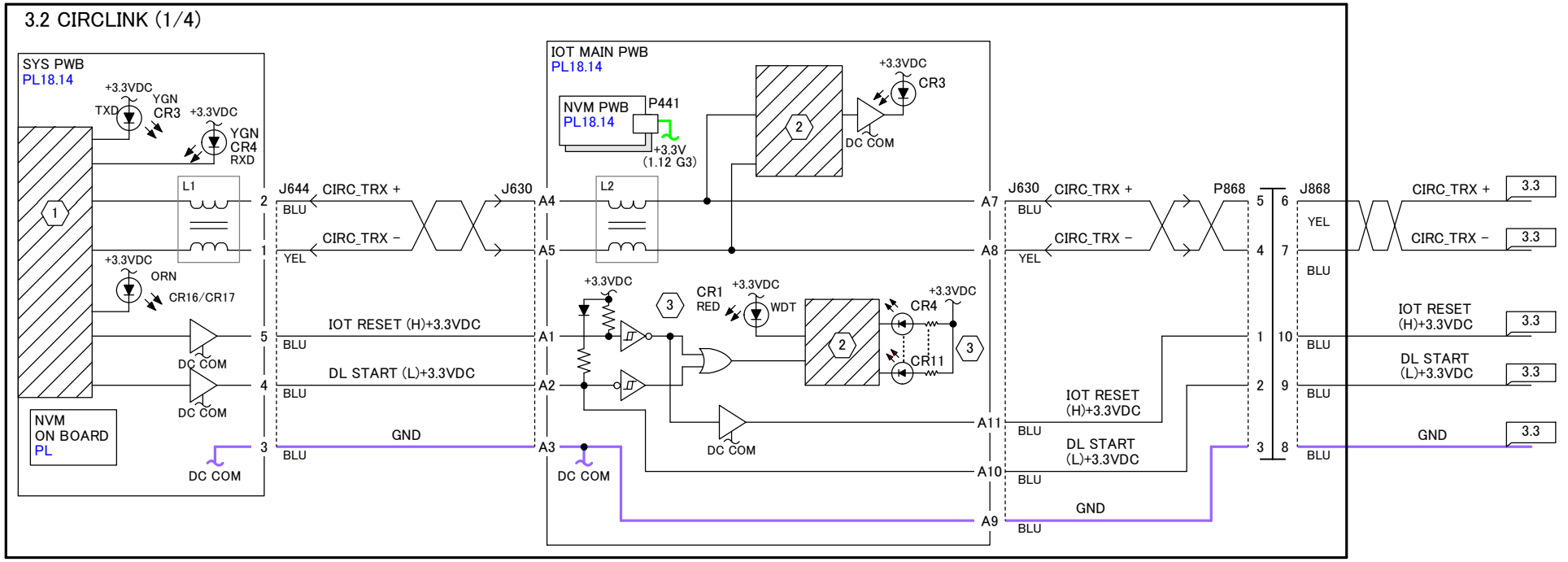
3.1 PWB COMMUNICATION BLOCK DIAGRAM



NOTE:

1. Since IOT Main PWB also controls the whole IOT and procon, read value of ADC sensor is obtained from MK_DRV ADC PWB by serial communication.
2. IOT control uses CircLink.
3. There are 4 types of MD boards.

j0cx730301



NOTE: (1) FAIL CODE

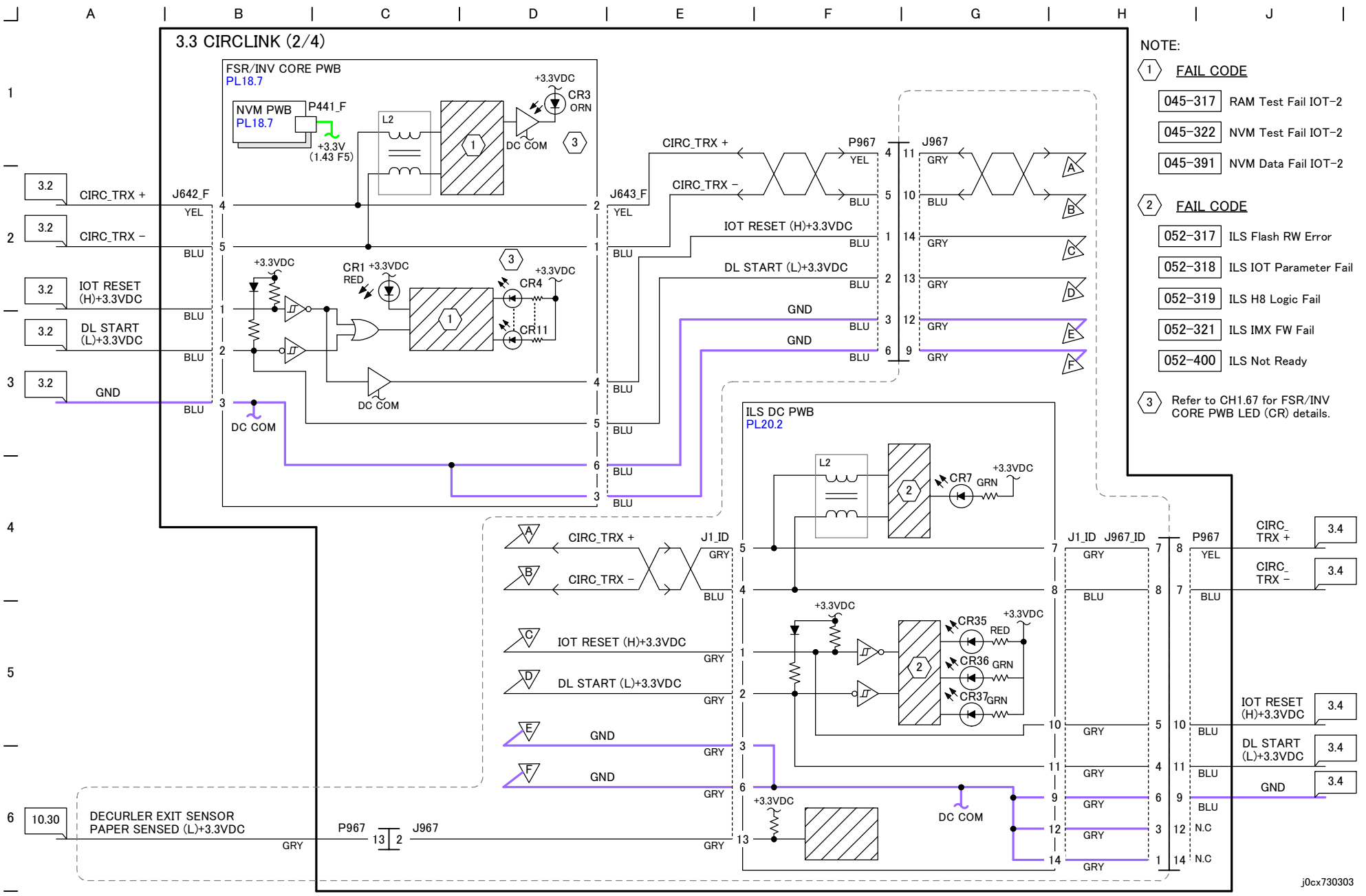
029-604	Communication Fail CircLink
029-605	Comm NVM Error
045-330	Circlink Fail
045-395	Diag TimeOut Fail
045-396	MK TimeOut Fail
045-397	PH TimeOut Fail
045-398	IM Pitch Skip Fail
045-910	Image Ready NG
045-940	Down Purge Fault
045-941	Up Purge Fault
124-312	Sys Logic Fail
124-320	Communication Fail IOT-Sys
124-321	All CRUM Fail 3
124-322	All CRUM Fail 21
124-323	All CRUM Fail 22
124-324	IOT PWB CRUM Restoration Fail 3
124-325	IOT PWB CRUM Restoration Fail 21
124-326	IOT PWB CRUM Restoration Fail 22
124-327	MK Drive CRUM Restoration Fail 3
124-328	MK Drive CRUM Restoration Fail 21
124-329	MK Drive CRUM Restoration Fail 22
124-330	Sys PWB CRUM Restoration Fail 3
124-331	Sys PWB CRUM Restoration Fail 21
124-332	Sys PWB CRUM Restoration Fail 22
124-342	Sys Arbitration Fail
124-343	IOT Logic Fail Sys Command
124-344	Sys Data Structure Fail
124-345	Incomplete Set Fail
024-xxx	For 024-xxx Fail, refer to Chapter 2 Troubleshooting.

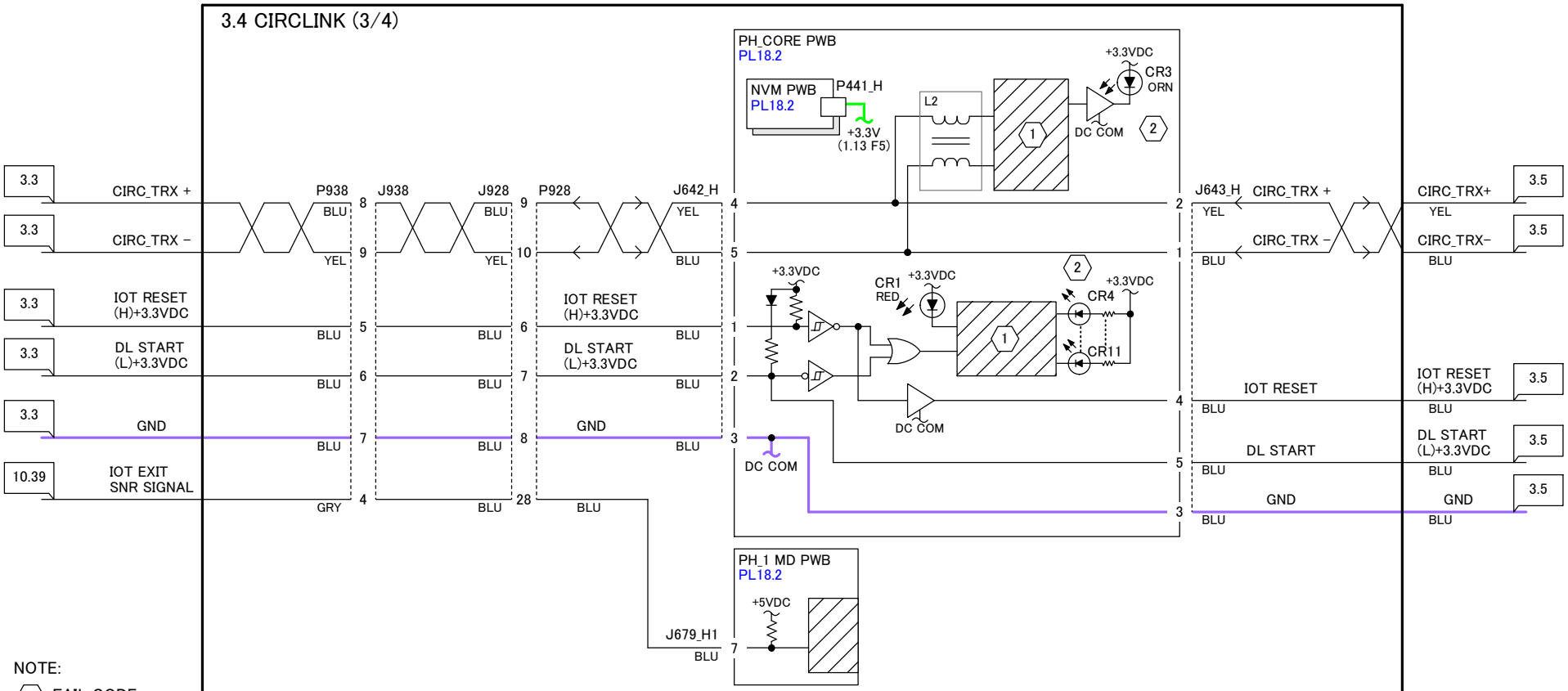
(2) FAIL CODE

045-312	ISP Logic Fail	045-332	FPGA Fail-1
045-313	IM Logic Fail	045-347	Finisher Command Parameter Fail
045-314	Diag Logic Fail	045-348	Finisher Command Timing Fail
045-315	Marking Logic Fail	045-349	FD Logic Fail
045-316	RAM Test Fail IOT-#1	045-350	PH Logic Fail
045-321	NVM Test Fail IOT-#1	045-353	Communication Fail IOT-6
045-326	Communication Fail IOT-2	045-390	NVM Data Fail IOT-1
045-328	Communication Fail IOT-4	052-310	ILS DC Communication Fail
045-329	Communication Fail IOT-5	052-400	ILS Not Ready
045-331	IOT Software Version Mismatch	129-310	Communication Fail Comm IOT

(3) Refer to CH1.68 for IOT Main PWB LED (CR) details.

j0cx730302


3.3 CIRCLINK (2/4)
FSR/INV CORE PWB
PL18.7
NVM PWB
PL18.7
P441_F
+3.3V
(1.43 F5)
L2
+3.3VDC
CR3
ORN
DC COM
CIRC_TRX +
CIRC_TRX –
IOT RESET (H)+3.3VDC
DL START (L)+3.3VDC
GND
J642_F
J643_F
P967
J967
YEL
BLU
GRY
CR1
RED
CR4
CR11
ILS DC PWB
PL20.2
CR7
GRN
CR35
CR36
CR37
J1_ID
J967_ID
DECURLER EXIT SENSOR
PAPER SENSED (L)+3.3VDC
NOTE:
1 FAIL CODE
045-317 RAM Test Fail IOT-2
045-322 NVM Test Fail IOT-2
045-391 NVM Data Fail IOT-2
2 FAIL CODE
052-317 ILS Flash RW Error
052-318 ILS IOT Parameter Fail
052-319 ILS H8 Logic Fail
052-321 ILS IMX FW Fail
052-400 ILS Not Ready
3 Refer to CH1.67 for FSR/INV CORE PWB LED (CR) details.
j0cx730303



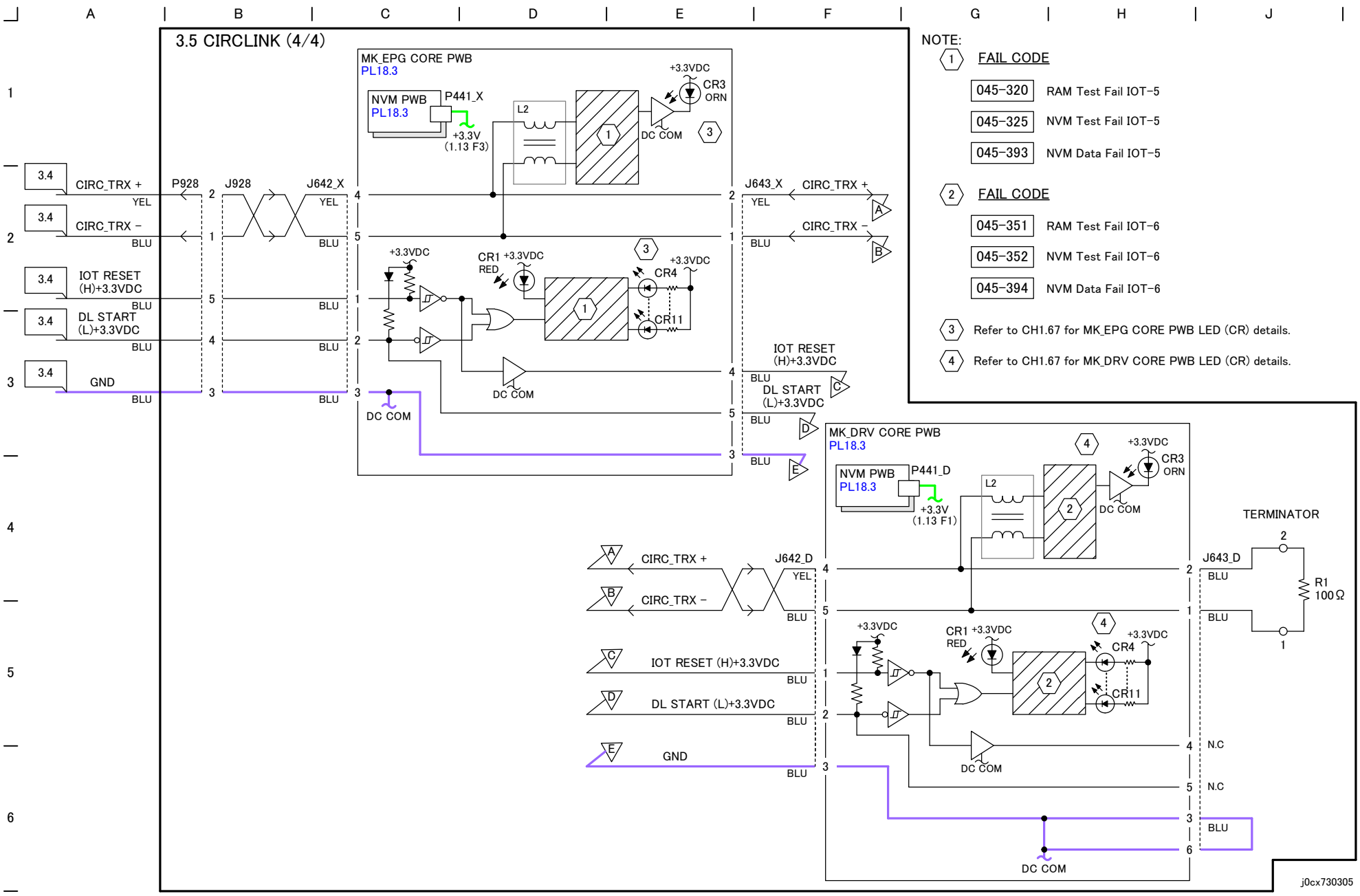
NOTE:

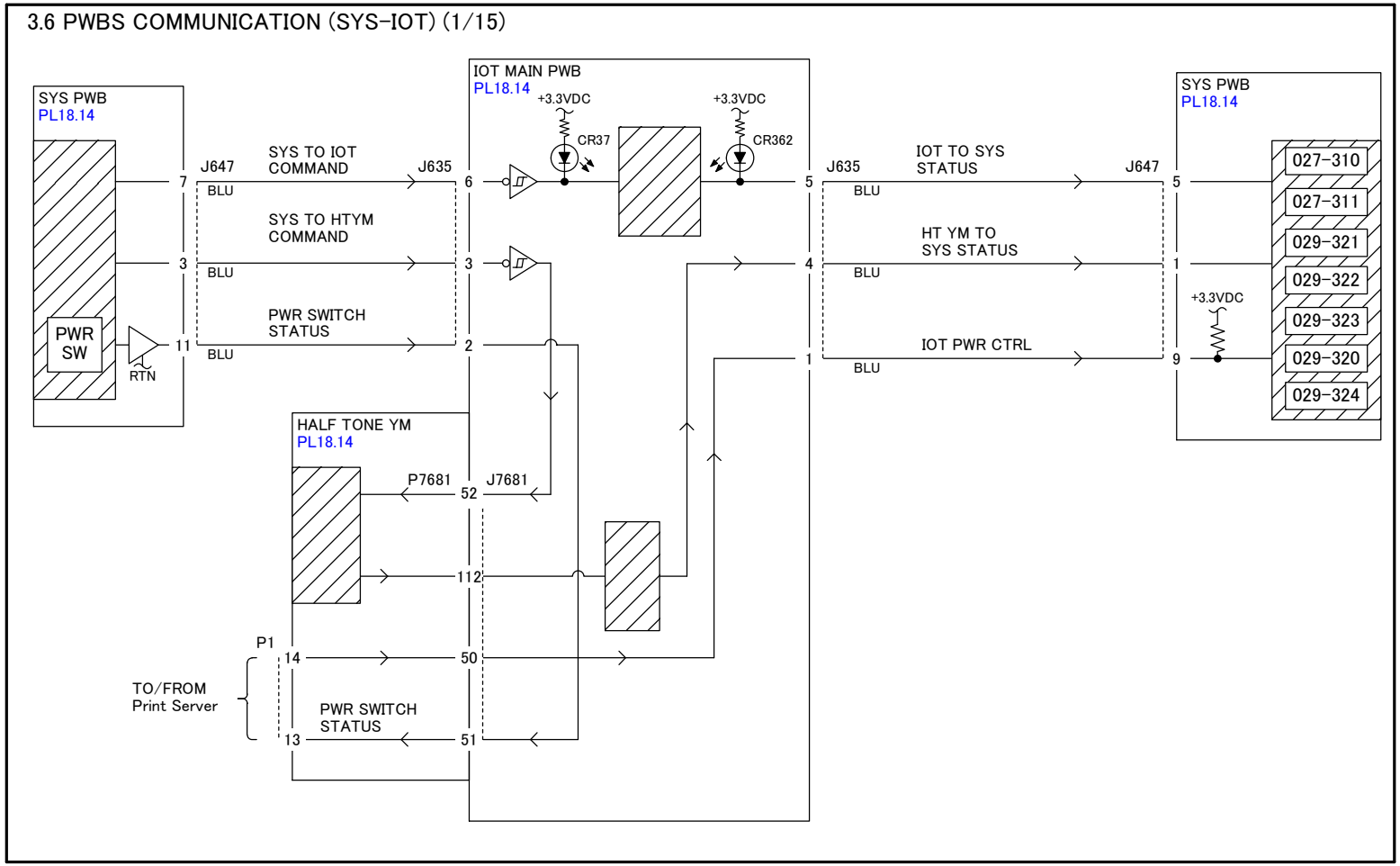
(1) FAIL CODE

045-319	RAM Test Fail IOT-4
045-324	NVM Test Fail IOT-4
045-392	NVM Data Fail IOT-#4
071-942	Tray 1 Parameter Setting in Process
071-943	Tray 1 Offline
071-944	Tray 1 Not Ready
071-945	Tray 1 Not Ready (For C13_SQ OFF during Lift Up)
071-946	Tray 1 No Paper (Scheduling Impossible)
071-947	Tray 1 No Paper – ATS Prohibited
071-948	Tray 1 Parameter Setting in Process – ATS Prohibited
071-949	Tray 1 Broken – ATS Prohibited
071-960	Tray 1 Not Ready – ATS Prohibited
071-961	Tray 1 Paper Wrong Position – ATS Prohibited
071-962	Tray 1 Offline – ATS Prohibited
072-942	Tray 2 Parameter Setting in Process
072-943	Tray 2 Offline
072-944	Tray 2 Not Ready
072-947	Tray 2 No Paper – ATS Prohibited
072-948	Tray 2 Parameter Setting in Process – ATS Prohibited
072-949	Tray 2 Broken – ATS Prohibited
072-945	Tray 2 Not Ready (For C13_SQ OFF during Lift Up)
072-960	Tray 2 Not Ready – ATS Prohibited
072-961	Tray 2 Paper Wrong Position – ATS Prohibited
072-962	Tray 2 Offline – ATS Prohibited
077-323	All Tray Fail
077-941	Paper Size Mismatch (at Feed)

(2) For details of LED (CR) on the PH_CORE PWB, see CH1.67.

j0cx730304


3.5 CIRCLINK (4/4)
MK_EPG CORE PWB
PL18.3
NVM PWB
PL18.3
P441_X
+3.3V
(1.13 F3)
L2
+3.3VDC
CR3
ORN
DC COM
CR1 +3.3VDC
RED
CR4
CR11
3.4
CIRC_TRX +
CIRC_TRX –
IOT RESET
(H)+3.3VDC
DL START
(L)+3.3VDC
GND
YEL
BLU
P928
J928
J642_X
J643_X
IOT RESET
(H)+3.3VDC
DL START
(L)+3.3VDC
MK_DRV CORE PWB
PL18.3
NVM PWB
PL18.3
P441_D
+3.3V
(1.13 F1)
J642_D
J643_D
TERMINATOR
R1
100Ω
N.C
NOTE:
1 FAIL CODE
045-320 RAM Test Fail IOT-5
045-325 NVM Test Fail IOT-5
045-393 NVM Data Fail IOT-5
2 FAIL CODE
045-351 RAM Test Fail IOT-6
045-352 NVM Test Fail IOT-6
045-394 NVM Data Fail IOT-6
3 Refer to CH1.67 for MK_EPG CORE PWB LED (CR) details.
4 Refer to CH1.67 for MK_DRV CORE PWB LED (CR) details.
j0cx730305



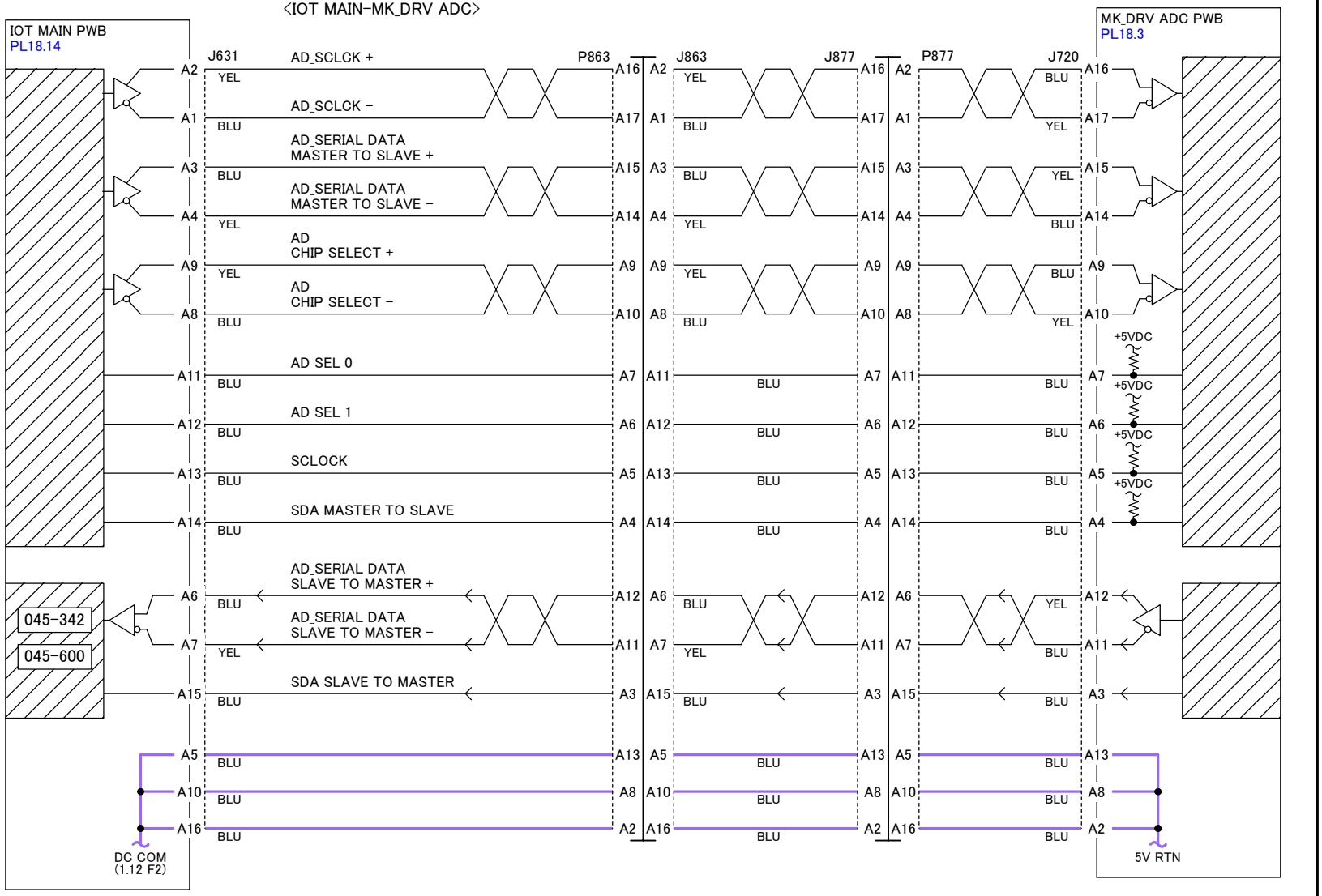
FAIL CODE

027-310	Print Server Logic Fail Sys Command
027-311	Print Server Broken
029-320	Communication Fail Comm - Print Server
029-321	Comm Logic Fail
029-322	Comm Command Error
029-323	Comm Status Error
029-324	Comm Watch Dog Reset

j0cx730306

3.7 IOT MAIN-MK_DRV ADC PWBS COMMUNICATION (2/15)

<IOT MAIN-MK_DRV ADC>

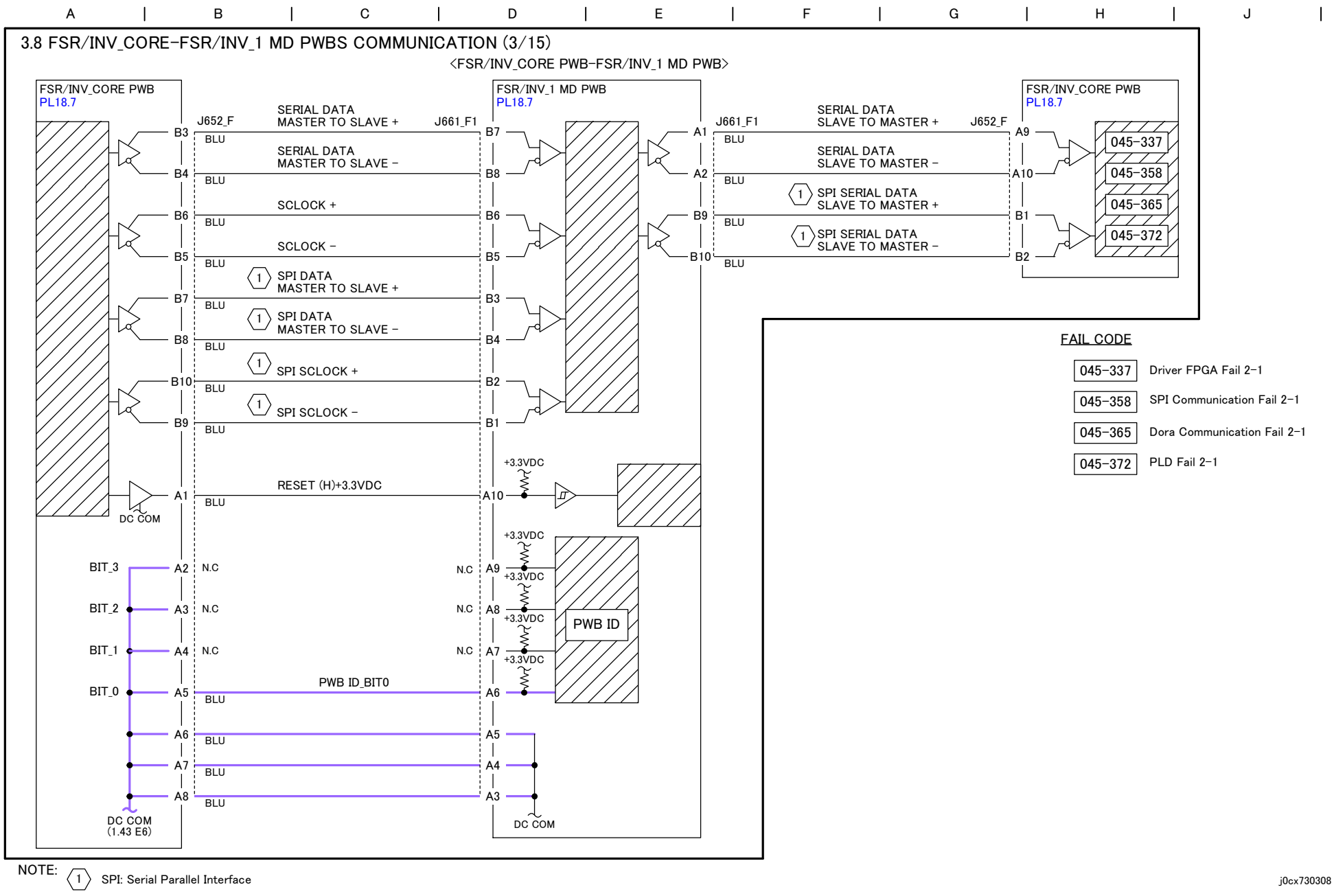


FAIL CODE

045-342
Communication Fail
IOT-AD Converter

045-600
Communication Fail
IOT-ADC Gain

j0cx730307

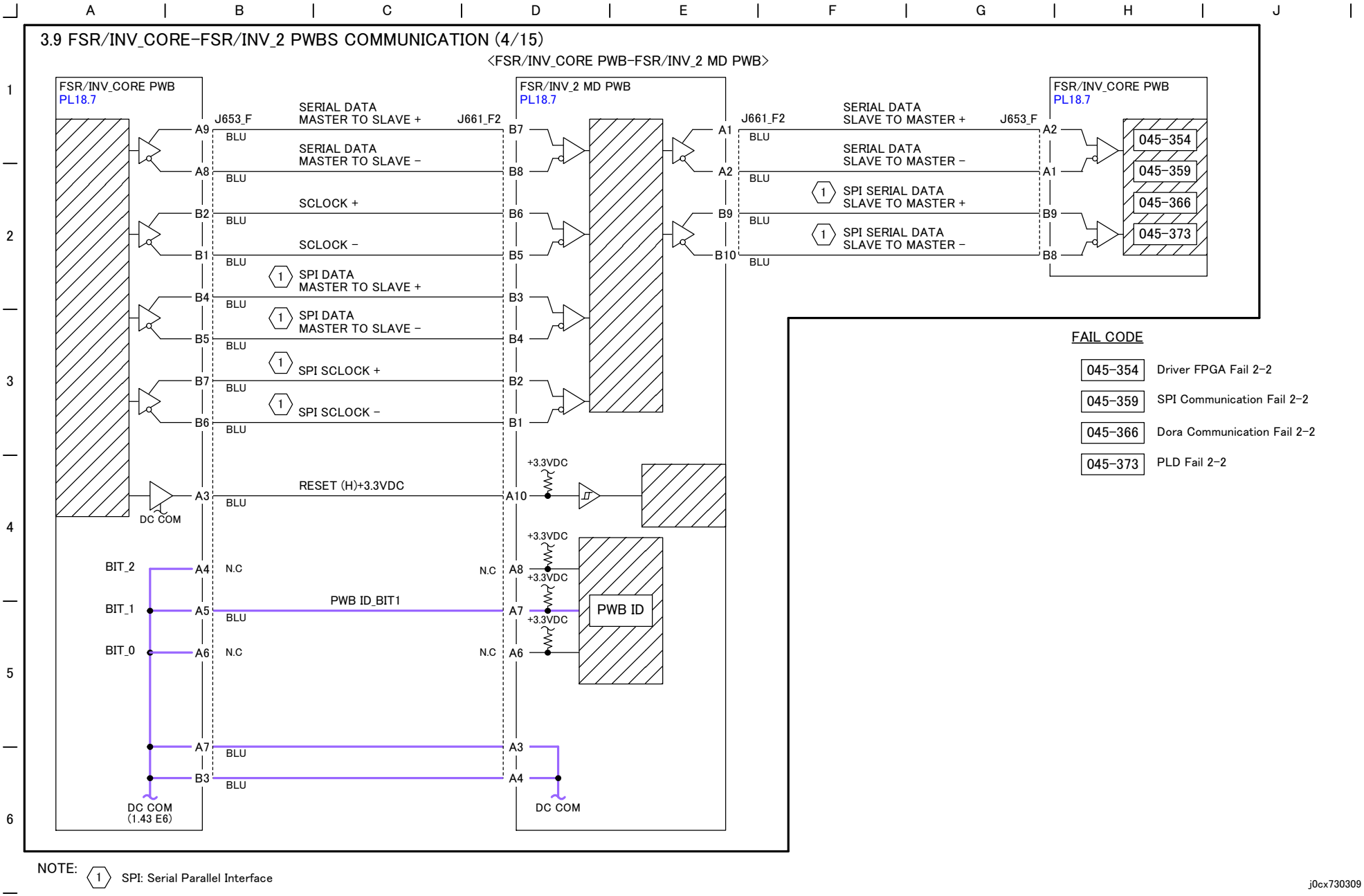


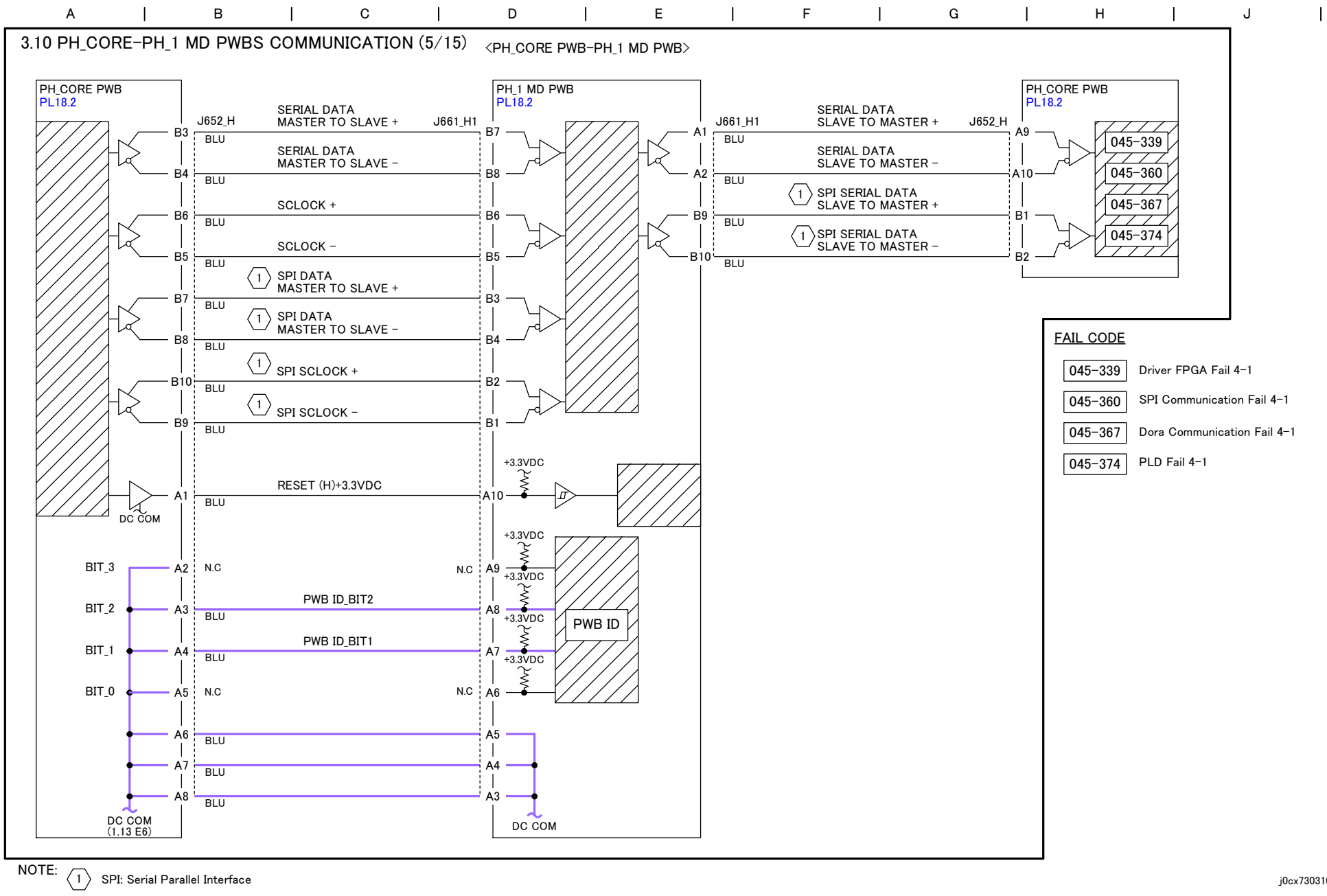
FAIL CODE

045-337	Driver FPGA Fail 2-1
045-358	SPI Communication Fail 2-1
045-365	Dora Communication Fail 2-1
045-372	PLD Fail 2-1

NOTE: (1) SPI: Serial Parallel Interface

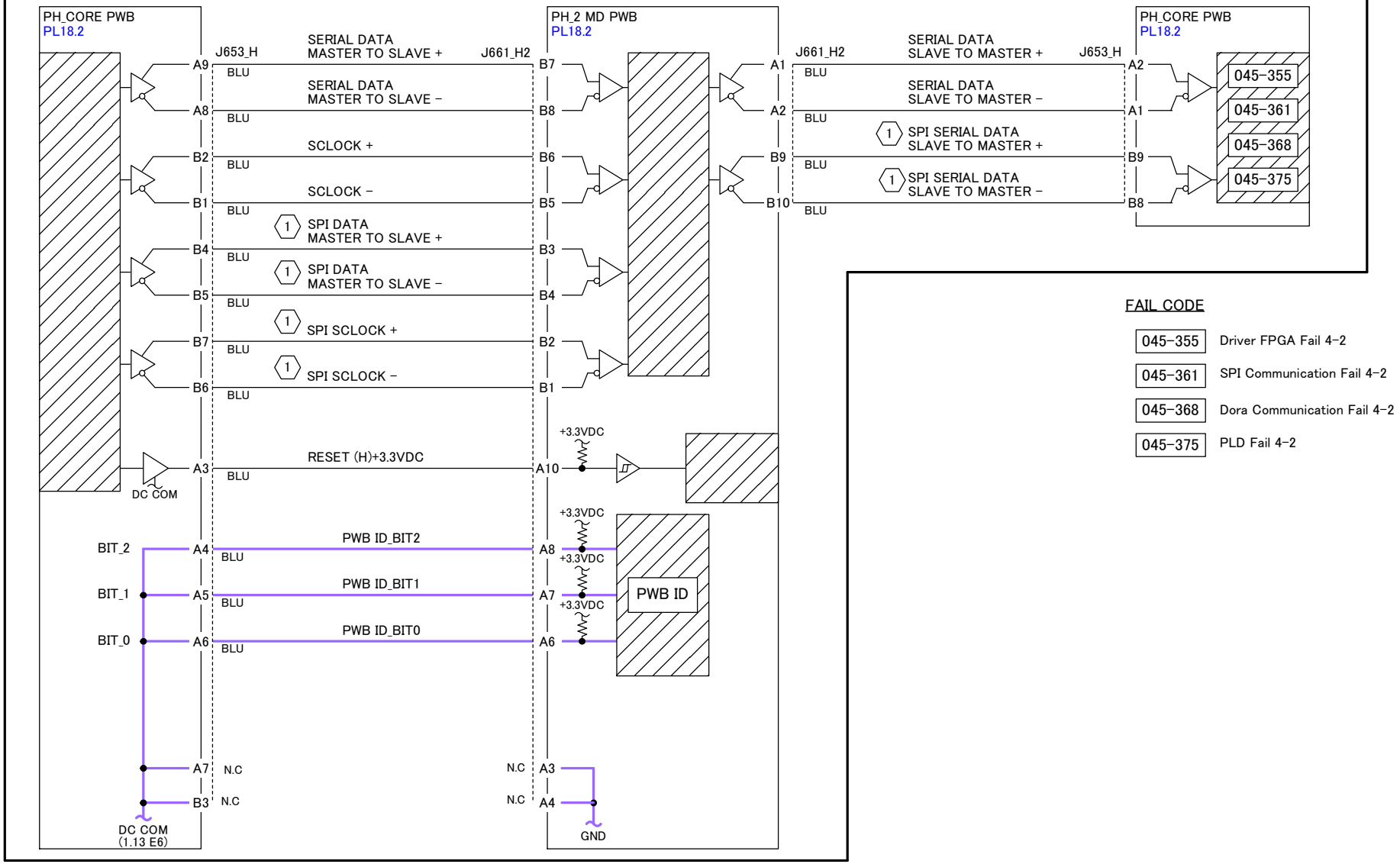
j0cx730308


3.9 FSR/INV_CORE-FSR/INV_2 PWBS COMMUNICATION (4/15)
<FSR/INV_CORE PWB-FSR/INV_2 MD PWB>
FSR/INV_CORE PWB
PL18.7
FSR/INV_2 MD PWB
PL18.7
FSR/INV_CORE PWB
PL18.7
J653_F
J661_F2
J661_F2
J653_F
SERIAL DATA MASTER TO SLAVE +
SERIAL DATA MASTER TO SLAVE −
SCLOCK +
SCLOCK −
SPI DATA MASTER TO SLAVE +
SPI DATA MASTER TO SLAVE −
SPI SCLOCK +
SPI SCLOCK −
SERIAL DATA SLAVE TO MASTER +
SERIAL DATA SLAVE TO MASTER −
SPI SERIAL DATA SLAVE TO MASTER +
SPI SERIAL DATA SLAVE TO MASTER −
A9
A8
B2
B1
B4
B5
B7
B6
B7
B8
B6
B5
B3
B4
B2
B1
A1
A2
B9
B10
A2
A1
B9
B8
BLU
RESET (H)+3.3VDC
A3
A10
DC COM
+3.3VDC
BIT_2
BIT_1
BIT_0
A4
A5
A6
N.C
PWB ID_BIT1
A8
A7
A6
PWB ID
A7
A3
B3
A4
DC COM
(1.43 E6)
DC COM
045-354
045-359
045-366
045-373
FAIL CODE
045-354 Driver FPGA Fail 2-2
045-359 SPI Communication Fail 2-2
045-366 Dora Communication Fail 2-2
045-373 PLD Fail 2-2
NOTE: 1 SPI: Serial Parallel Interface
j0cx730309


3.10 PH_CORE-PH_1 MD PWBS COMMUNICATION (5/15)
<PH_CORE PWB-PH_1 MD PWB>
PH_CORE PWB
PL18.2
PH_1 MD PWB
PL18.2
PH_CORE PWB
PL18.2
J652_H
J661_H1
J661_H1
J652_H
SERIAL DATA MASTER TO SLAVE +
SERIAL DATA MASTER TO SLAVE −
SCLOCK +
SCLOCK −
SPI DATA MASTER TO SLAVE +
SPI DATA MASTER TO SLAVE −
SPI SCLOCK +
SPI SCLOCK −
RESET (H)+3.3VDC
SERIAL DATA SLAVE TO MASTER +
SERIAL DATA SLAVE TO MASTER −
SPI SERIAL DATA SLAVE TO MASTER +
SPI SERIAL DATA SLAVE TO MASTER −
B3
B4
B6
B5
B7
B8
B10
B9
A1
B7
B8
B6
B5
B3
B4
B2
B1
A10
A1
A2
B9
B10
A9
A10
B1
B2
BLU
DC COM
BIT_3
BIT_2
BIT_1
BIT_0
A2
A3
A4
A5
N.C
PWB ID_BIT2
PWB ID_BIT1
A9
A8
A7
A6
+3.3VDC
PWB ID
A6
A7
A8
A5
A4
A3
DC COM
(1.13 E6)
DC COM
045-339
045-360
045-367
045-374
FAIL CODE
045-339 Driver FPGA Fail 4-1
045-360 SPI Communication Fail 4-1
045-367 Dora Communication Fail 4-1
045-374 PLD Fail 4-1
NOTE: 1 SPI: Serial Parallel Interface
j0cx730310

3.11 PH_CORE-PH_2 MD PWBS COMMUNICATION (6/15)

<PH_CORE PWB-PH_2 MD PWB>

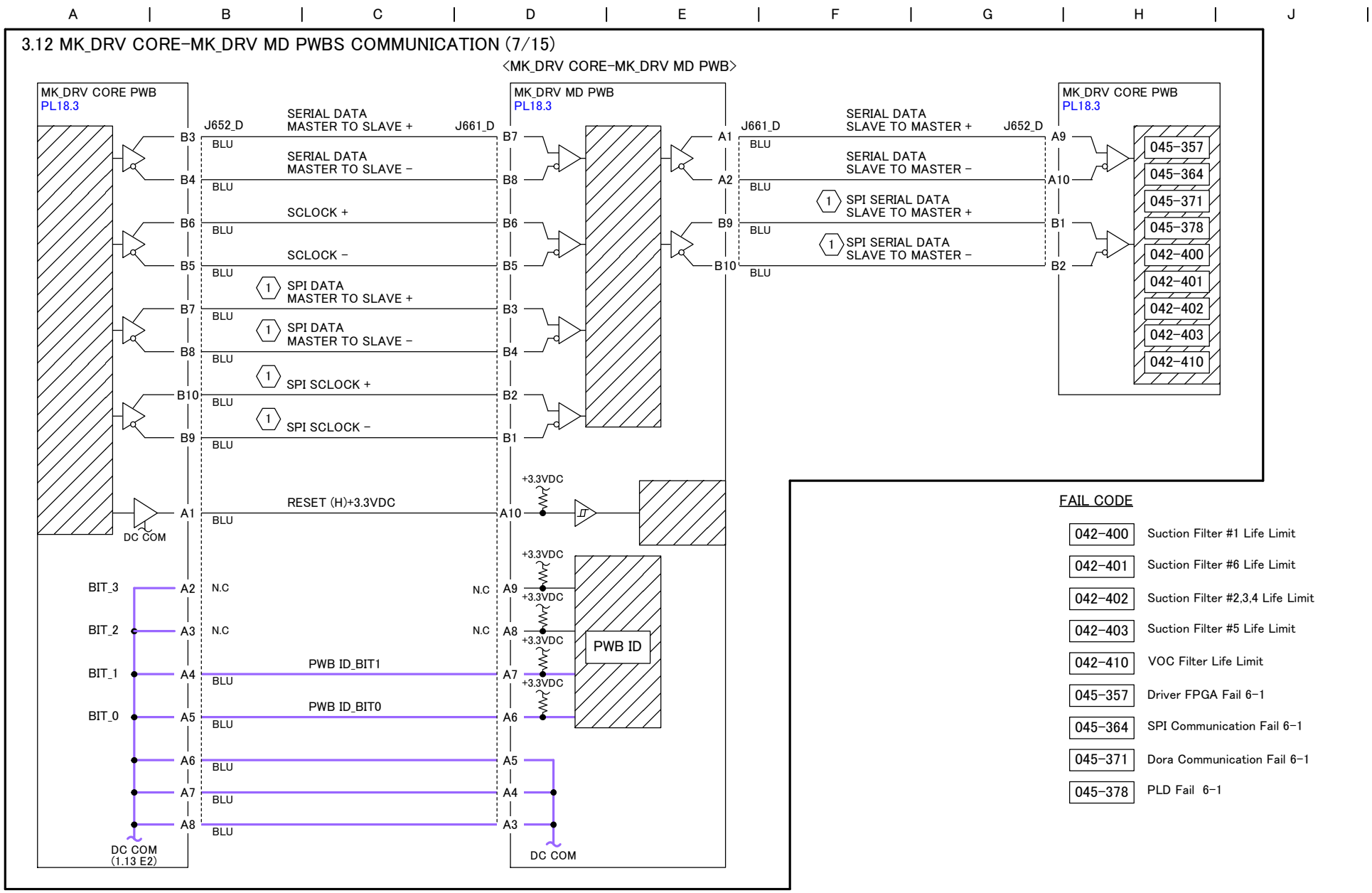


FAIL CODE

045-355	Driver FPGA Fail 4-2
045-361	SPI Communication Fail 4-2
045-368	Dora Communication Fail 4-2
045-375	PLD Fail 4-2

NOTE: (1) SPI: Serial Parallel Interface

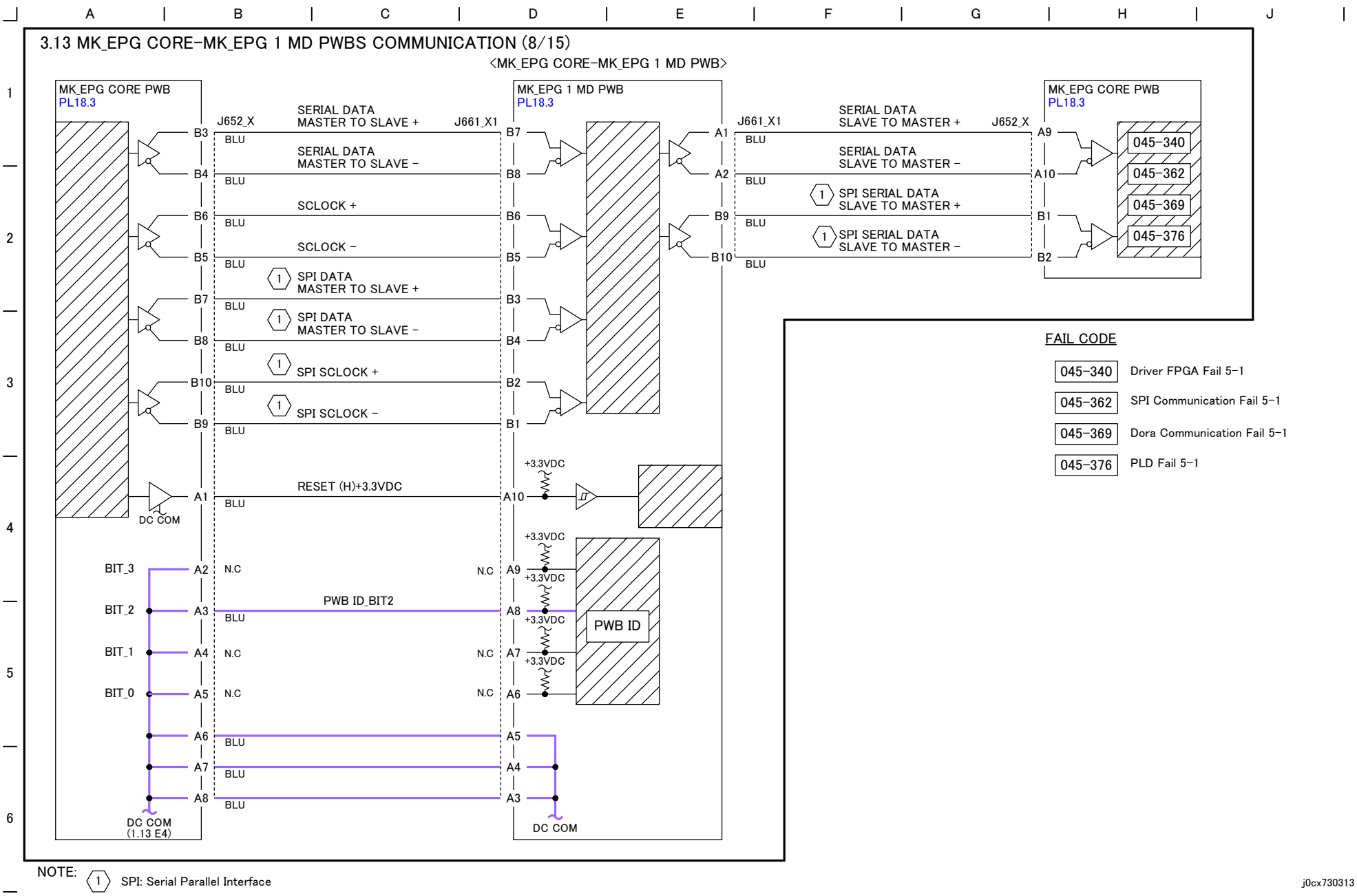
j0cx730311

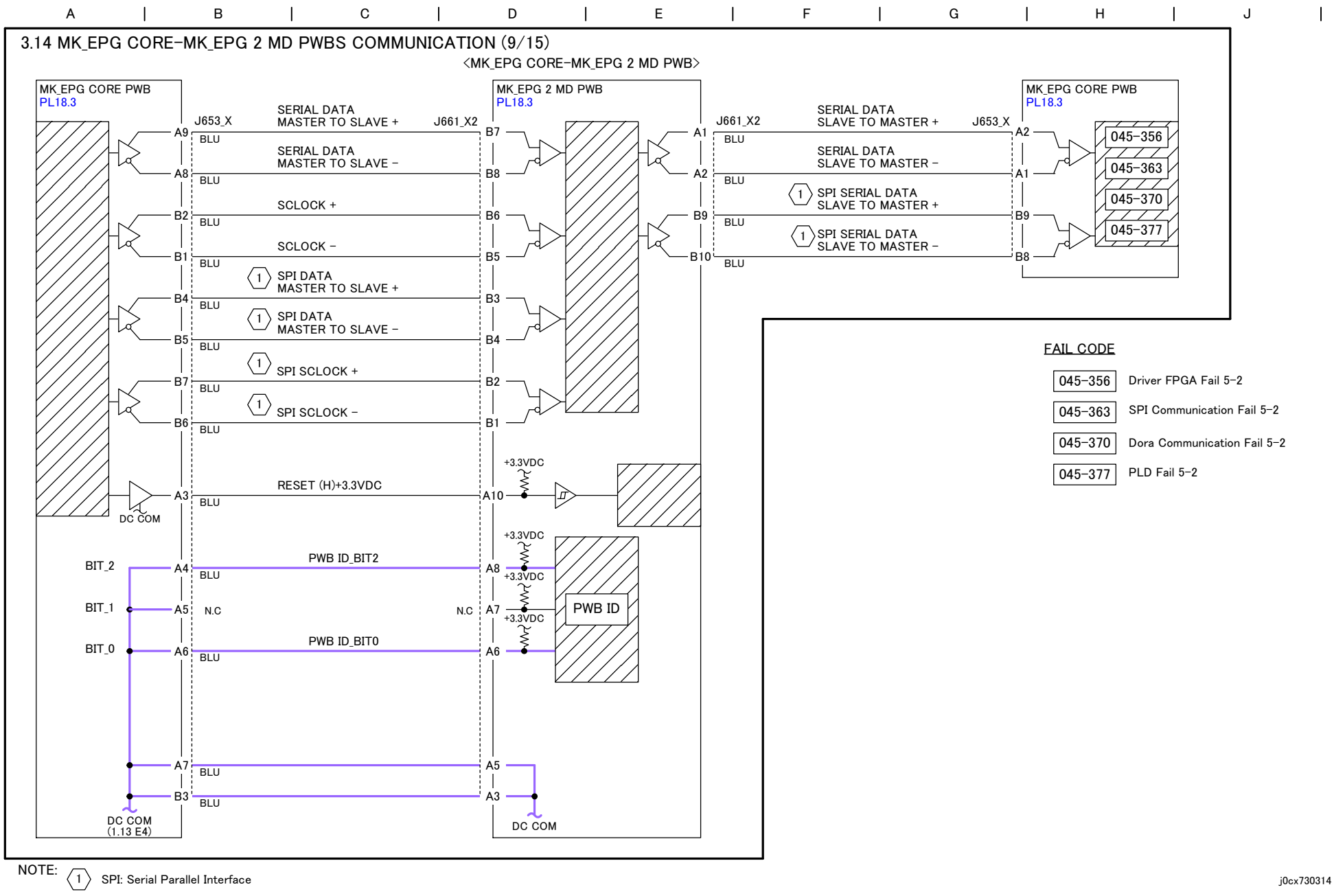


FAIL CODE

042-400	Suction Filter #1 Life Limit
042-401	Suction Filter #6 Life Limit
042-402	Suction Filter #2,3,4 Life Limit
042-403	Suction Filter #5 Life Limit
042-410	VOC Filter Life Limit
045-357	Driver FPGA Fail 6-1
045-364	SPI Communication Fail 6-1
045-371	Dora Communication Fail 6-1
045-378	PLD Fail 6-1

j0cx730312


3.13 MK_EPG CORE-MK_EPG 1 MD PWBS COMMUNICATION (8/15)
<MK_EPG CORE-MK_EPG 1 MD PWB>
MK_EPG CORE PWB
PL18.3
MK_EPG 1 MD PWB
PL18.3
MK_EPG CORE PWB
PL18.3
J652_X
J661_X1
J661_X1
J652_X
SERIAL DATA MASTER TO SLAVE +
SERIAL DATA MASTER TO SLAVE −
SCLOCK +
SCLOCK −
SPI DATA MASTER TO SLAVE +
SPI DATA MASTER TO SLAVE −
SPI SCLOCK +
SPI SCLOCK −
SERIAL DATA SLAVE TO MASTER +
SERIAL DATA SLAVE TO MASTER −
SPI SERIAL DATA SLAVE TO MASTER +
SPI SERIAL DATA SLAVE TO MASTER −
B3
B4
B6
B5
B7
B8
B10
B9
A1
A2
B9
B10
A9
A10
B1
B2
BLU
RESET (H)+3.3VDC
+3.3VDC
DC COM
BIT_3
BIT_2
BIT_1
BIT_0
A2
A3
A4
A5
N.C
PWB ID_BIT2
A6
A7
A8
PWB ID
DC COM
(1.13 E4)
DC COM
045-340
045-362
045-369
045-376
FAIL CODE
045-340 Driver FPGA Fail 5-1
045-362 SPI Communication Fail 5-1
045-369 Dora Communication Fail 5-1
045-376 PLD Fail 5-1
NOTE: 1 SPI: Serial Parallel Interface
j0cx730313



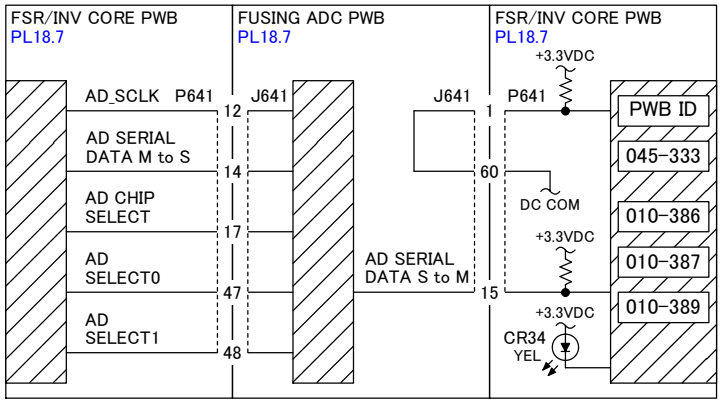
FAIL CODE

045-356	Driver FPGA Fail 5-2
045-363	SPI Communication Fail 5-2
045-370	Dora Communication Fail 5-2
045-377	PLD Fail 5-2

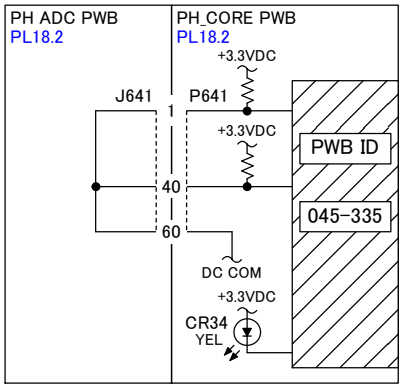
j0cx730314

3.15 PWBS COMMUNICATION (10/15)

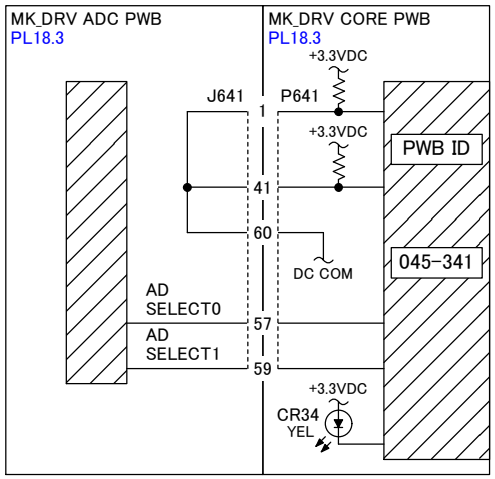
<FUSING CORE-FUSING ADC>



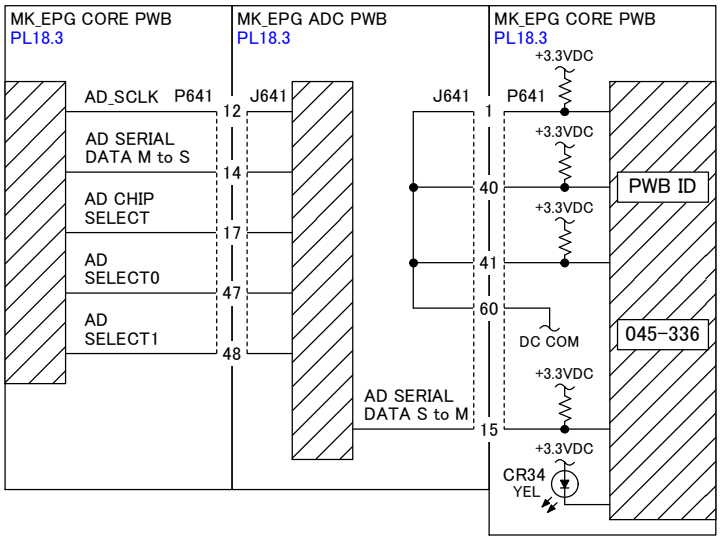
<PH CORE-PH ADC>



<MK_DRV CORE-MK_DRV ADC>



<MK_EPG CORE-MK_EPG ADC>



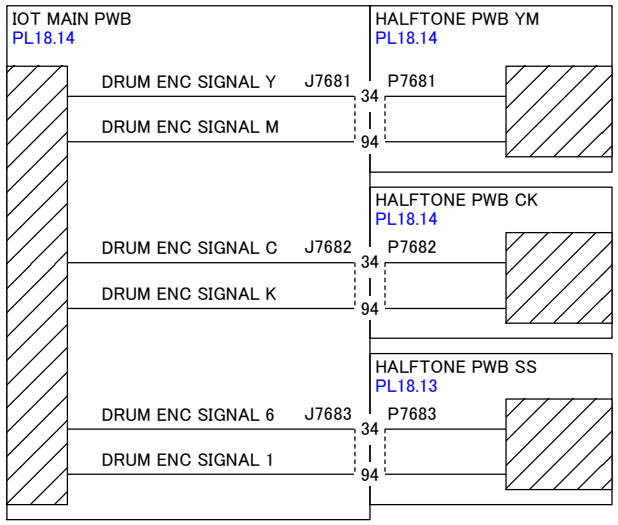
FAIL CODE

- 010-386 Fusing Transition 1 Fail
- 010-387 Fusing Transition 2 Fail
- 010-389 Fusing Transition 4 Fail
- 045-333 FPGA Fail-2
- 045-335 FPGA Fail-4
- 045-336 FPGA Fail-5
- 045-341 FPGA Fail-6

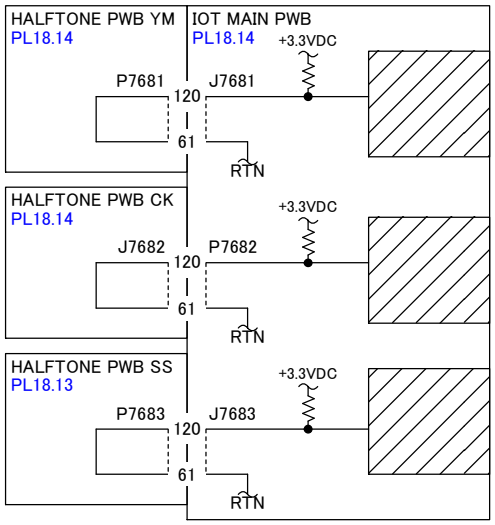
j0cx730315

3.16 PWBS COMMUNICATION (11/15)

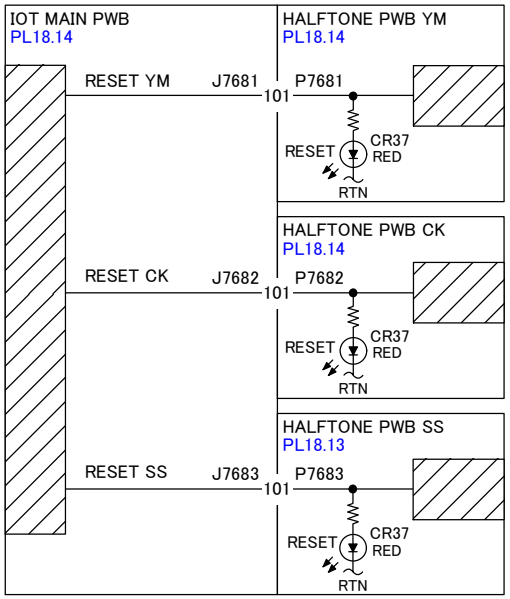
<DRUM ENCODER SIGNAL>



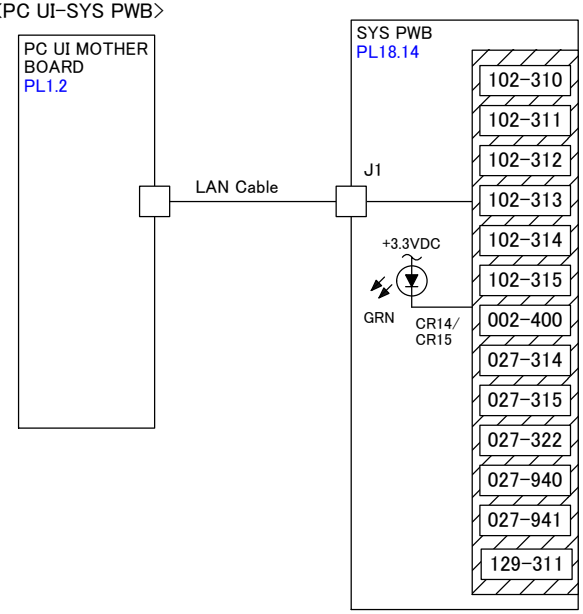
<HALFTONE CONNECTION>



<HALFTONE RESET>



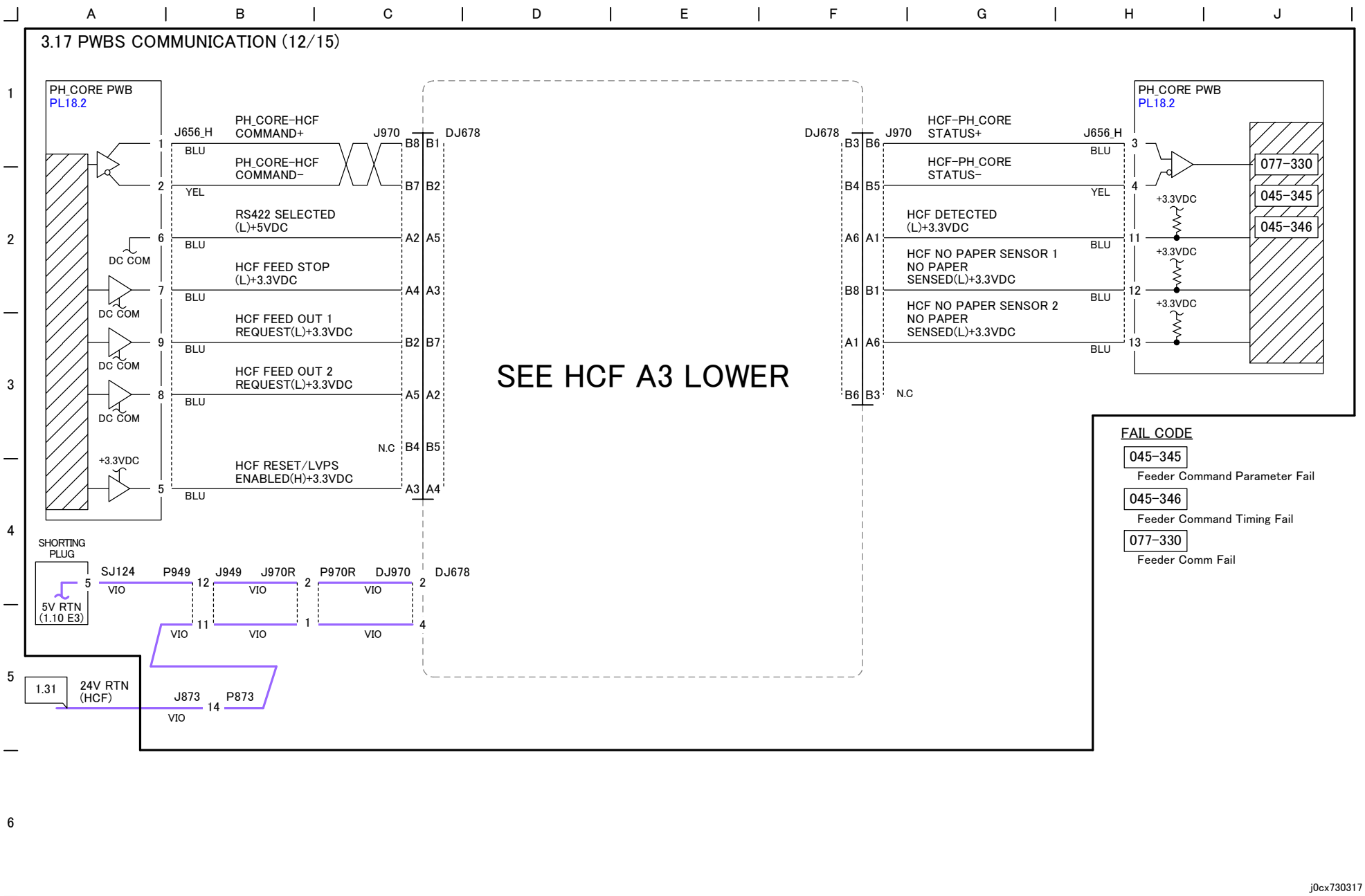
<PC UI-SYS PWB>



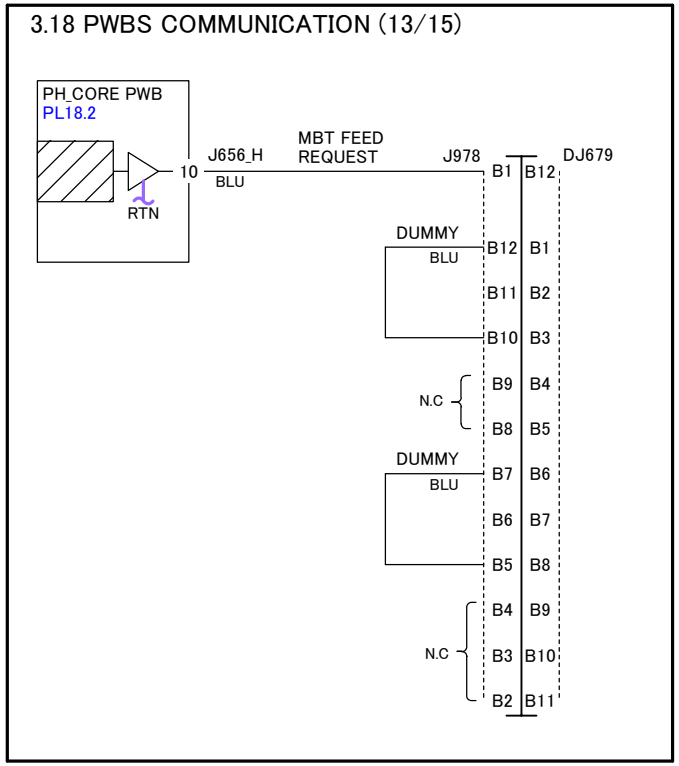
FAIL CODE

- 027-314 Communication Fail Sys – Print Server
- 027-315 Print Server Logic Fail Print Server Command
- 027-322 Initialize Request From Print Server
- 027-940 Print Server Job Parameter NG
- 027-941 Stop From Print Server
- 102-310 UI Logic Fail
- 102-311 No UI Software Resource
- 102-312 No UI Software Setup File
- 102-313 No UI Software Library
- 102-314 NVM Test Fail UI
- 102-315 Communication Fail UI – Sys
- 002-400 Waiting for Sys
- 129-311 Communication Fail PC Service – Comm

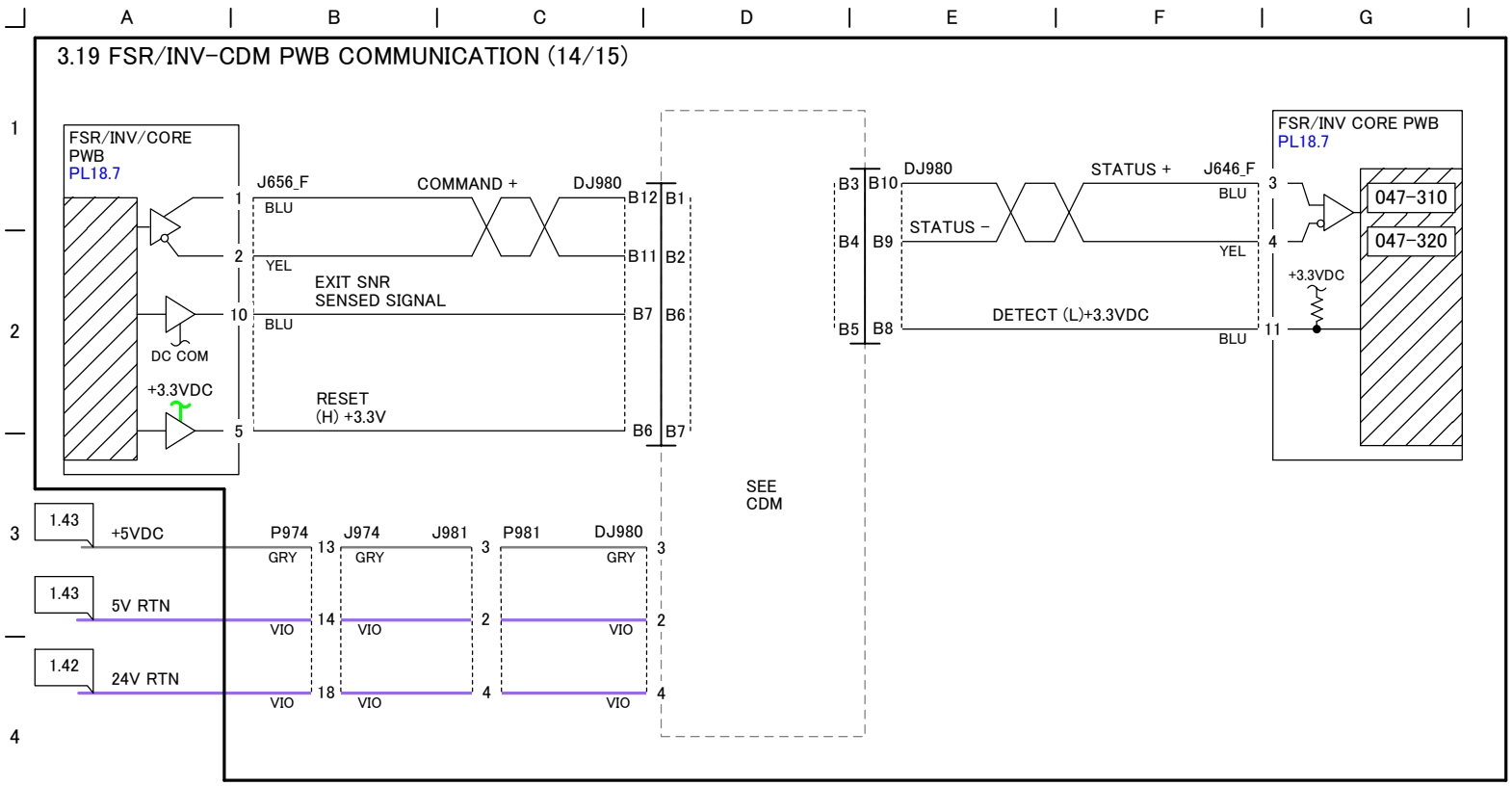
j0cx730316


3.17 PWBS COMMUNICATION (12/15)
PH_CORE PWB
PL18.2
J656_H
PH_CORE-HCF COMMAND+
PH_CORE-HCF COMMAND-
RS422 SELECTED (L)+5VDC
HCF FEED STOP (L)+3.3VDC
HCF FEED OUT 1 REQUEST(L)+3.3VDC
HCF FEED OUT 2 REQUEST(L)+3.3VDC
HCF RESET/LVPS ENABLED(H)+3.3VDC
DC COM
+3.3VDC
BLU
YEL
N.C
J970
DJ678
SEE HCF A3 LOWER
HCF-PH_CORE STATUS+
HCF-PH_CORE STATUS-
HCF DETECTED (L)+3.3VDC
HCF NO PAPER SENSOR 1 NO PAPER SENSED(L)+3.3VDC
HCF NO PAPER SENSOR 2 NO PAPER SENSED(L)+3.3VDC
077-330
045-345
045-346
SHORTING PLUG
5V RTN (1.10 E3)
SJ124
P949
J949
J970R
P970R
DJ970
VIO
1.31
24V RTN (HCF)
J873
P873
FAIL CODE
045-345
Feeder Command Parameter Fail
045-346
Feeder Command Timing Fail
077-330
Feeder Comm Fail

j0cx730317


3.18 PWBS COMMUNICATION (13/15)
PH_CORE PWB
PL18.2
RTN
10
J656_H
BLU
MBT FEED
REQUEST
J978
DJ679
B1
B12
DUMMY
BLU
B12
B1
B11
B2
B10
B3
N.C
B9
B4
B8
B5
DUMMY
BLU
B7
B6
B6
B7
B5
B8
N.C
B4
B9
B3
B10
B2
B11

j0cx730318

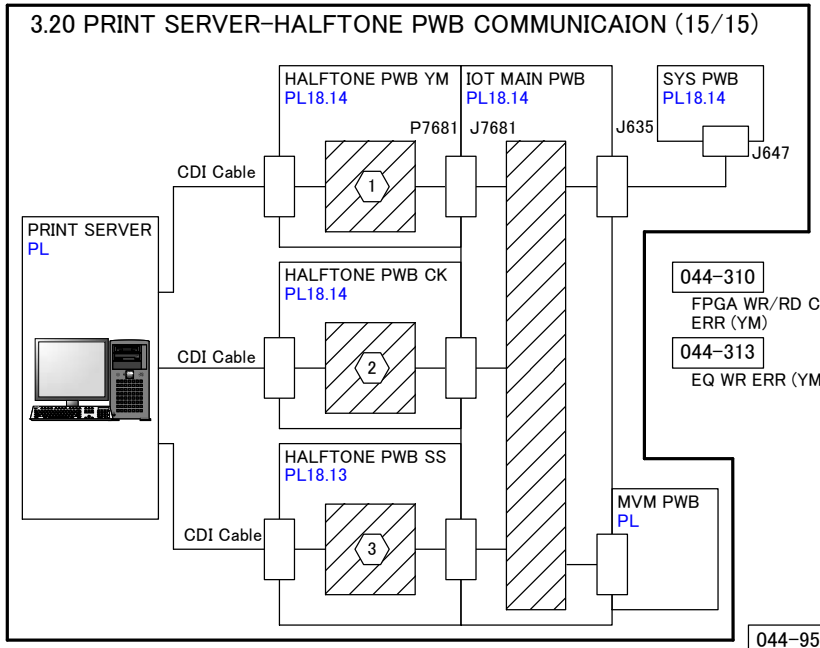


FAIL CODE

047-310	Output Device Comm Fail
047-320	All Output Fail

j0cx730319

3.20 PRINT SERVER-HALFTONE PWB COMMUNICAION (15/15)



NOTE:

(1) Fail Coce is as follows.

- 044-310 FPGA WR/RD Check ERR (YM)
- 044-313 EQ WR ERR (YM)
- 044-316 LINKUP ERR (YM)
- 044-319 Cable_Connection_ ERR (YM)
- 044-322 FPGA Config ERR (YM)
- 044-325 FAN FAIL (YM)
- 044-328 Elastic Buf_S ERR (YM)
- 044-331 8b10b Code_S ERR (YM)
- 044-334 PKT Interleave ERR (YM)
- 044-600 Elastic Buf_H ERR (YM)
- 044-603 SOP_H ERR (YM)
- 044-606 ECC_H ERR (YM)
- 044-609 8b10b Code_H ERR (YM)
- 044-612 Tx PKTBuf UDF_ H ERR (YM)
- 044-615 Rx PKTBuf OVF_ H ERR (YM)
- 044-618 IMG Info_H ERR (YM)
- 044-621 PKT Num_H ERR (YM)
- 044-624 LINE Buf_H ERR (YM)
- 044-627 IMGST2Preq_T_H_ERR (YM)
- 044-630 Preq2PEND_H ERR (YM)
- 044-633 Acum_ECC_H_ERR (YM)
- 044-636 Acum_8b10b_Code_ H_ERR (YM)
- 044-941 8b10b Code ERR (YM)
- 044-943 ECC ERR (YM)
- 044-946 Elastic Buf ERR (YM)
- 044-949 IMG Info ERR (YM)
- 044-952 LINE Buf ERR (YM)
- 044-958 PKT Num ERR (YM)
- 044-961 Preq2PEND ERR (YM)
- 044-964 Rx PKTBuf OVF ERR (YM)
- 044-967 SOP ERR (YM)
- 044-970 Tx PKTBuf UDF ERR (YM)
- 044-973 Acum_ECC_ERR (YM)
- 044-976 Acum_8b10b_Code_ ERR (YM)
- 044-979 IMGST2Preq_T_ERR (YM)
- 045-387 Mother HT Connect Fail – #3_4
- 045-389 Mother IOT_MAIN Connect Fail

(2) Fail Coce is as follows.

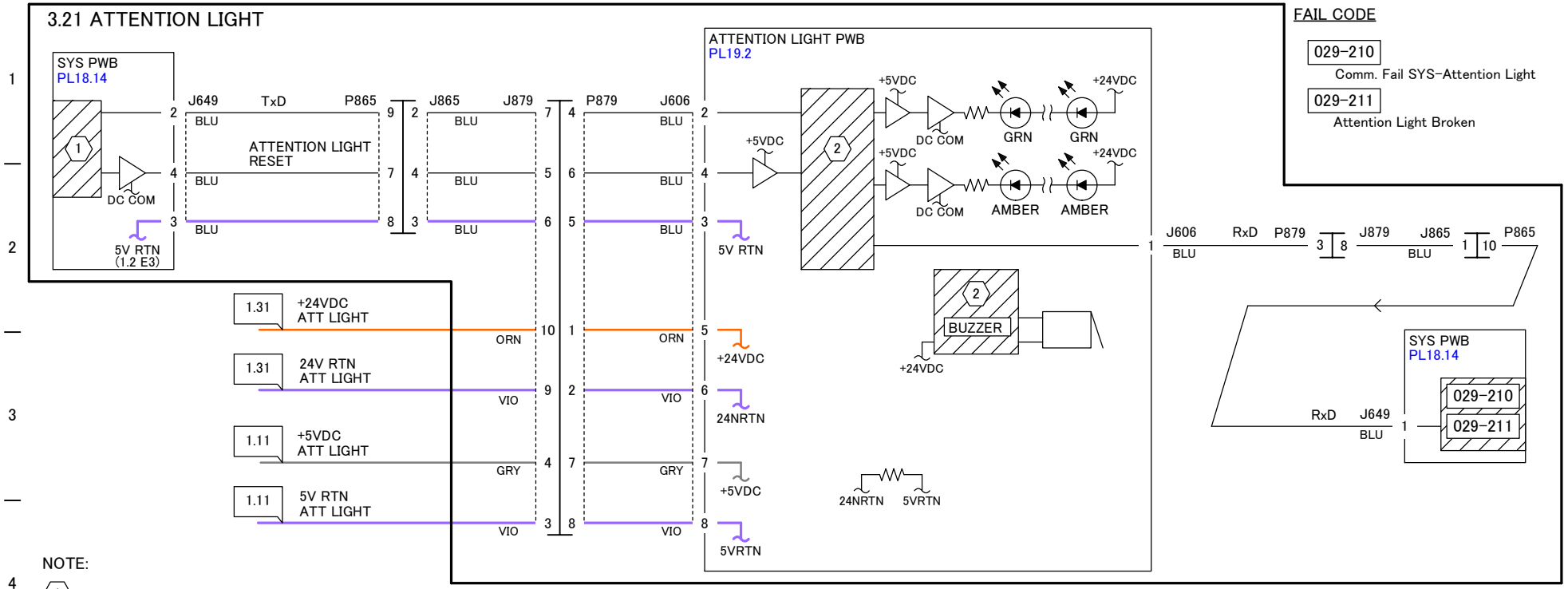
- 044-311 FPGA WR/RD Check ERR (CK)
- 044-314 EQ WR ERR (CK)
- 044-317 LINKUP ERR (CK)
- 044-320 Cable_Connection_ ERR (CK)
- 44-323 FPGA Config ERR (CK)
- 044-326 FAN FAIL (CK)
- 044-329 Elastic Buf_S ERR (CK)
- 044-332 8b10b Code_S ERR (CK)
- 044-335 PKT Interleave ERR (CK)
- 044-601 Elastic Buf_H ERR (CK)
- 044-604 SOP_H ERR (CK)
- 044-607 ECC_H ERR (CK)
- 044-610 8b10b Code_H ERR (CK)
- 044-613 Tx PKTBuf UDF_ H ERR (CK)
- 044-616 Rx PKTBuf OVF_ H ERR (CK)
- 044-619 IMG Info_H ERR (CK)
- 044-622 PKT Num_H ERR (CK)
- 044-625 LINE Buf_H ERR (CK)
- 044-628 IMGST2Preq_T_H_ERR (CK)
- 044-631 Preq2PEND_H ERR (CK)
- 044-634 Acum_ECC_H_ERR (CK)
- 044-637 Acum_8b10b_Code_ H_ERR (CK)
- 044-940 8b10b Code ERR (CK)
- 044-944 ECC ERR (CK)
- 044-947 Elastic Buf ERR (CK)
- 044-950 IMG Info ERR (CK)
- 044-953 LINE Buf ERR (CK)
- 044-959 PKT Num ERR (CK)
- 044-962 Preq2PEND ERR (CK)
- 044-965 Preq2PEND ERR (CK)
- 044-968 SOP ERR (CK)
- 044-971 Tx PKTBuf UDF ERR (CK)
- 044-974 Acum_ECC_ERR (CK)
- 044-977 Acum_8b10b_Code_ERR (CK)
- 044-980 IMGST2Preq_T_ERR (CK)
- 045-388 Mother HT Connect Fail – #5_6

(3) Fail Coce is as follows.

- 044-312 FPGA WR/RD Check ERR (S2S1)
- 044-315 EQ WR ERR (S2S1)
- 044-318 LINKUP ERR (S2S1)
- 044-321 Cable_Connection_ERR (S2S1)
- 044-324 FPGA Config ERR (S2S1)
- 044-327 FAN FAIL (S2S1)
- 044-330 Elastic Buf_S ERR (S2S1)
- 044-333 8b10b Code_S ERR (S2S1)
- 044-336 PKT Interleave ERR (S2S1)
- 044-602 Elastic Buf_H ERR (S2S1)
- 044-605 SOP_H ERR (S2S1)
- 044-608 ECC_H ERR (S2S1)
- 044-611 8b10b Code_H ERR (S2S1)
- 044-614 Tx PKTBuf UDF_H ERR (S2S1)
- 044-617 Rx PKTBuf OVF_H ERR (S2S1)
- 044-620 IMG Info_H ERR (S2S1)
- 044-623 PKT Num_H ERR (S2S1)
- 044-626 LINE Buf_H ERR (S2S1)
- 044-629 IMGST2Preq_T_H_ERR (S2S1)
- 044-632 Preq2PEND_H ERR (S2S1)
- 044-635 Acum_ECC_H_ERR (S2S1)
- 044-638 Acum_8b10b_Code_H_ERR (S2S1)
- 044-942 8b10b Code ERR (S2S1)
- 044-945 ECC ERR (S2S1)
- 044-948 Elastic Buf ERR (S2S1)
- 044-951 IMG Info ERR (S2S1)
- 044-954 LINE Buf ERR (S2S1)
- 044-960 PKT Num ERR (S2S1)
- 044-963 Preq2PEND ERR (S2S1)
- 044-966 Rx PKTBuf OVF ERR (S2S1)
- 044-969 SOP ERR (S2S1)
- 044-972 Tx PKTBuf UDF ERR (S2S1)
- 044-975 Acum_ECC_ERR (S2S1)
- 044-978 Acum_8b10b_Code_ERR (S2S1)
- 044-981 IMGST2Preq_T_ERR (S2S1)
- 045-386 Mother HT Connect Fail – #1_2

j0cx730320

3.21 ATTENTION LIGHT



FAIL CODE

029-210
Comm. Fail SYS-Attention Light

029-211
Attention Light Broken

NOTE:

(1)

Green Light
- Attention Light is also lit in green when IOT power is ON.
- Attention Light is also Off when IOT power is OFF.
- When machine transits to Sleep Mode, Attention Light also turns OFF as LVPS H1U becomes OFF.

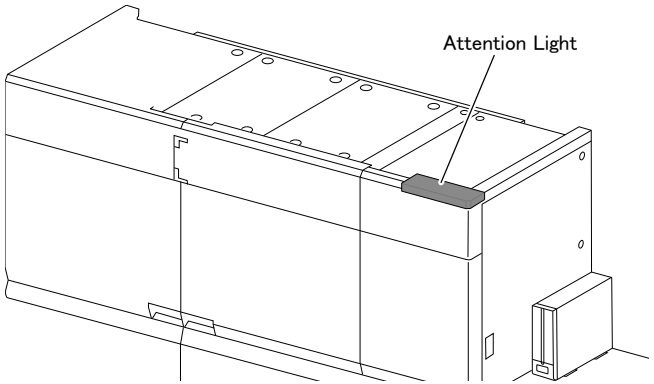
Flashing Amber
- When Fail, in which job can not be continued without user action is detected, Attention Light flashes quickly in amber. (On for 750 msec, Off for 750 msec)

Beep Sound
- Medium attention tone is sounded when paper runs out.
- Loud attention tone is sounded when Fail other than no paper occurs.

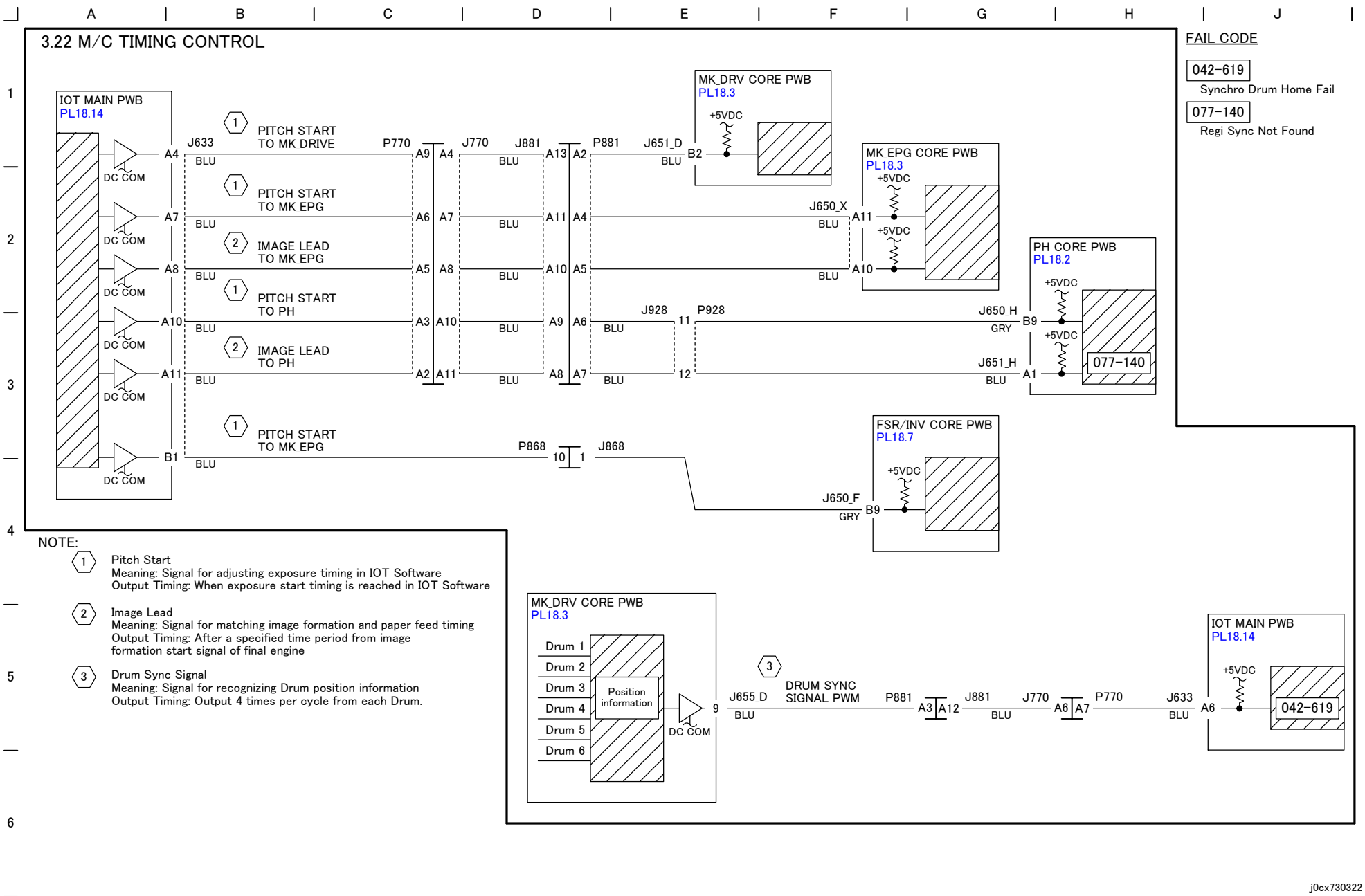
Diag in Progress
- Attention Light is not lit during Diag.
- Beep tone is not sounded.

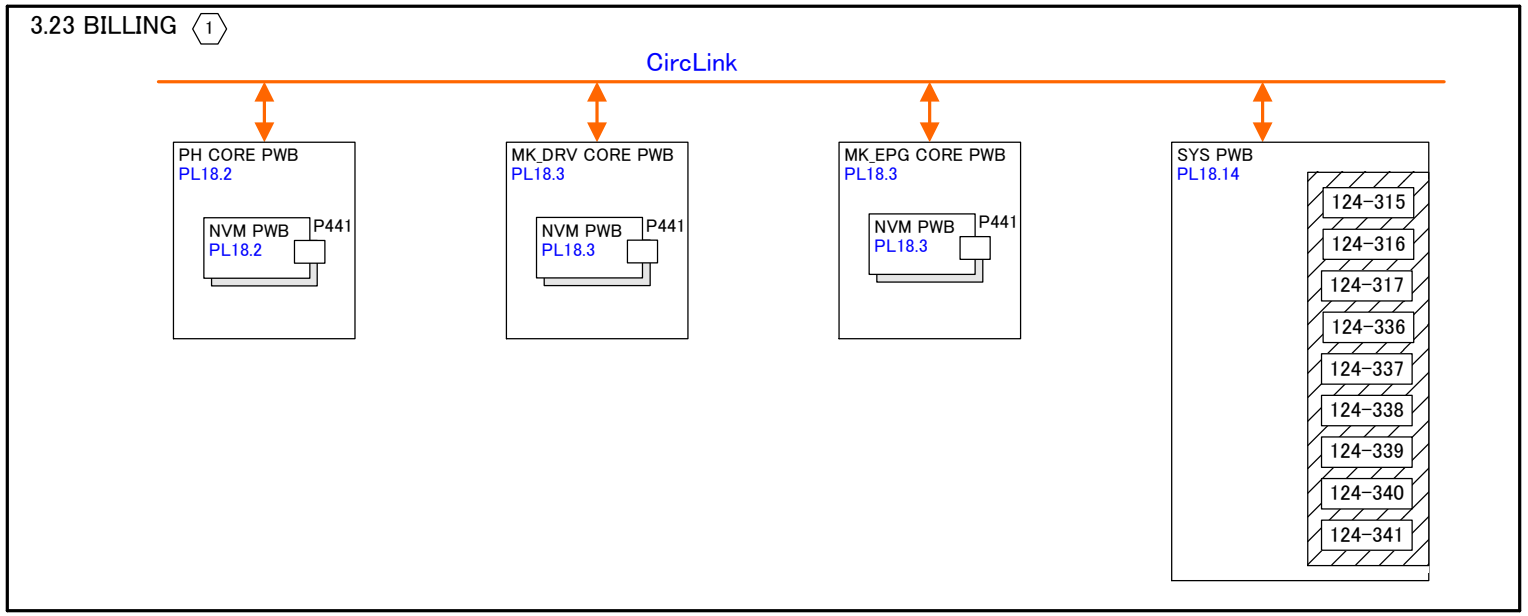
(2)

DC330	Meaning
003-001	LED Lit Green
003-002	LED Flashing Green (Slow)
003-003	LED Lit Amber
003-004	LED Flashing Amber (Fast)
003-010	Buzzer Near Full/Near Empty (Loud)
003-011	Buzzer Near Full/Near Empty (Medium)
003-012	Buzzer Near Full/Near Empty (Soft)
003-013	Buzzer Stop Trigger (No Paper) (Loud)
003-014	Buzzer Stop Trigger (No Paper) (Medium)
003-015	Buzzer Stop Trigger (No Paper) (Soft)
003-016	Buzzer Stop Trigger (Other than No Paper) (Loud)
003-017	Buzzer Stop Trigger (Other than No Paper) (Medium)
003-018	Buzzer Stop Trigger (Other than No Paper) (Soft)



j0cx730321


3.22 M/C TIMING CONTROL
FAIL CODE
042-619
Synchro Drum Home Fail
077-140
Regi Sync Not Found
IOT MAIN PWB
PL18.14
PITCH START TO MK_DRIVE
PITCH START TO MK_EPG
IMAGE LEAD TO MK_EPG
PITCH START TO PH
IMAGE LEAD TO PH
PITCH START TO MK_EPG
DC COM
J633
P770
J770
J881
P881
J651_D
MK_DRV CORE PWB
PL18.3
+5VDC
MK_EPG CORE PWB
PL18.3
J650_X
PH CORE PWB
PL18.2
J928
P928
J650_H
J651_H
077-140
FSR/INV CORE PWB
PL18.7
P868
J868
J650_F
NOTE:
1 Pitch Start
Meaning: Signal for adjusting exposure timing in IOT Software
Output Timing: When exposure start timing is reached in IOT Software
2 Image Lead
Meaning: Signal for matching image formation and paper feed timing
Output Timing: After a specified time period from image formation start signal of final engine
3 Drum Sync Signal
Meaning: Signal for recognizing Drum position information
Output Timing: Output 4 times per cycle from each Drum.
MK_DRV CORE PWB
PL18.3
Drum 1
Drum 2
Drum 3
Drum 4
Drum 5
Drum 6
Position information
DRUM SYNC SIGNAL PWM
J655_D
P881
J881
J770
P770
J633
IOT MAIN PWB
PL18.14
042-619
j0cx730322



FAIL CODE

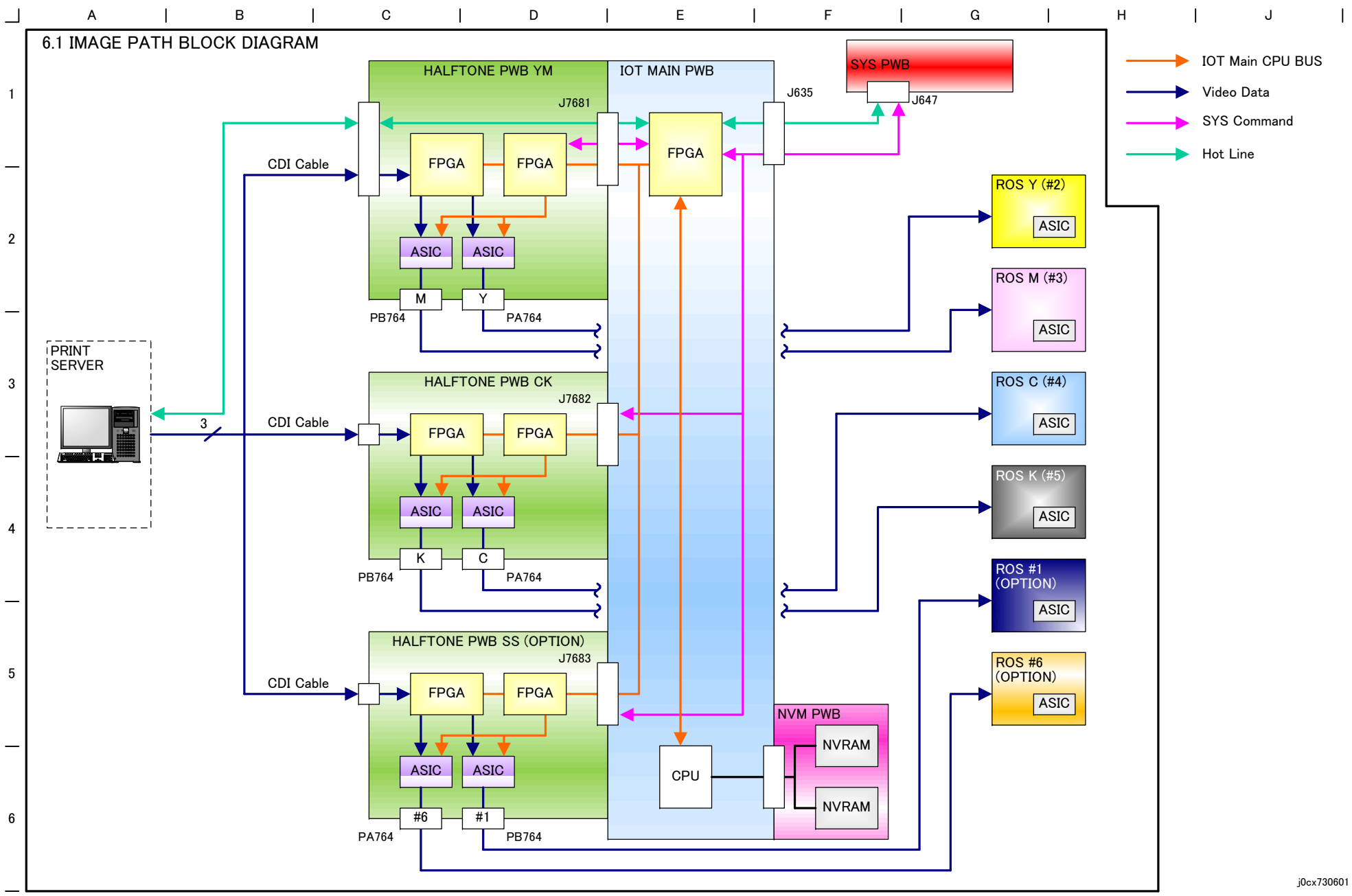
- 124-315 Billing Fail
- 124-316 Serial Number Fail
- 124-317 Usage Counter Fail
- 124-336 MK EPG Product Number Fail
- 124-337 All Product Number Fail
- 124-338 IOT PWB Billing Count Up Mode Fail
- 124-339 MK Drive Billing Count Up Mode Fail
- 124-340 MK EPG Billing Count Up Mode Fail
- 124-341 All Billing Count Up Mode Fail

NOTE:

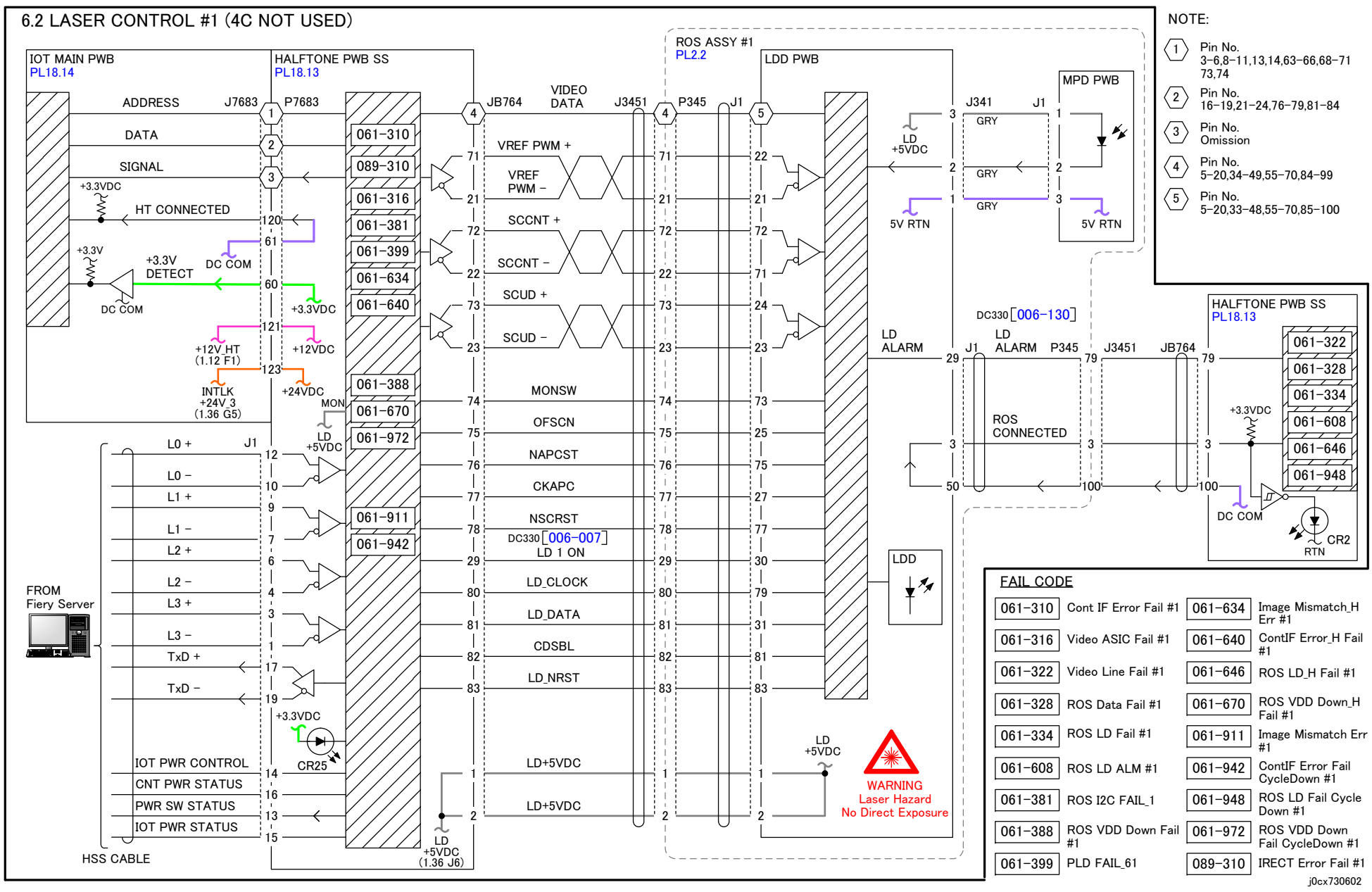
1 Billing Backup Timing
1. When Power On
2. When Diag Exit
3. When checking user billing counter
4. When job is completed successfully
5. When recovering from Sleep Mode

Data (partial) is held in 3 locations
- Serial Number
- Billing Counter
- Product Number

j0cx730323


6.1 IMAGE PATH BLOCK DIAGRAM
HALFTONE PWB YM
J7681
FPGA
FPGA
ASIC
ASIC
M
Y
PB764
PA764
IOT MAIN PWB
FPGA
J635
SYS PWB
J647
IOT Main CPU BUS
Video Data
SYS Command
Hot Line
CDI Cable
PRINT SERVER
3
HALFTONE PWB CK
J7682
FPGA
FPGA
ASIC
ASIC
K
C
PB764
PA764
CDI Cable
HALFTONE PWB SS (OPTION)
J7683
FPGA
FPGA
ASIC
ASIC
#6
#1
PA764
PB764
CDI Cable
CPU
NVM PWB
NVRAM
NVRAM
ROS Y (#2)
ASIC
ROS M (#3)
ASIC
ROS C (#4)
ASIC
ROS K (#5)
ASIC
ROS #1 (OPTION)
ASIC
ROS #6 (OPTION)
ASIC
j0cx730601

6.2 LASER CONTROL #1 (4C NOT USED)



NOTE:

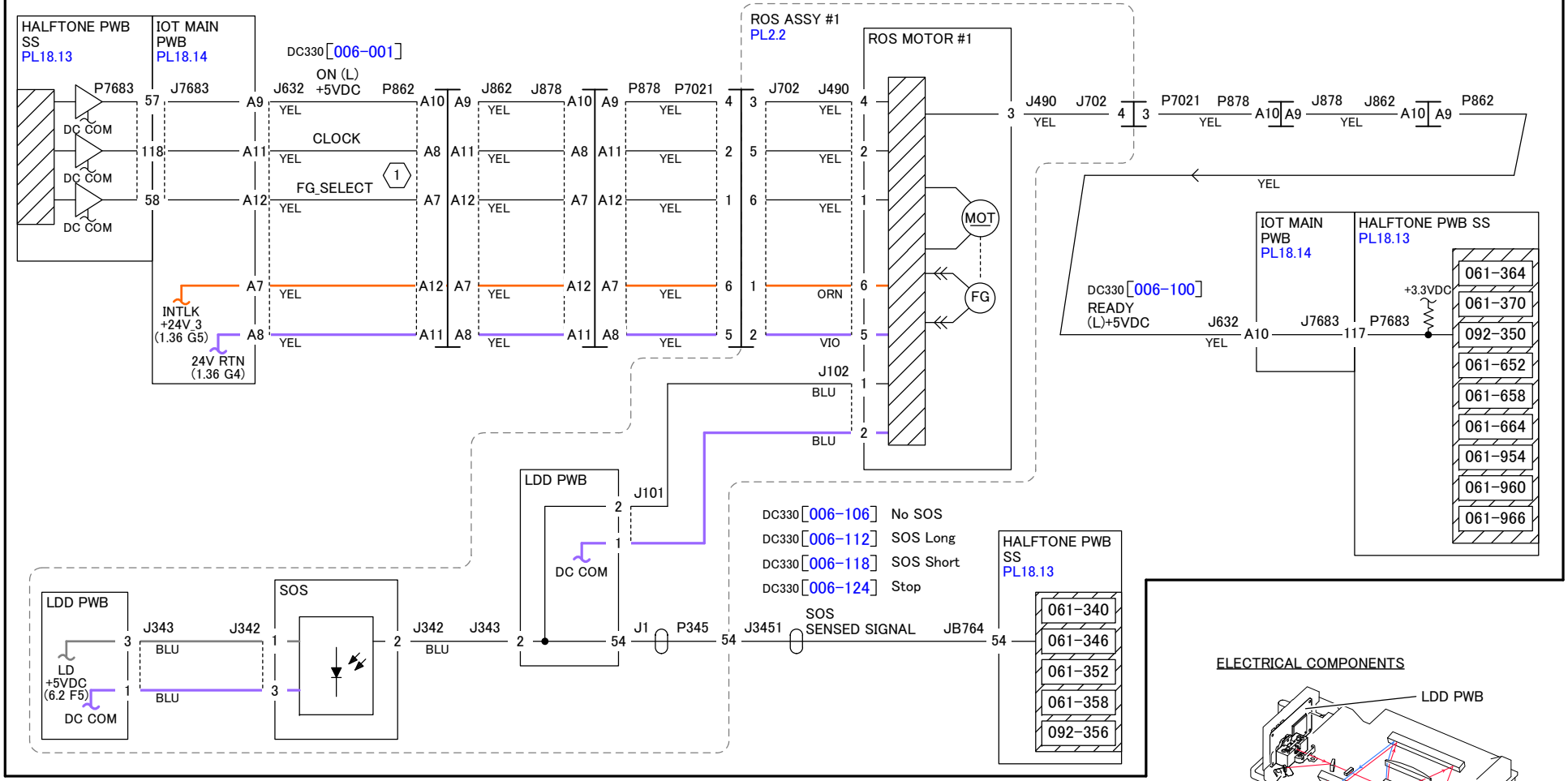
1. Pin No. 3-6,8-11,13,14,63-66,68-71 73,74
2. Pin No. 16-19,21-24,76-79,81-84
3. Pin No. Omission
4. Pin No. 5-20,34-49,55-70,84-99
5. Pin No. 5-20,33-48,55-70,85-100

FAIL CODE

061-310	Cont IF Error Fail #1	061-634	Image Mismatch_H Err #1
061-316	Video ASIC Fail #1	061-640	ContIF Error_H Fail #1
061-322	Video Line Fail #1	061-646	ROS LD_H Fail #1
061-328	ROS Data Fail #1	061-670	ROS VDD Down_H Fail #1
061-334	ROS LD Fail #1	061-911	Image Mismatch Err #1
061-608	ROS LD ALM #1	061-942	ContIF Error Fail CycleDown #1
061-381	ROS I2C FAIL_1	061-948	ROS LD Fail Cycle Down #1
061-388	ROS VDD Down Fail #1	061-972	ROS VDD Down Fail CycleDown #1
061-399	PLD FAIL_61	089-310	IRECT Error Fail #1

j0cx730602

6.3 LASER SCAN #1 (4C NOT USED)



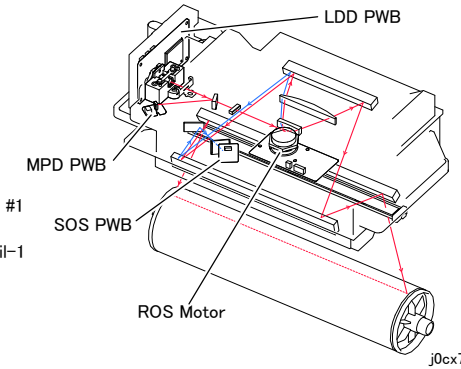
NOTE:

(1) L: External rotation frequency signal selection
H: Internal rotation frequency signal selection

FAIL CODE

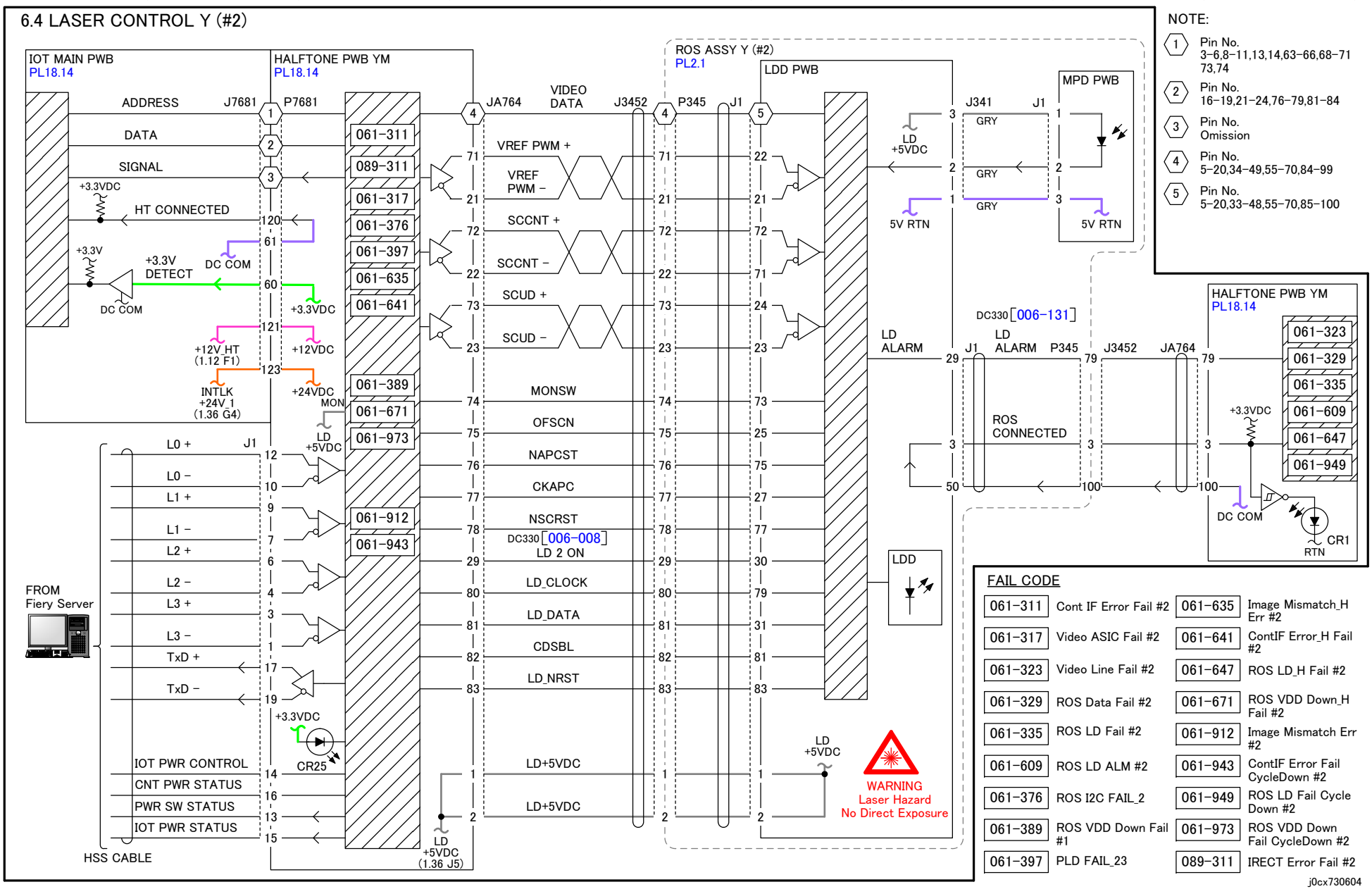
061-340	No SOS Fail #1	061-370	Polygon Motor Ready Check Fail #1	061-960	SOS Short Fail CycleDown #1
061-346	SOS Long Fail #1	061-652	SOS Long_H Fail #1	061-966	Polygon Motor Fail CycleDown #1
061-352	SOS Short Fail #1	061-658	SOS Short_H Fail #1	092-350	Polygon Motor SOS Rotate Fail-1
061-358	SOS Stop Fail #1	061-664	Polygon Motor_H Fail #1	092-356	FGSEL Fail-1
061-364	Polygon Motor Fail #1	061-954	SOS Long Fail CycleDown #1		

ELECTRICAL COMPONENTS



j0cx730603

6.4 LASER CONTROL Y (#2)



NOTE:

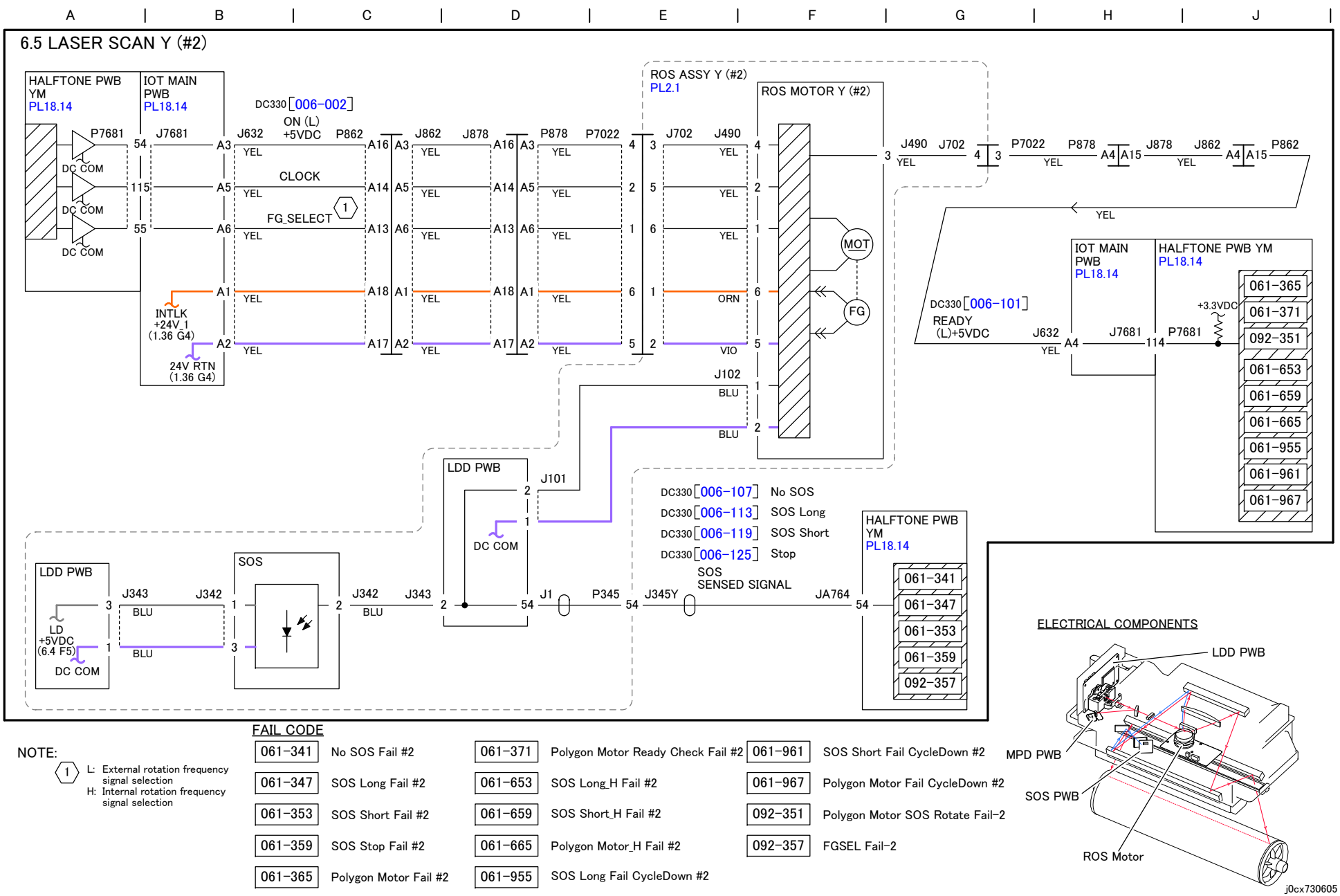
1. Pin No. 3-6,8-11,13,14,63-66,68-71 73,74
2. Pin No. 16-19,21-24,76-79,81-84
3. Pin No. Omission
4. Pin No. 5-20,34-49,55-70,84-99
5. Pin No. 5-20,33-48,55-70,85-100

FAIL CODE

061-311	Cont IF Error Fail #2	061-635	Image Mismatch_H Err #2
061-317	Video ASIC Fail #2	061-641	ContIF Error_H Fail #2
061-323	Video Line Fail #2	061-647	ROS LD_H Fail #2
061-329	ROS Data Fail #2	061-671	ROS VDD Down_H Fail #2
061-335	ROS LD Fail #2	061-912	Image Mismatch Err #2
061-609	ROS LD ALM #2	061-943	ContIF Error Fail CycleDown #2
061-376	ROS I2C FAIL_2	061-949	ROS LD Fail Cycle Down #2
061-389	ROS VDD Down Fail #1	061-973	ROS VDD Down Fail CycleDown #2
061-397	PLD FAIL_23	089-311	IRECT Error Fail #2

j0cx730604

6.5 LASER SCAN Y (#2)



NOTE:

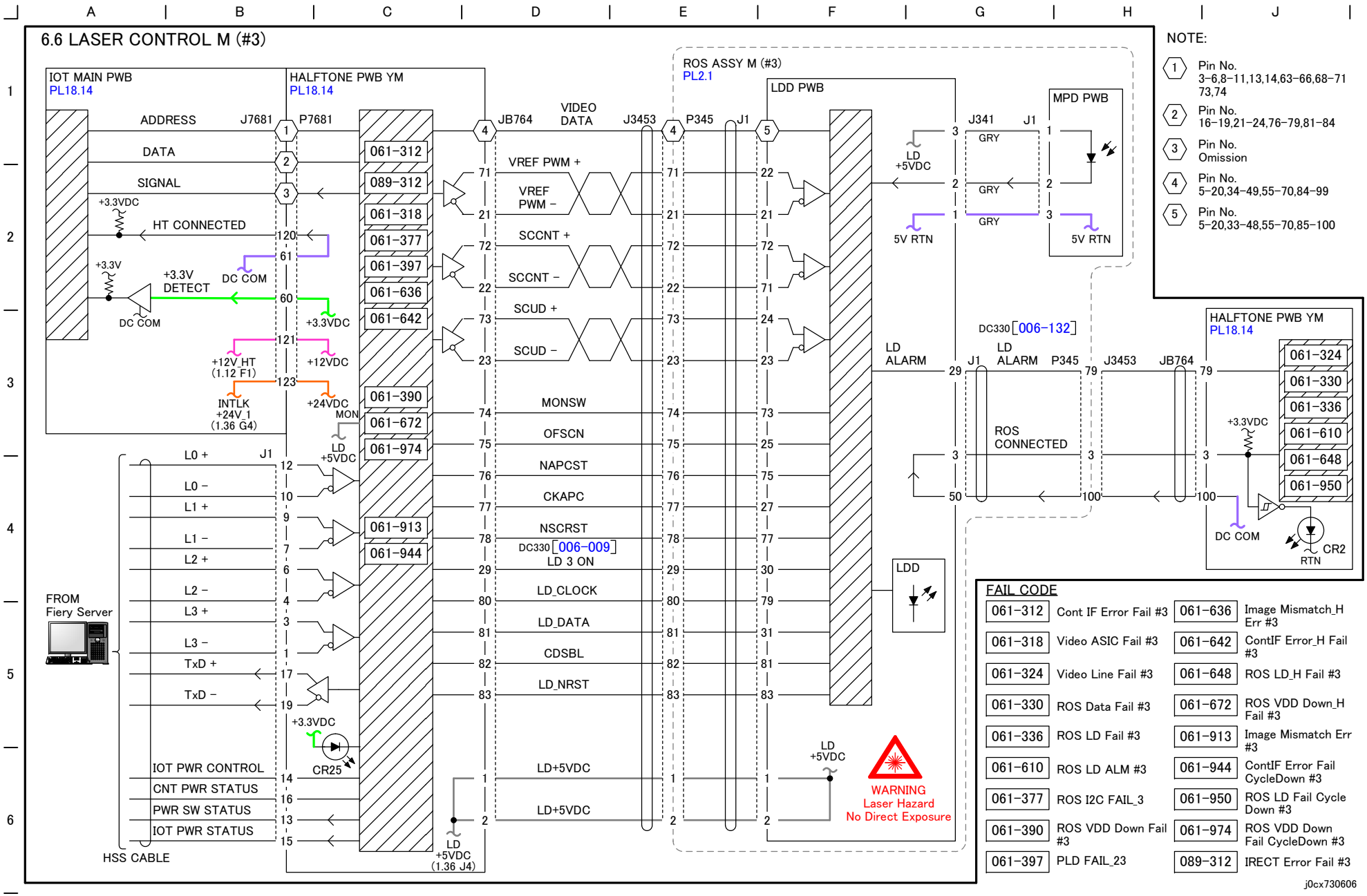
(1) L: External rotation frequency signal selection
H: Internal rotation frequency signal selection

FAIL CODE

061-341	No SOS Fail #2	061-371	Polygon Motor Ready Check Fail #2	061-961	SOS Short Fail CycleDown #2
061-347	SOS Long Fail #2	061-653	SOS Long_H Fail #2	061-967	Polygon Motor Fail CycleDown #2
061-353	SOS Short Fail #2	061-659	SOS Short_H Fail #2	092-351	Polygon Motor SOS Rotate Fail-2
061-359	SOS Stop Fail #2	061-665	Polygon Motor_H Fail #2	092-357	FGSEL Fail-2
061-365	Polygon Motor Fail #2	061-955	SOS Long Fail CycleDown #2		

ELECTRICAL COMPONENTS

j0cx730605



NOTE:

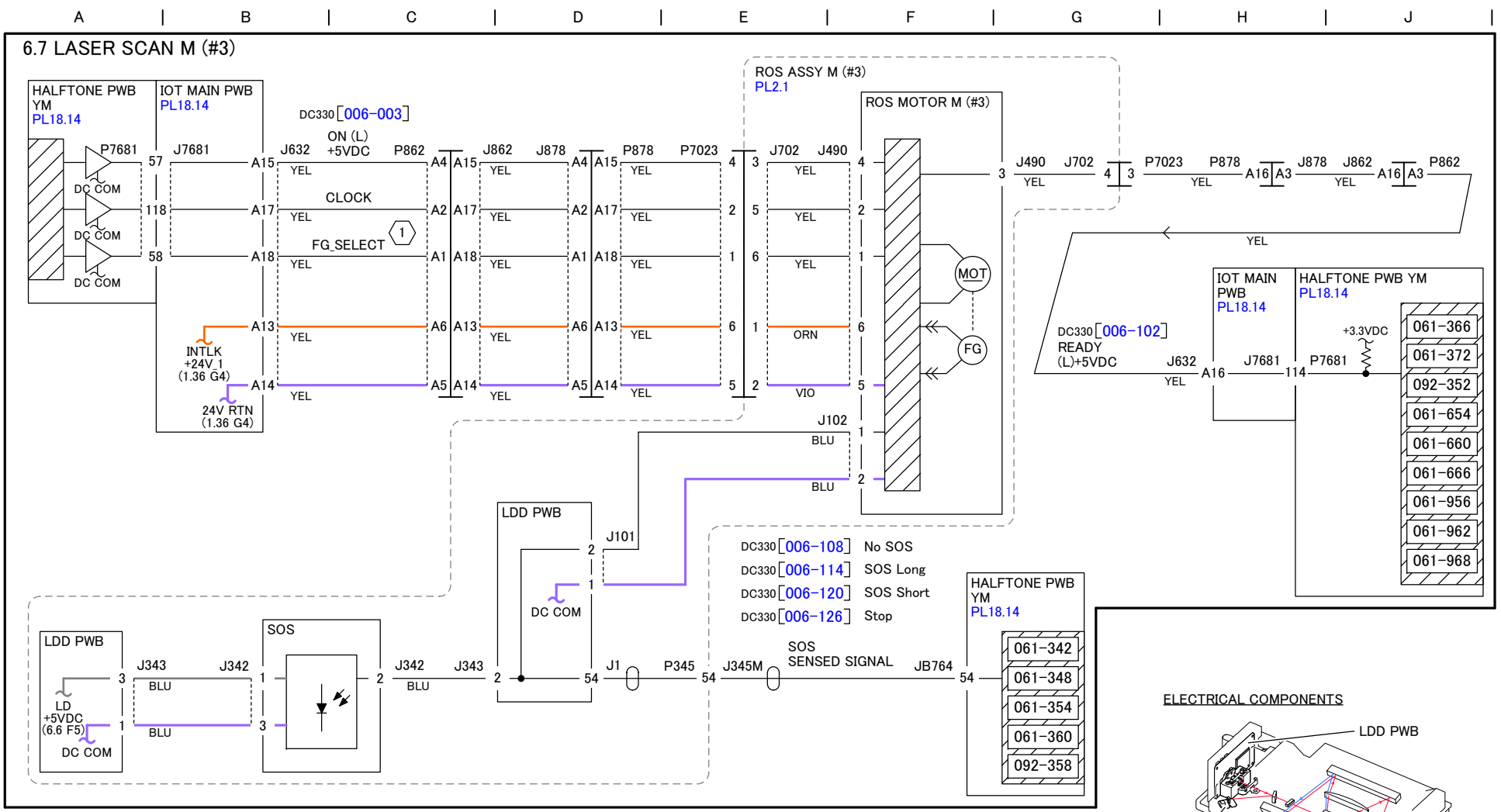
1. Pin No. 3-6,8-11,13,14,63-66,68-71 73,74
2. Pin No. 16-19,21-24,76-79,81-84
3. Pin No. Omission
4. Pin No. 5-20,34-49,55-70,84-99
5. Pin No. 5-20,33-48,55-70,85-100

FAIL CODE

061-312	Cont IF Error Fail #3	061-636	Image Mismatch_H Err #3
061-318	Video ASIC Fail #3	061-642	ContIF Error_H Fail #3
061-324	Video Line Fail #3	061-648	ROS LD_H Fail #3
061-330	ROS Data Fail #3	061-672	ROS VDD Down_H Fail #3
061-336	ROS LD Fail #3	061-913	Image Mismatch Err #3
061-610	ROS LD ALM #3	061-944	ContIF Error Fail CycleDown #3
061-377	ROS I2C FAIL_3	061-950	ROS LD Fail Cycle Down #3
061-390	ROS VDD Down Fail #3	061-974	ROS VDD Down Fail CycleDown #3
061-397	PLD FAIL_23	089-312	IRECT Error Fail #3

j0cx730606

6.7 LASER SCAN M (#3)



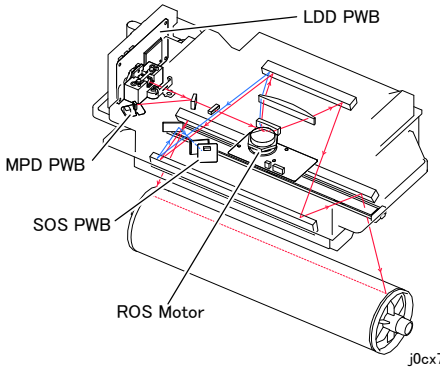
NOTE:

(1) L: External rotation frequency signal selection
H: Internal rotation frequency signal selection

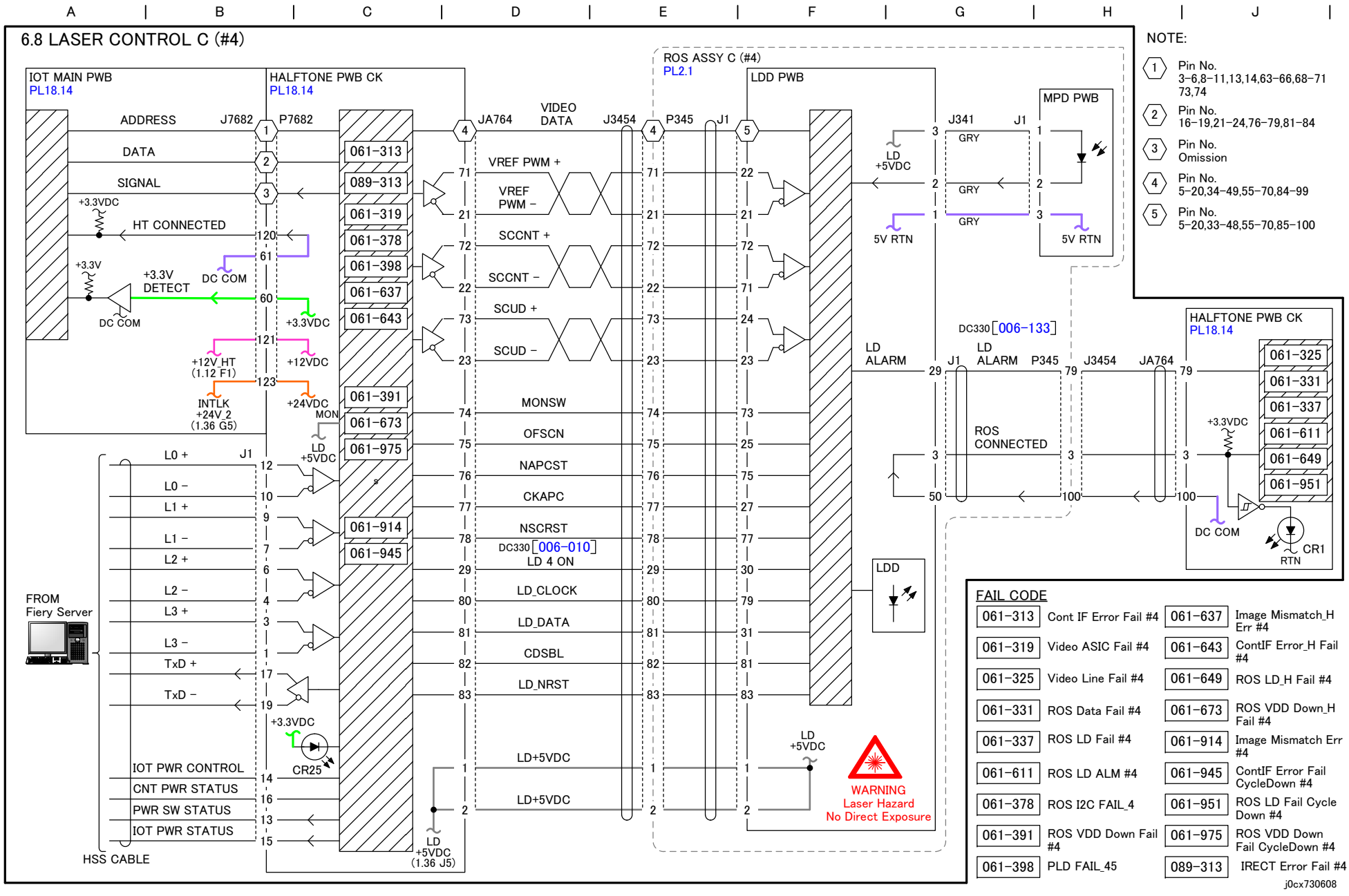
FAIL CODE

061-342	No SOS Fail #3
061-348	SOS Long Fail #3
061-354	SOS Short Fail #3
061-360	SOS Stop Fail #3
061-366	Polygon Motor Fail #3
061-372	Polygon Motor Ready Check Fail #3
061-654	SOS Long_H Fail #3
061-660	SOS Short_H Fail #3
061-666	Polygon Motor_H Fail #3
061-956	SOS Long Fail CycleDown #3
061-962	SOS Short Fail CycleDown #3
061-968	Polygon Motor Fail CycleDown #3
092-352	Polygon Motor SOS Rotate Fail-Y
092-358	FGSEL Fail-Y

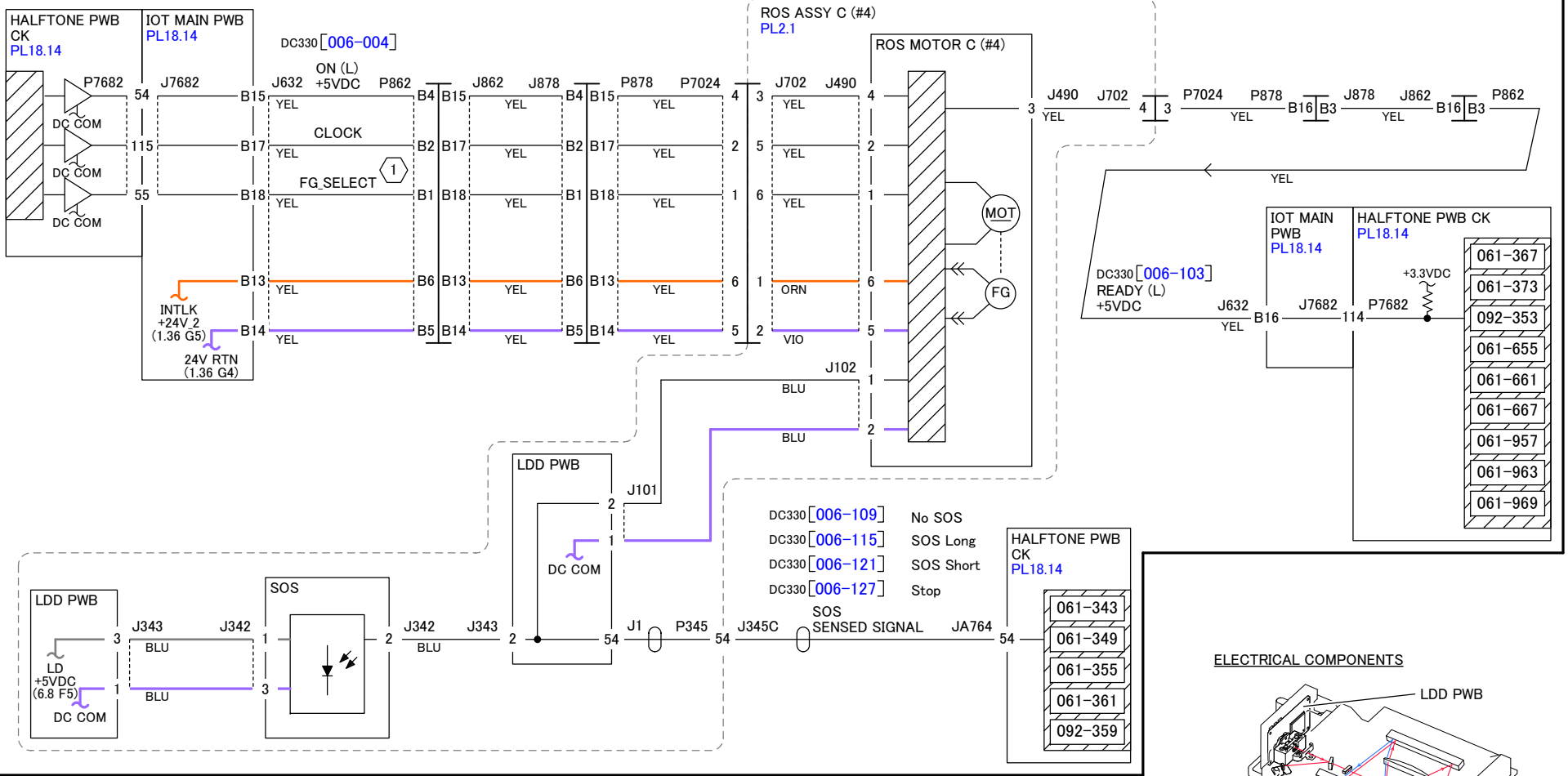
ELECTRICAL COMPONENTS



j0cx730607


6.8 LASER CONTROL C (#4)
IOT MAIN PWB
PL18.14
HALFTONE PWB CK
PL18.14
ROS ASSY C (#4)
PL2.1
LDD PWB
MPD PWB
ADDRESS
DATA
SIGNAL
HT CONNECTED
+3.3VDC
+3.3V
+3.3V DETECT
DC COM
+12V_HT (1.12 F1)
INTLK +24V_2 (1.36 G5)
+12VDC
+24VDC
MON
LD +5VDC
J7682
P7682
JA764
J3454
P345
J1
J341
VIDEO DATA
VREF PWM +
VREF PWM –
SCCNT +
SCCNT –
SCUD +
SCUD –
MONSW
OFSCN
NAPCST
CKAPC
NSCRST
DC330 [006-010] LD 4 ON
LD_CLOCK
LD_DATA
CDSBL
LD_NRST
LD+5VDC
LD+5VDC
GRY
GRY
GRY
5V RTN
5V RTN
LD ALARM
DC330 [006-133]
ROS CONNECTED
HALFTONE PWB CK
PL18.14
DC COM
CR1
RTN
LDD
WARNING
Laser Hazard
No Direct Exposure
L0 +
L0 –
L1 +
L1 –
L2 +
L2 –
L3 +
L3 –
TxD +
TxD –
IOT PWR CONTROL
CNT PWR STATUS
PWR SW STATUS
IOT PWR STATUS
CR25
HSS CABLE
FROM Fiery Server
061-313
089-313
061-319
061-378
061-398
061-637
061-643
061-391
061-673
061-975
061-914
061-945
061-325
061-331
061-337
061-611
061-649
061-951
NOTE:
1 Pin No. 3-6,8-11,13,14,63-66,68-71 73,74
2 Pin No. 16-19,21-24,76-79,81-84
3 Pin No. Omission
4 Pin No. 5-20,34-49,55-70,84-99
5 Pin No. 5-20,33-48,55-70,85-100
FAIL CODE
061-313 Cont IF Error Fail #4
061-319 Video ASIC Fail #4
061-325 Video Line Fail #4
061-331 ROS Data Fail #4
061-337 ROS LD Fail #4
061-611 ROS LD ALM #4
061-378 ROS I2C FAIL_4
061-391 ROS VDD Down Fail #4
061-398 PLD FAIL_45
061-637 Image Mismatch_H Err #4
061-643 ContIF Error_H Fail #4
061-649 ROS LD_H Fail #4
061-673 ROS VDD Down_H Fail #4
061-914 Image Mismatch Err #4
061-945 ContIF Error Fail CycleDown #4
061-951 ROS LD Fail Cycle Down #4
061-975 ROS VDD Down Fail CycleDown #4
089-313 IRECT Error Fail #4
j0cx730608

6.9 LASER SCAN C (#4)

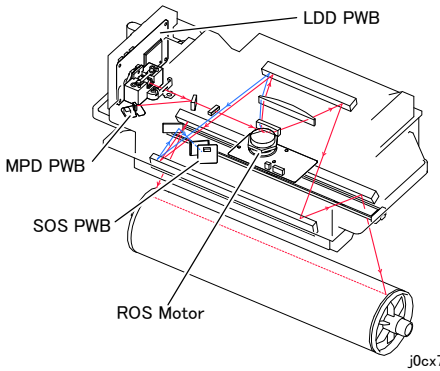


NOTE:
(1) L: External rotation frequency signal selection
H: Internal rotation frequency signal selection

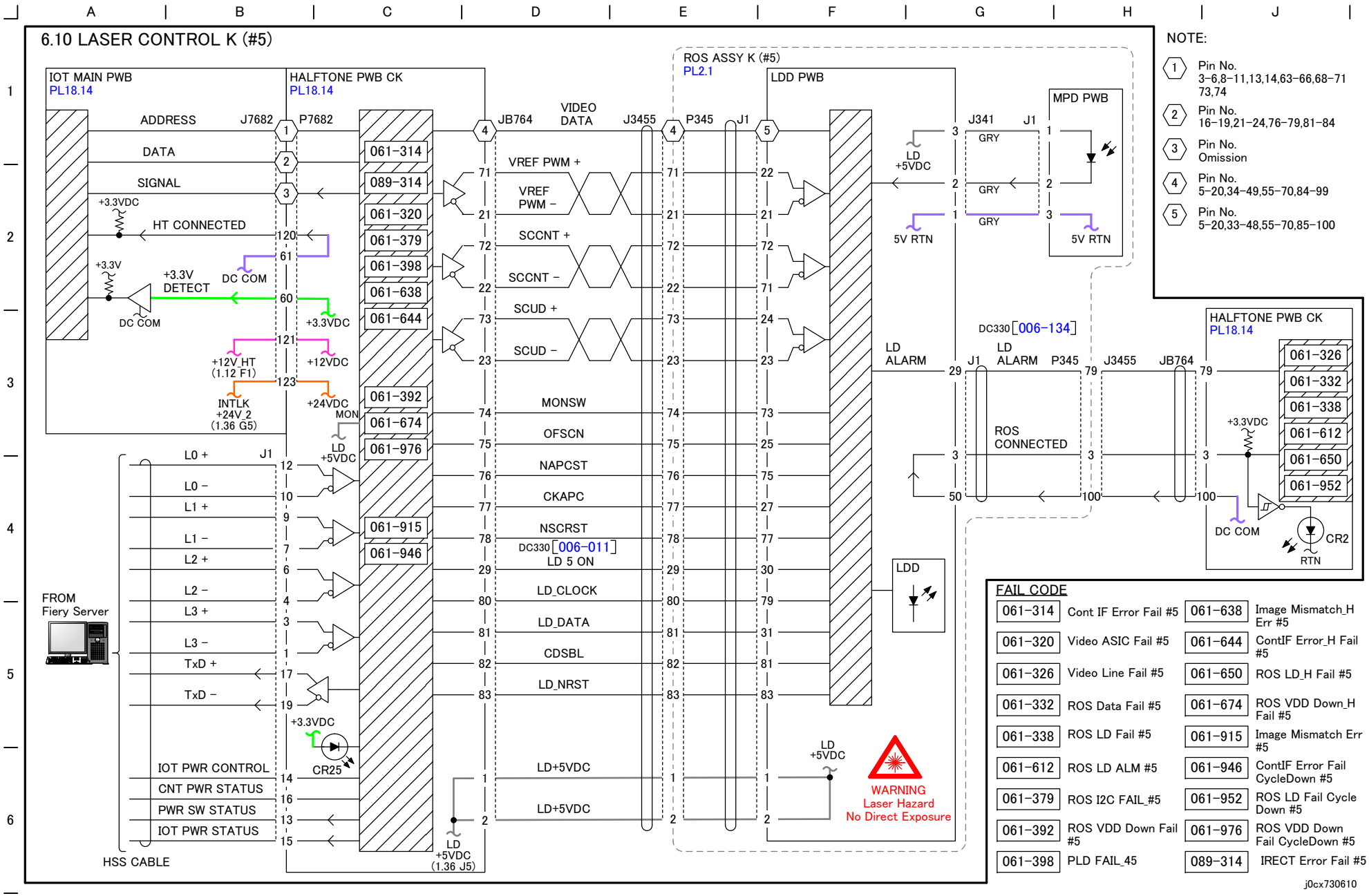
FAIL CODE

061-343	No SOS Fail #4
061-349	SOS Long Fail #4
061-355	SOS Short Fail #4
061-361	SOS Stop Fail #4
061-367	Polygon Motor Fail #4
061-373	Polygon Motor Ready Check Fail #4
061-655	SOS Long_H Fail #4
061-661	SOS Short_H Fail #4
061-667	Polygon Motor_H Fail #4
061-957	SOS Long Fail CycleDown #4
061-963	SOS Short Fail CycleDown #4
061-969	Polygon Motor Fail CycleDown #4
092-353	Polygon Motor SOS Rotate Fail-M
092-359	FGSEL Fail-M

ELECTRICAL COMPONENTS



j0cx730609



NOTE:

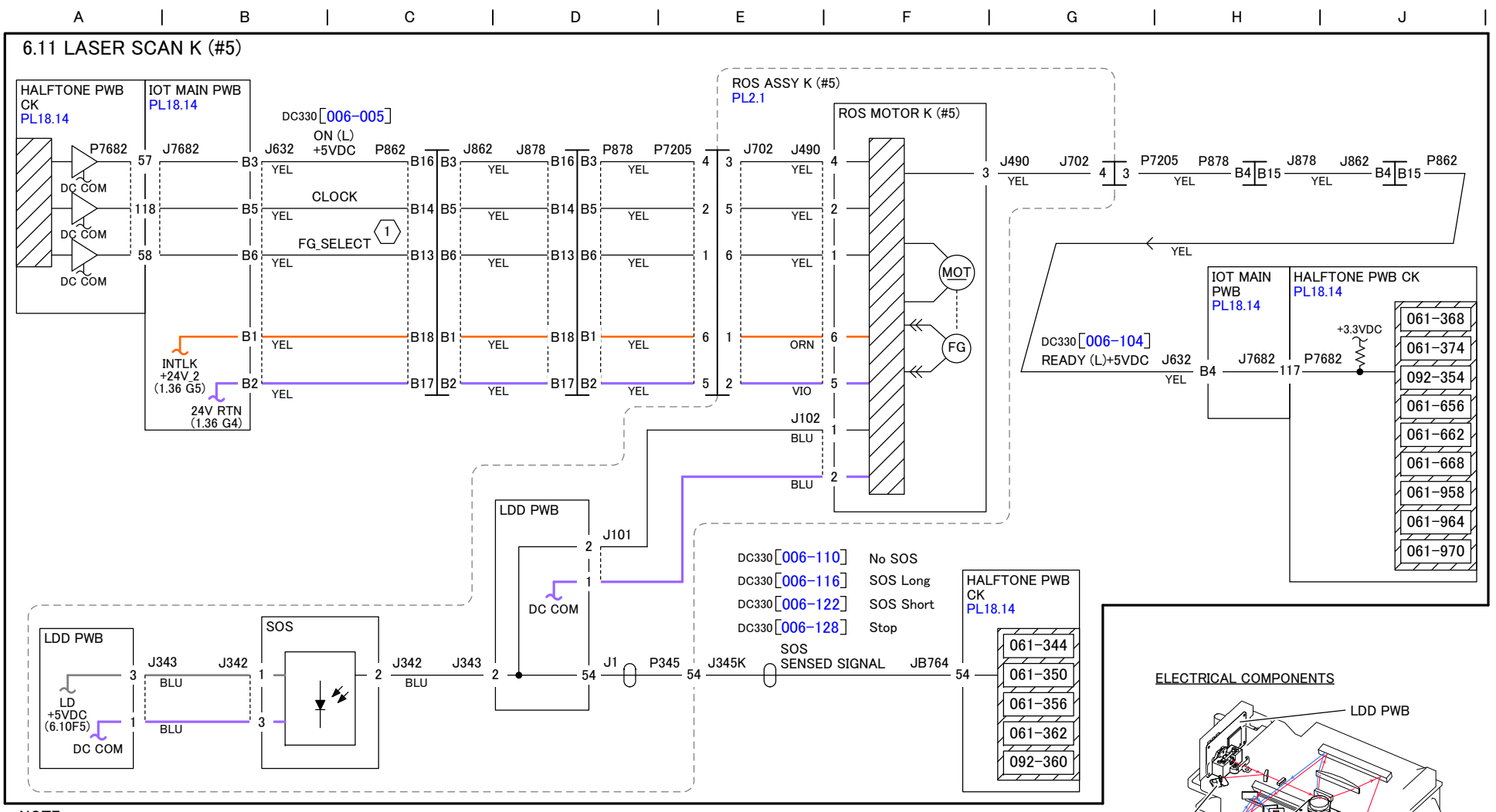
1. Pin No. 3-6,8-11,13,14,63-66,68-71 73,74
2. Pin No. 16-19,21-24,76-79,81-84
3. Pin No. Omission
4. Pin No. 5-20,34-49,55-70,84-99
5. Pin No. 5-20,33-48,55-70,85-100

FAIL CODE

061-314	Cont IF Error Fail #5	061-638	Image Mismatch_H Err #5
061-320	Video ASIC Fail #5	061-644	ContIF Error_H Fail #5
061-326	Video Line Fail #5	061-650	ROS LD_H Fail #5
061-332	ROS Data Fail #5	061-674	ROS VDD Down_H Fail #5
061-338	ROS LD Fail #5	061-915	Image Mismatch Err #5
061-612	ROS LD ALM #5	061-946	ContIF Error Fail CycleDown #5
061-379	ROS I2C FAIL_#5	061-952	ROS LD Fail Cycle Down #5
061-392	ROS VDD Down Fail #5	061-976	ROS VDD Down Fail CycleDown #5
061-398	PLD FAIL_45	089-314	IRECT Error Fail #5

j0cx730610

6.11 LASER SCAN K (#5)



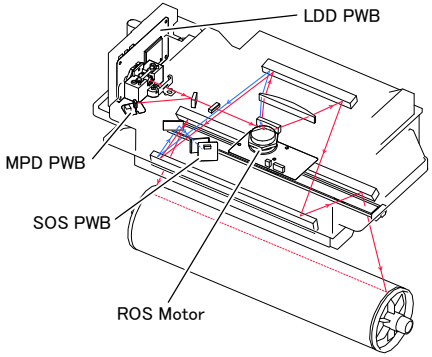
NOTE:

(1) L: External rotation frequency signal selection
H: Internal rotation frequency signal selection

FAIL CODE

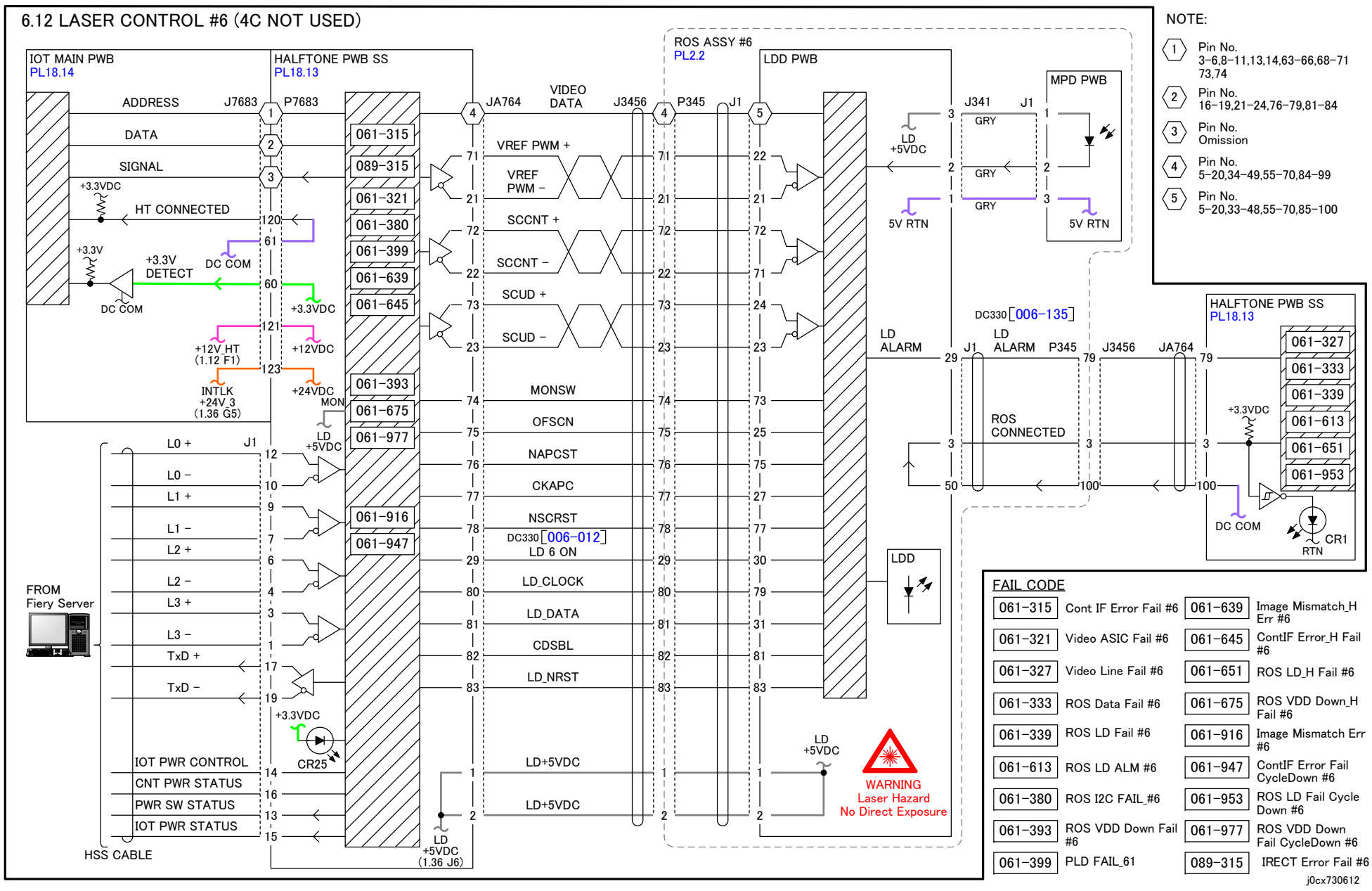
061-344	No SOS Fail #5
061-350	SOS Long Fail #5
061-356	SOS Short Fail #5
061-362	SOS Stop Fail #5
061-368	Polygon Motor Fail #5
061-374	Polygon Motor Ready Check Fail #5
061-656	SOS Long_H Fail #5
061-662	SOS Short_H Fail #5
061-668	Polygon Motor_H Fail #5
061-958	SOS Long Fail CycleDown #5
061-964	SOS Short Fail CycleDown #5
061-970	Polygon Motor Fail CycleDown #5
092-354	Polygon Motor SOS Rotate Fail-C
092-360	FGSEL Fail-C

ELECTRICAL COMPONENTS



j0cx730611

6.12 LASER CONTROL #6 (4C NOT USED)



NOTE:

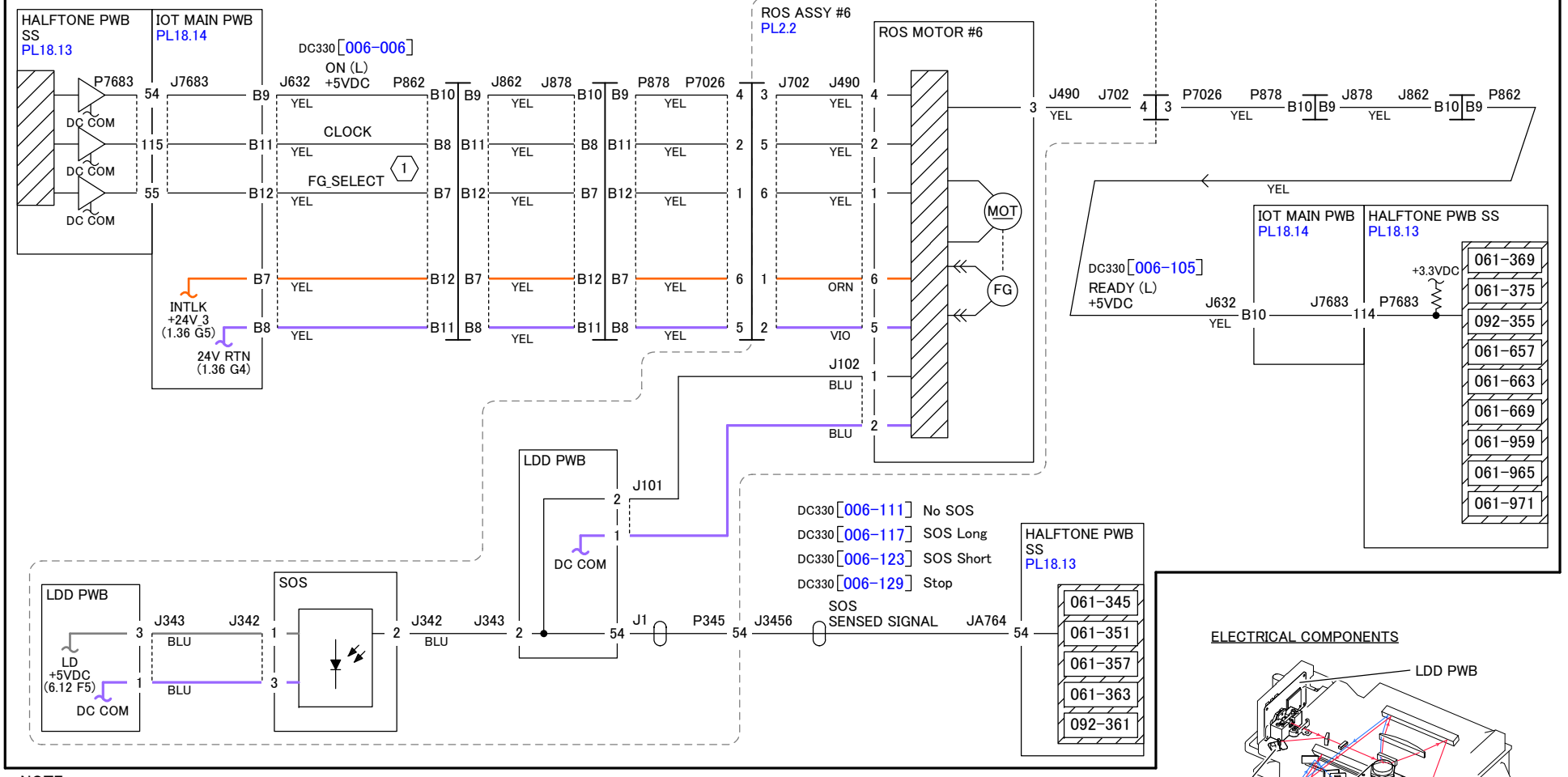
1. Pin No. 3-6,8-11,13,14,63-66,68-71 73,74
2. Pin No. 16-19,21-24,76-79,81-84
3. Pin No. Omission
4. Pin No. 5-20,34-49,55-70,84-99
5. Pin No. 5-20,33-48,55-70,85-100

FAIL CODE

061-315	Cont IF Error Fail #6	061-639	Image Mismatch_H Err #6
061-321	Video ASIC Fail #6	061-645	ContIF Error_H Fail #6
061-327	Video Line Fail #6	061-651	ROS LD_H Fail #6
061-333	ROS Data Fail #6	061-675	ROS VDD Down_H Fail #6
061-339	ROS LD Fail #6	061-916	Image Mismatch Err #6
061-613	ROS LD ALM #6	061-947	ContIF Error Fail CycleDown #6
061-380	ROS I2C FAIL_#6	061-953	ROS LD Fail Cycle Down #6
061-393	ROS VDD Down Fail #6	061-977	ROS VDD Down Fail CycleDown #6
061-399	PLD FAIL_61	089-315	IRECT Error Fail #6

j0cx730612

6.13 LASER SCAN #6 (4C NOT USED)

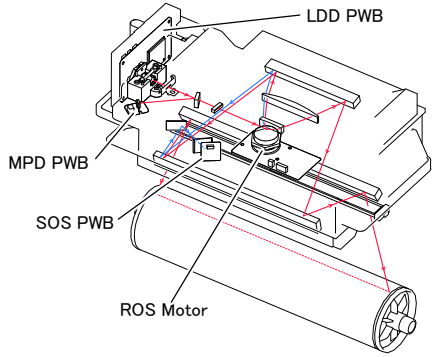


NOTE:
(1) L: External rotation frequency signal selection
H: Internal rotation frequency signal selection

FAIL CODE

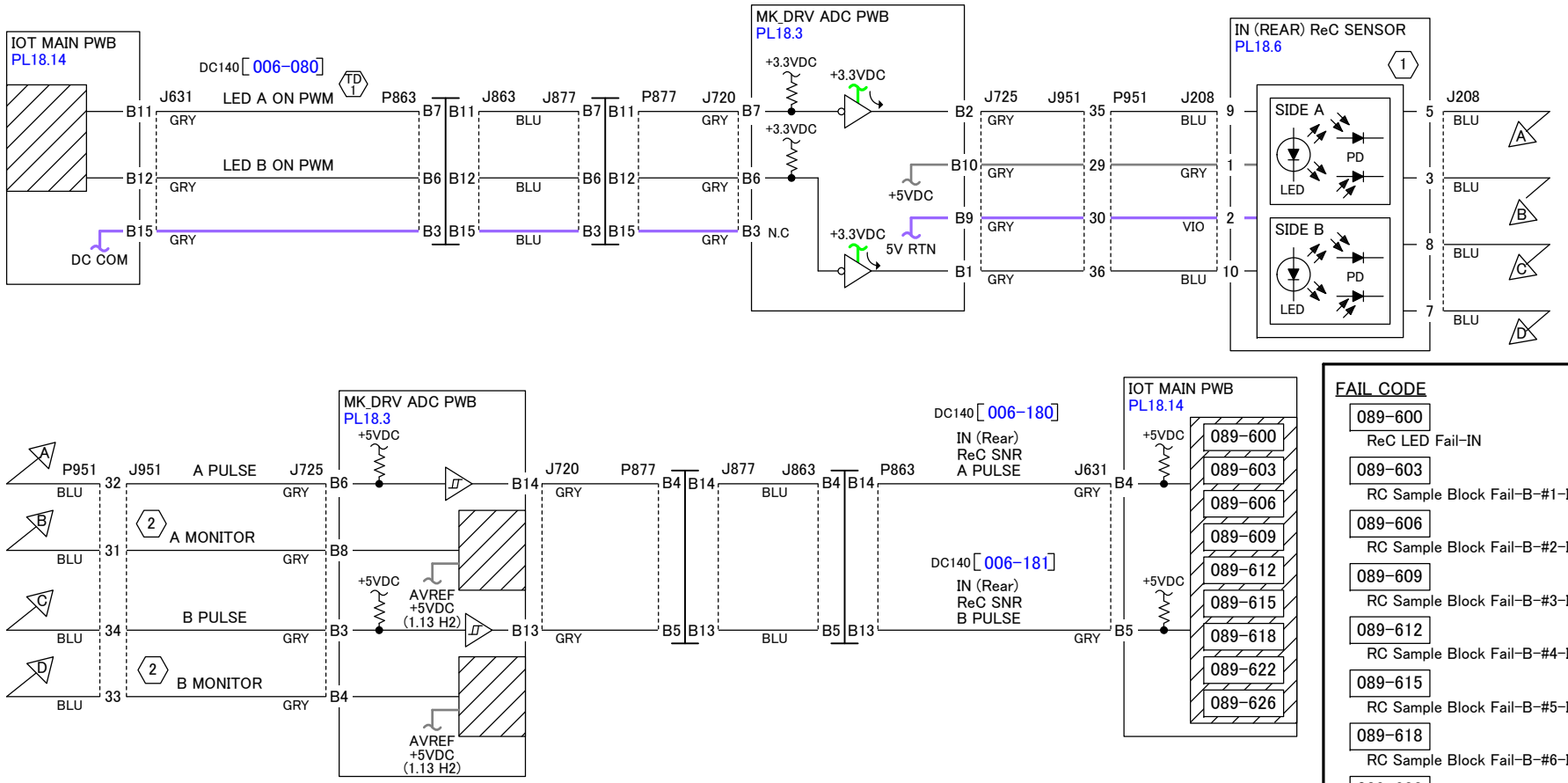
061-345	No SOS Fail #6
061-351	SOS Long Fail #6
061-357	SOS Short Fail #6
061-363	SOS Stop Fail #6
061-369	Polygon Motor Fail #6
061-375	Polygon Motor Ready Check Fail #6
061-657	SOS Long_H Fail #6
061-663	SOS Short_H Fail #6
061-669	Polygon Motor_H Fail #6
061-959	SOS Long Fail CycleDown #6
061-965	SOS Short Fail CycleDown #6
061-971	Polygon Motor Fail CycleDown #6
092-355	Polygon Motor SOS Rotate Fail-K
092-361	FGSEL Fail-K

ELECTRICAL COMPONENTS



j0cx730613

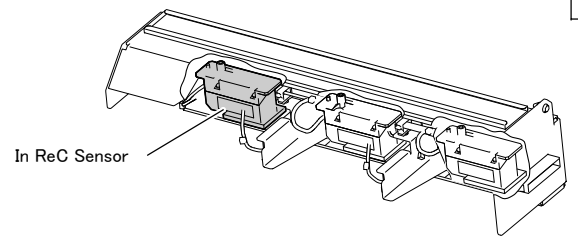
6.14 IMAGE REGISTRATION (IN ReC) (1/3)



NOTE:

1. The ReC sensor is a reflective sensor which outputs pulses when the center line of the chevron patch image formed on the IBT belt coincides with the center line of the sensor.
2. Internal PD Signal Monitor (Analog)
   Used when adjusting LED light intensity. (Auto)
TD 1. Test Point: Between MK_DRV MD PWB J678_D-B1 (+) GND(-)
   Voltage changes from about +20VDC to 0VDC during Diag ON.

ELECTRICAL COMPONENTS



089-633～638
RC Linearlity OverRage Fail
#1～#6

FAIL CODE

089-600
ReC LED Fail-IN

089-603
RC Sample Block Fail-B-#1-IN

089-606
RC Sample Block Fail-B-#2-IN

089-609
RC Sample Block Fail-B-#3-In

089-612
RC Sample Block Fail-B-#4-IN

089-615
RC Sample Block Fail-B-#5-IN

089-618
RC Sample Block Fail-B-#6-IN

089-622
RC Sample Block Fail-A1-IN

089-626
RC Sample Block Fail-D3-IN

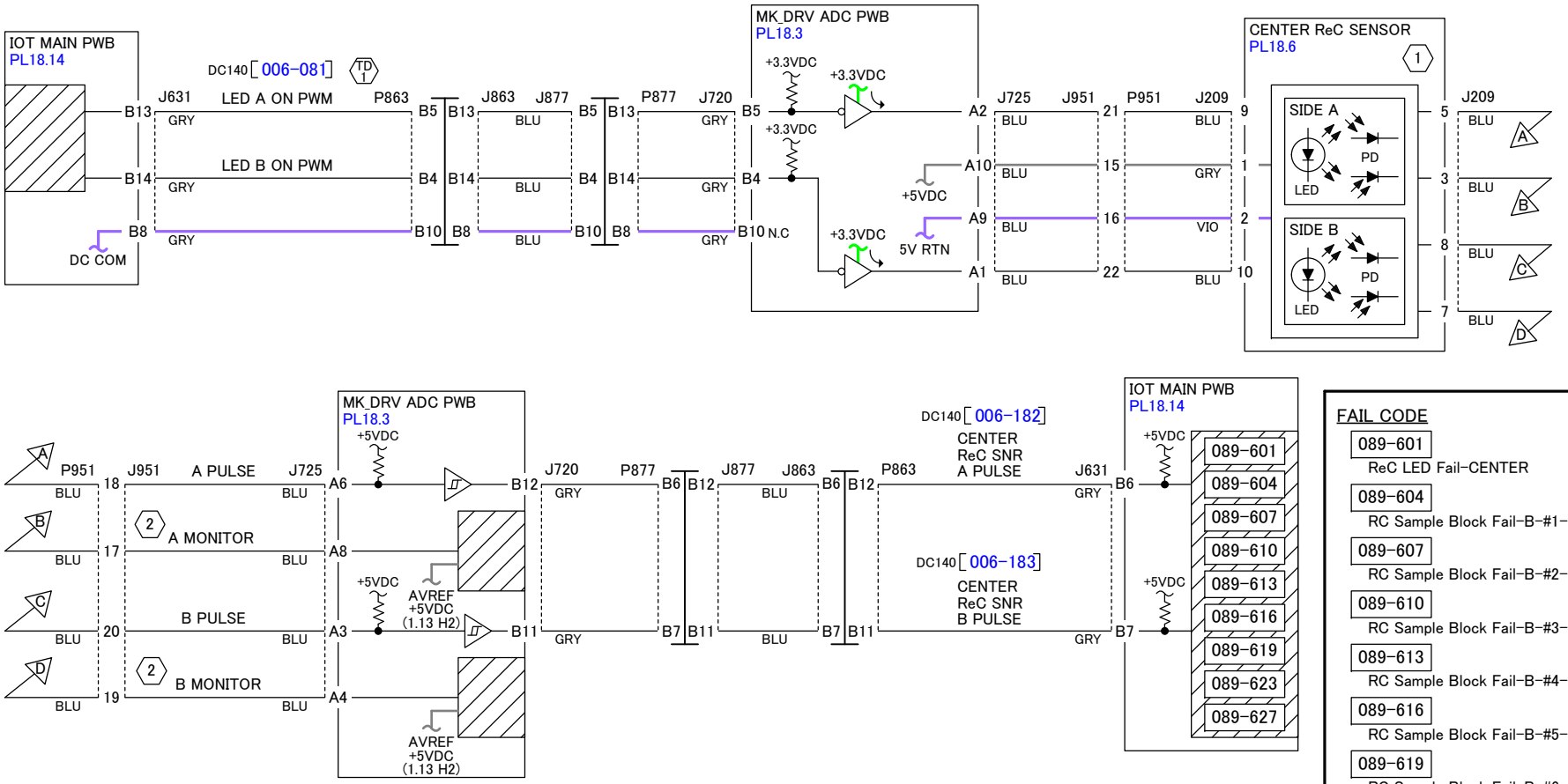
089-625
RC Sample Lateral Fail-D3

089-631
RC Data OverFlow Fail

089-632
RC Data OverRange Fail

j0cx730614

6.15 IMAGE REGISTRATION (CENTER ReC) (2/3)



FAIL CODE

- 089-601 ReC LED Fail-CENTER
- 089-604 RC Sample Block Fail-B-#1-CNT
- 089-607 RC Sample Block Fail-B-#2-CNT
- 089-610 RC Sample Block Fail-B-#3-CNT
- 089-613 RC Sample Block Fail-B-#4-CNT
- 089-616 RC Sample Block Fail-B-#5-CNT
- 089-619 RC Sample Block Fail-B-#6-CNT
- 089-623 RC Sample Block Fail-A1-CNT
- 089-627 RC Sample Block Fail-D3-CNT

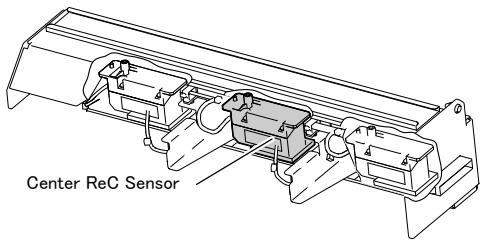
NOTE:

(1) The ReC sensor is a reflective sensor which outputs pulses when the center line of the chevron patch image formed on the IBT belt coincides with the center line of the sensor.

(2) Internal PD Signal Monitor (Analog)
Used when adjusting LED light intensity. (Auto)

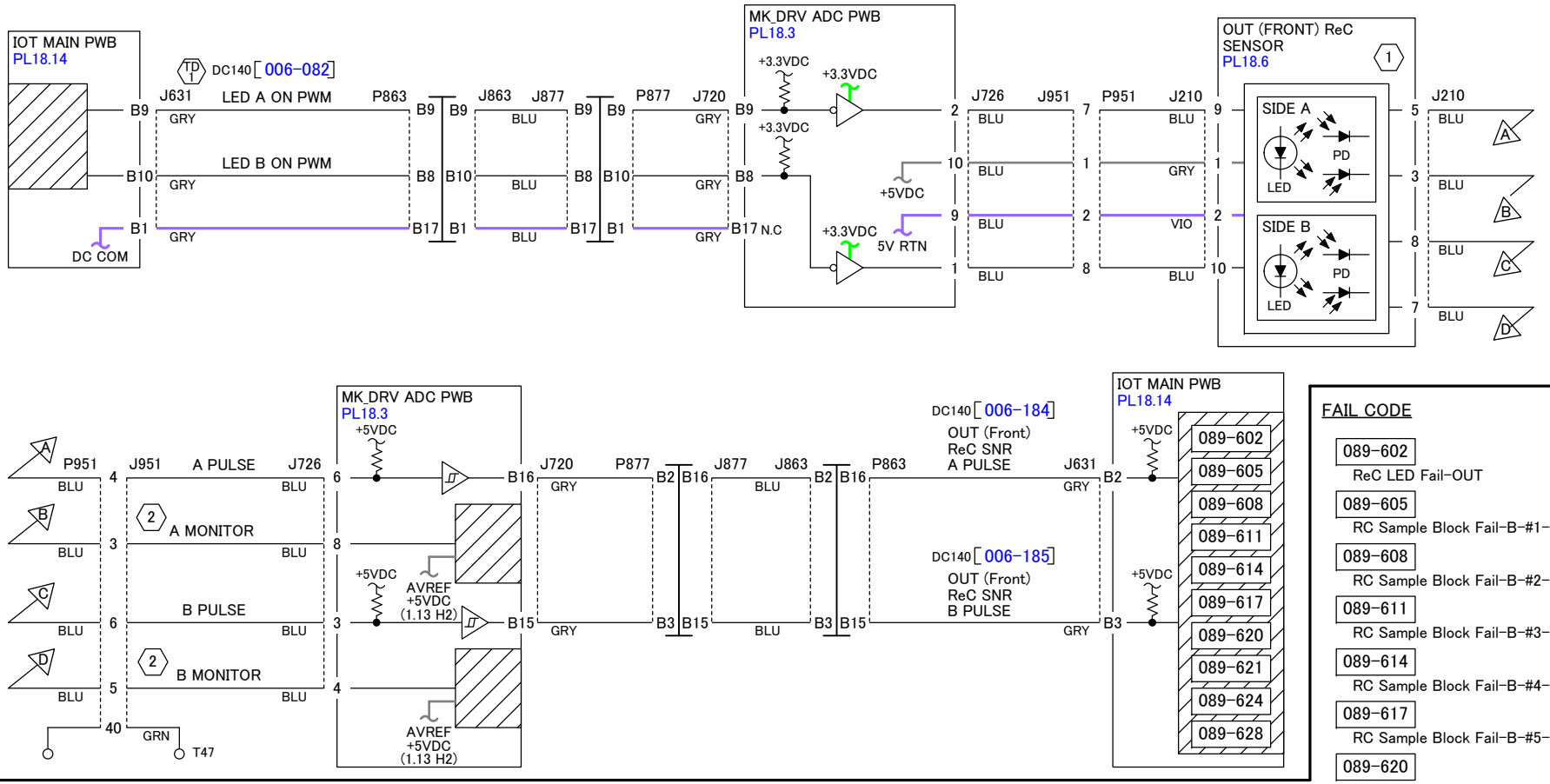
TD1 Test Point: MK_DRV ADC PWB J720-B5 (+) to GND (–)
When DC140[006-081] turns ON, +3.3VDC changes to +2.7VDC.

ELECTRICAL COMPONENTS



j0cx730615

6.16 IMAGE REGISTRATION (OUT ReC) (3/3)



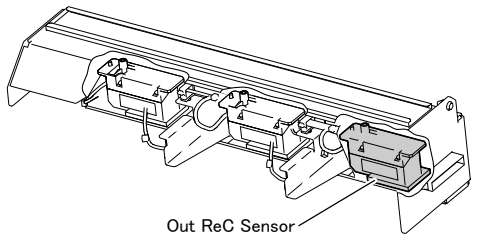
NOTE:

(1) ReC Sensor is a reflective sensor that outputs pulses when the centroidal line of a chevron patch image formed on IBT Belt is right above the centerline of the sensor itself.

(2) Internal PD Signal Monitor (Analog)
To be used for LED Light Qty Adjustment (Auto).

(TD 1) Test Point: MK_DRV ADC PWB J720-B9 (+) to GND (-)
When DC140[006-082] turns ON, +3.3VDC changes to +2.7VDC.

ELECTRICAL COMPONENTS



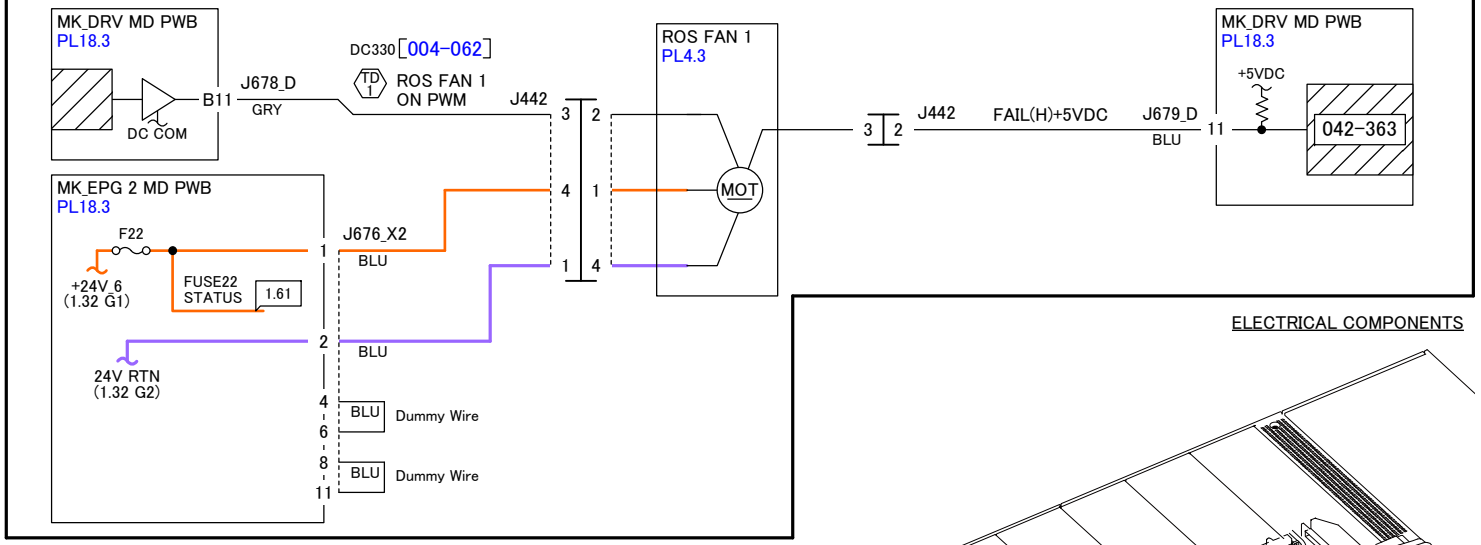
Out ReC Sensor

FAIL CODE

- 089-602 ReC LED Fail-OUT
- 089-605 RC Sample Block Fail-B-#1-OUT
- 089-608 RC Sample Block Fail-B-#2-OUT
- 089-611 RC Sample Block Fail-B-#3-OUT
- 089-614 RC Sample Block Fail-B-#4-OUT
- 089-617 RC Sample Block Fail-B-#5-OUT
- 089-620 RC Sample Block Fail-B-#6-OUT
- 089-621 RC Sample Lateral Fail-A1
- 089-624 RC Sample Block Fail-A1-OUT
- 089-628 RC Sample Block Fail-D3-OUT

j0cx730616

6.17 ROS FAN CONTROL

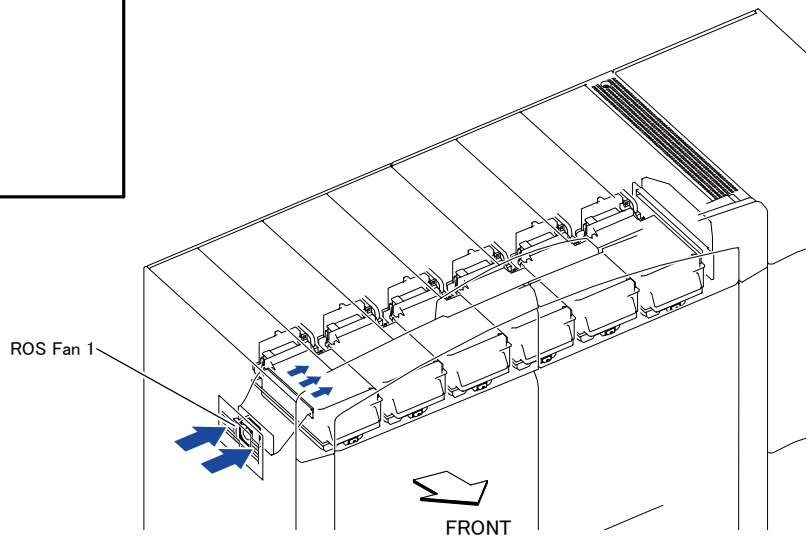


TD 1 Test Point: MK_DRV MD PWB J678_D-B11 (+) to GND (-)
When the respective diag codes turn ON, approx. +20VDC changes to 0VDC.

FAIL CODE

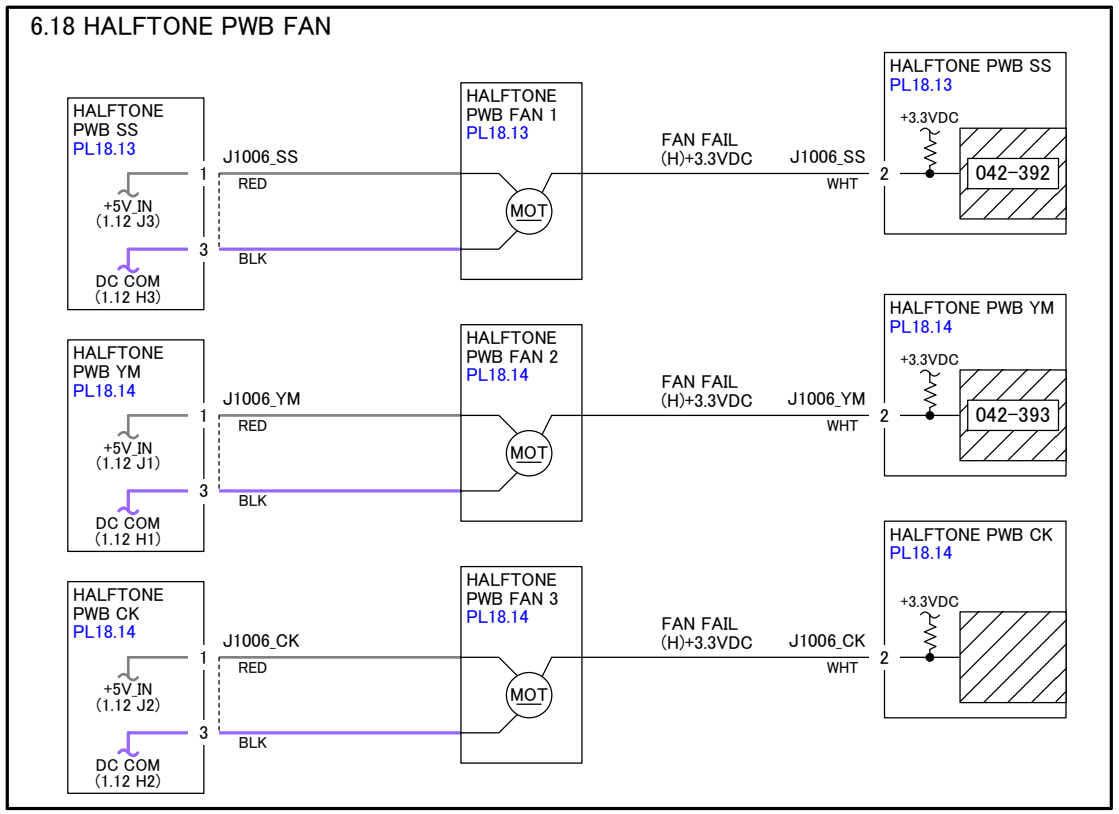
042-363	ROS Fan 1 Fail

ELECTRICAL COMPONENTS



j0cx730617

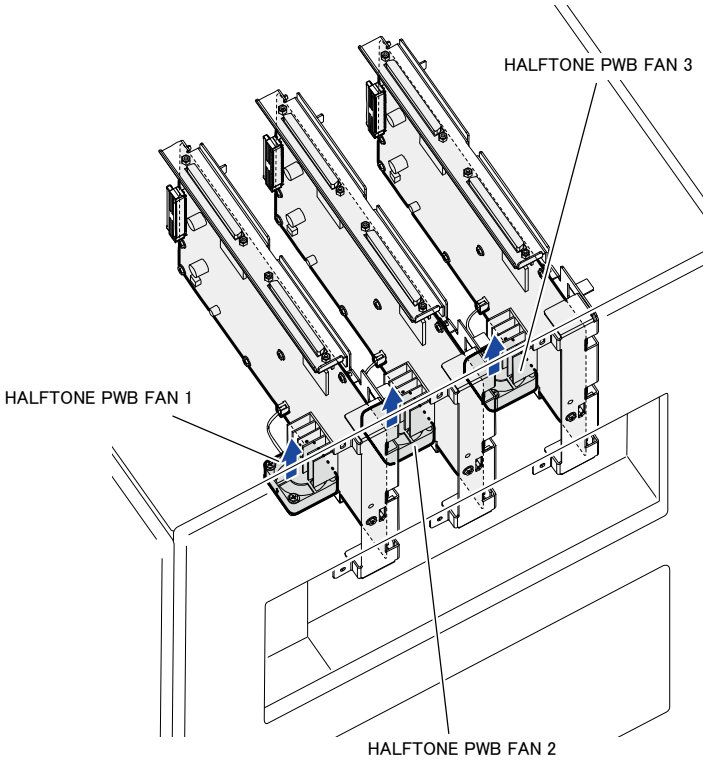
6.18 HALFTONE PWB FAN



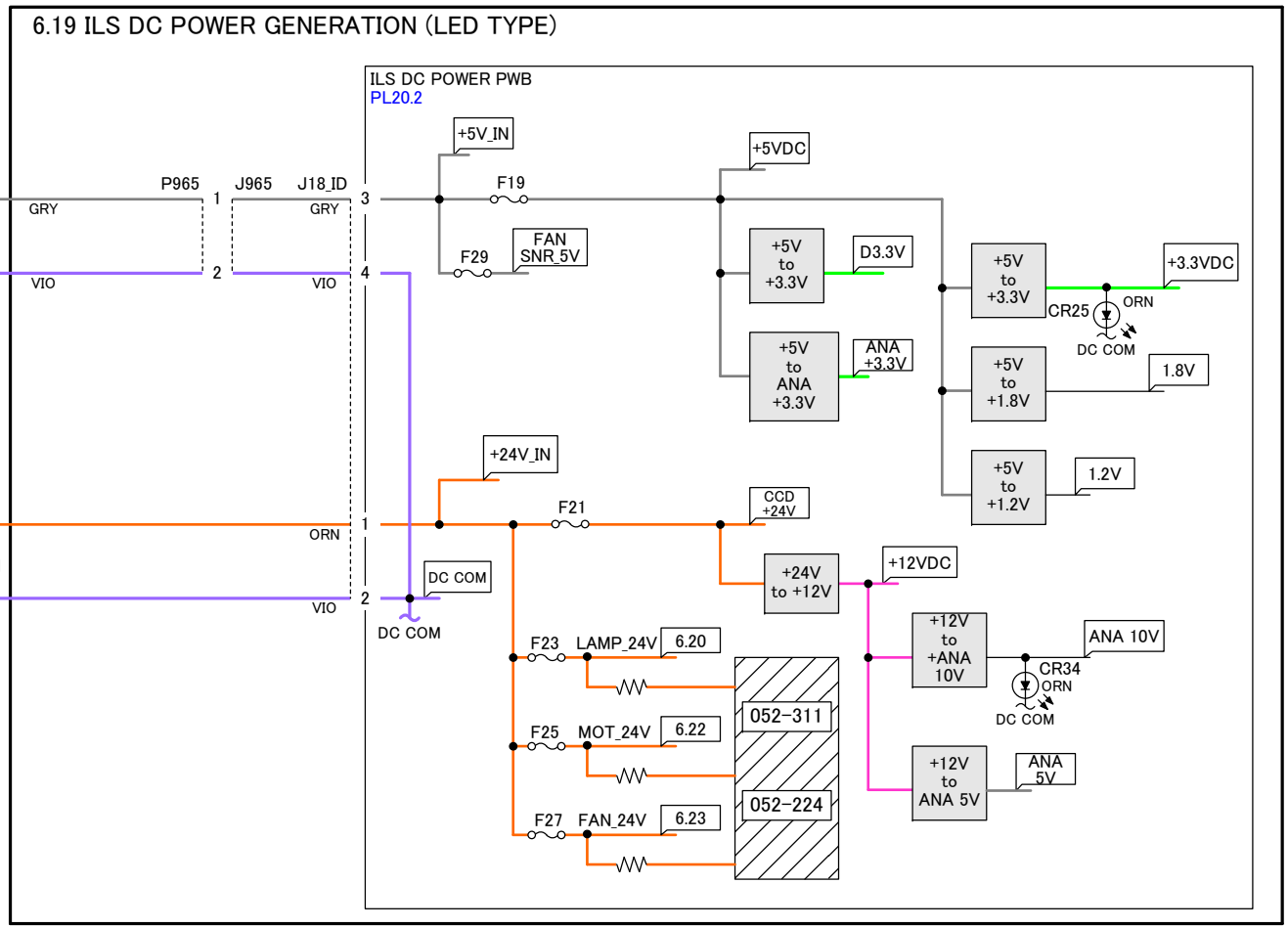
FAIL CODE

042-392
Video Box 1 Fan Fail

042-393
Video Box 2 Fan Fail



j0cx730618



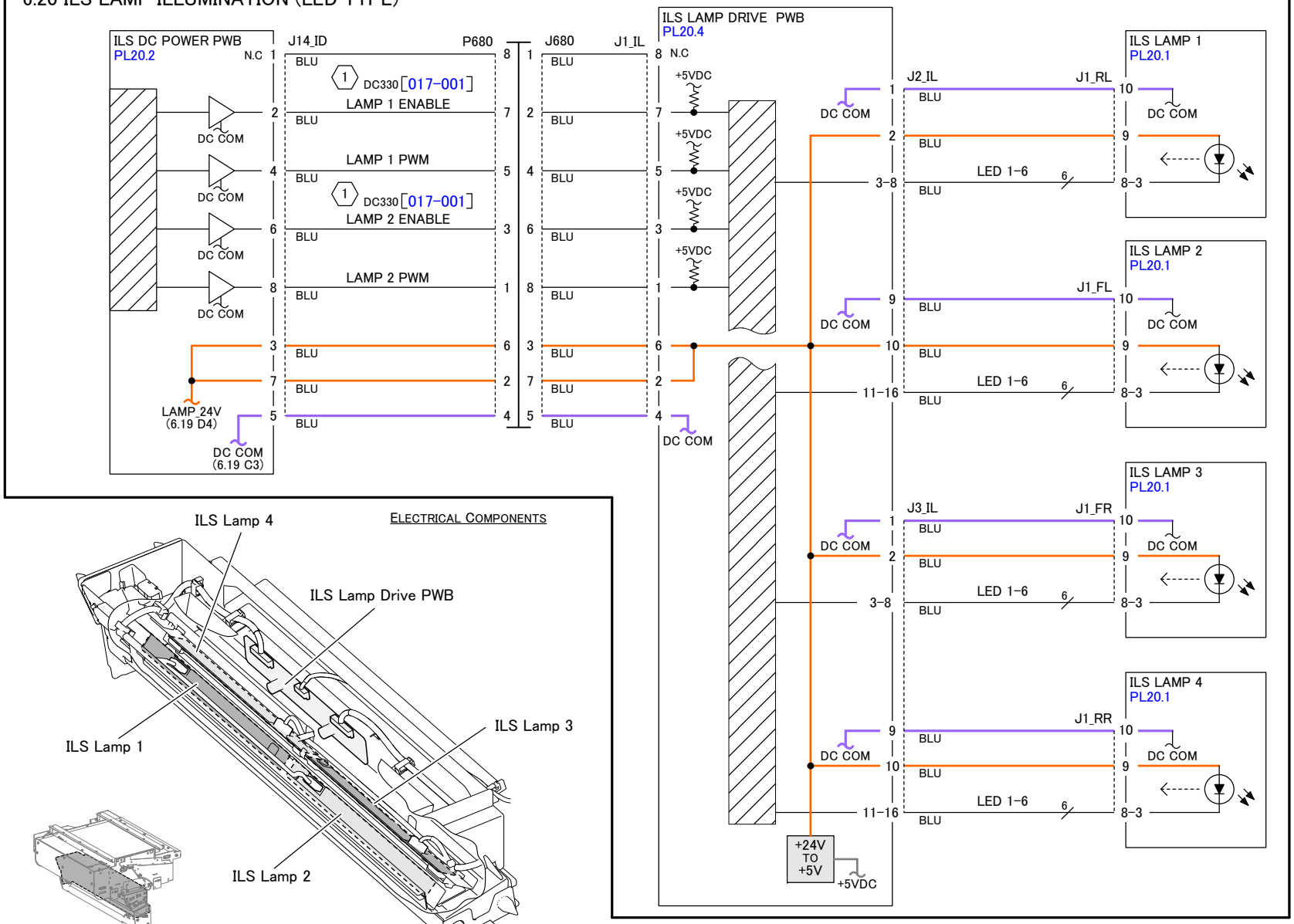
FAIL CODE

052-311
ILS Power 24 Fail (LED Type)

052-224
ILS CCD Fail (LED Type)

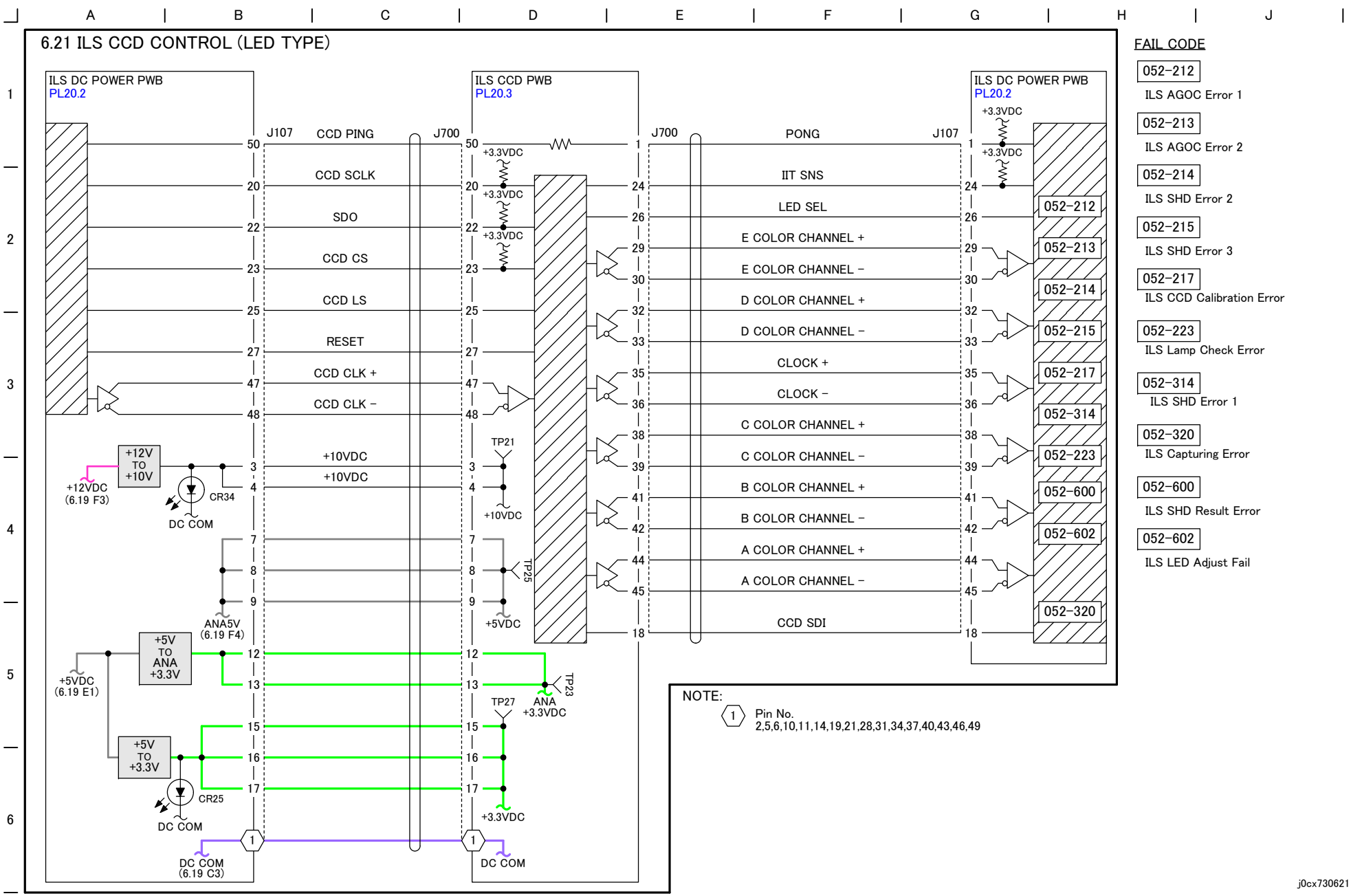
j0cx730619

6.20 ILS LAMP ILLUMINATION (LED TYPE)



NOTE: (1) When this Diag is On, ILS Fan 1 – 5 are also On at the same time.

j0cx730620

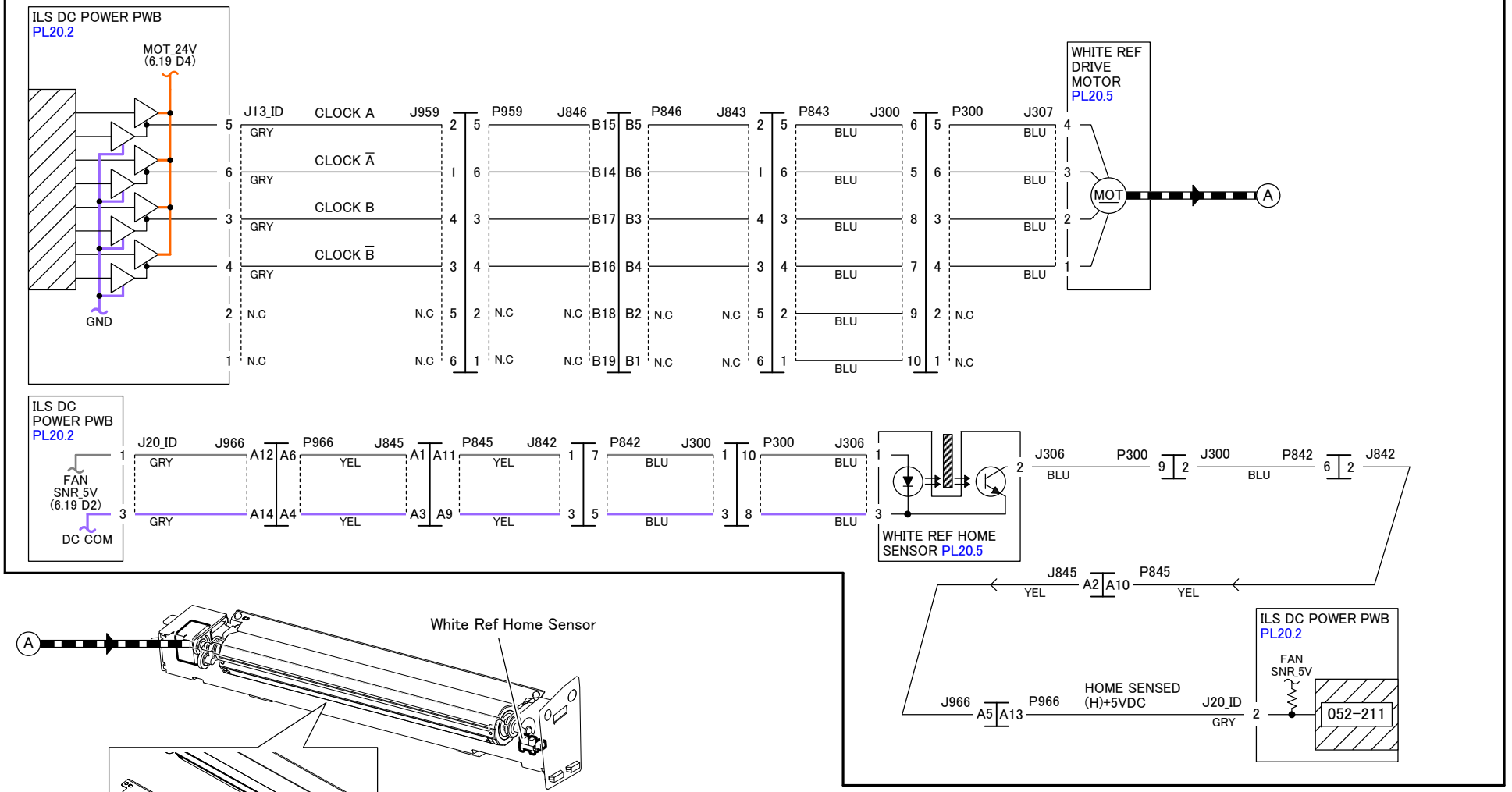


FAIL CODE

- 052-212 ILS AGOC Error 1
- 052-213 ILS AGOC Error 2
- 052-214 ILS SHD Error 2
- 052-215 ILS SHD Error 3
- 052-217 ILS CCD Calibration Error
- 052-223 ILS Lamp Check Error
- 052-314 ILS SHD Error 1
- 052-320 ILS Capturing Error
- 052-600 ILS SHD Result Error
- 052-602 ILS LED Adjust Fail

j0cx730621

6.22 WHITE REFERENCE ADJUSTMENT (LED TYPE)

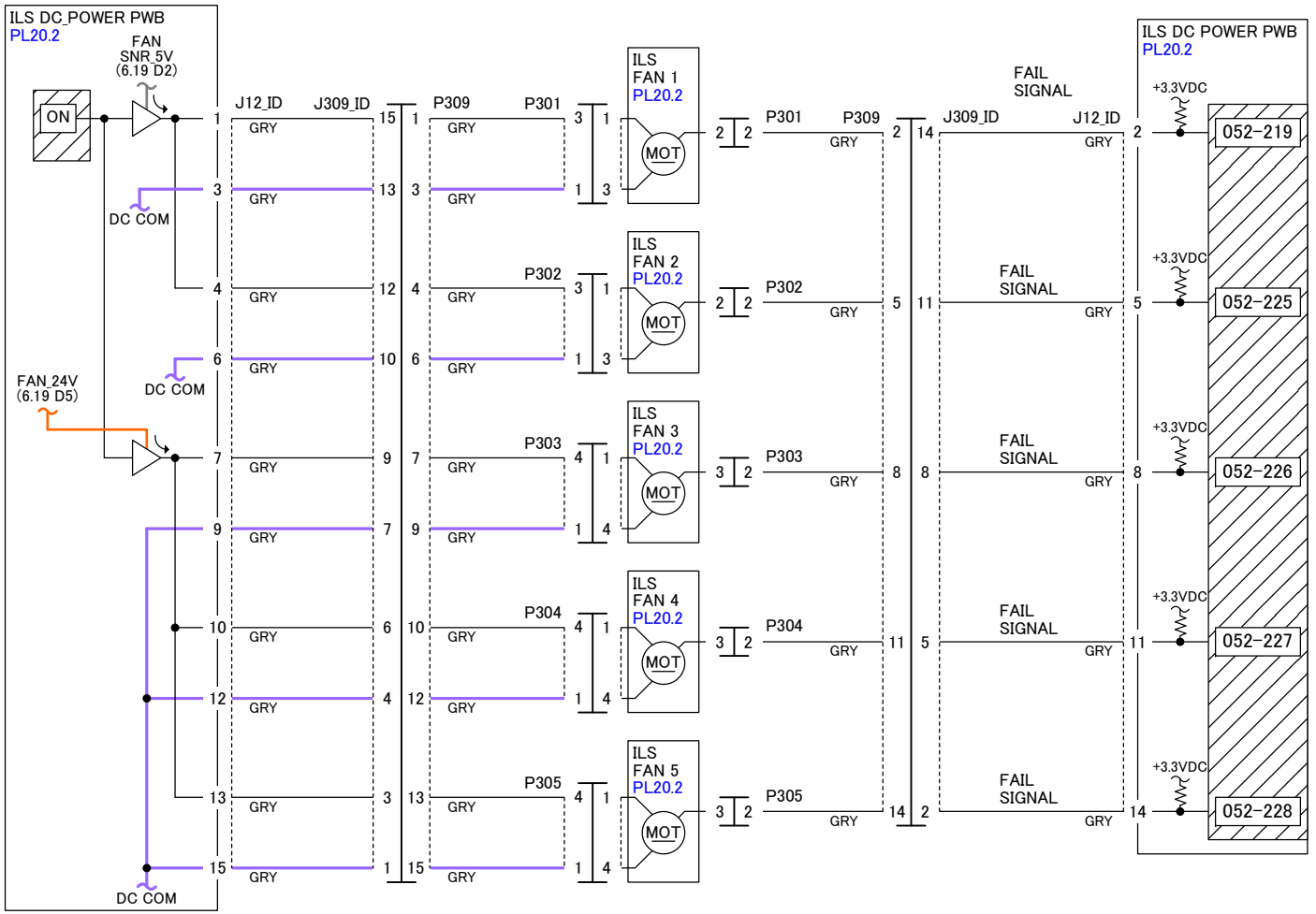


FAIL CODE

052-211
ILS WR Motor Fail

j0cx730622

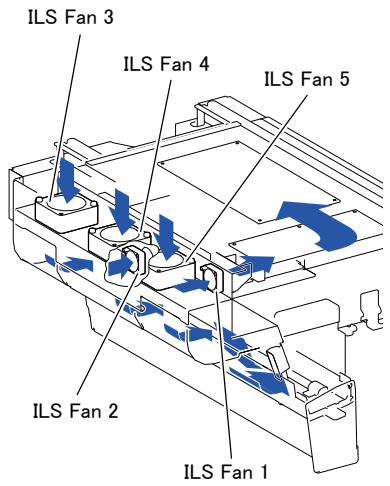
6.23 ILS FAN CONTROL (LED TYPE)



FAIL CODE

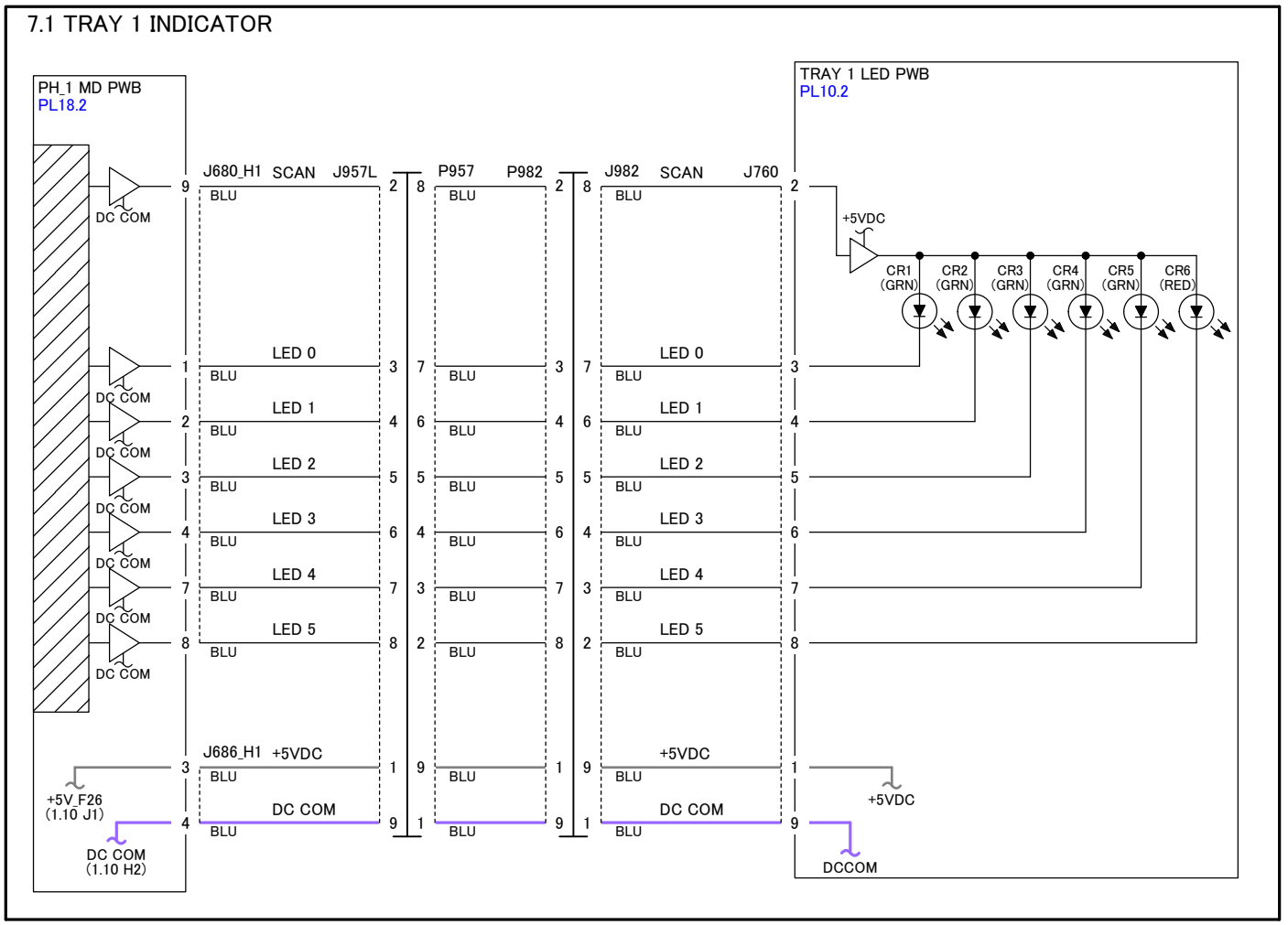
052-219	ILS Fan Fail 1	052-227	ILS Fan Fail 4
052-225	ILS Fan Fail 2	052-228	ILS Fan Fail 5
052-226	ILS Fan Fail 3		

ELECTRICAL COMPONENTS

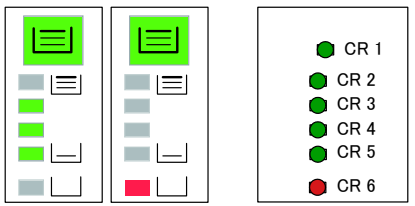


j0cx730623

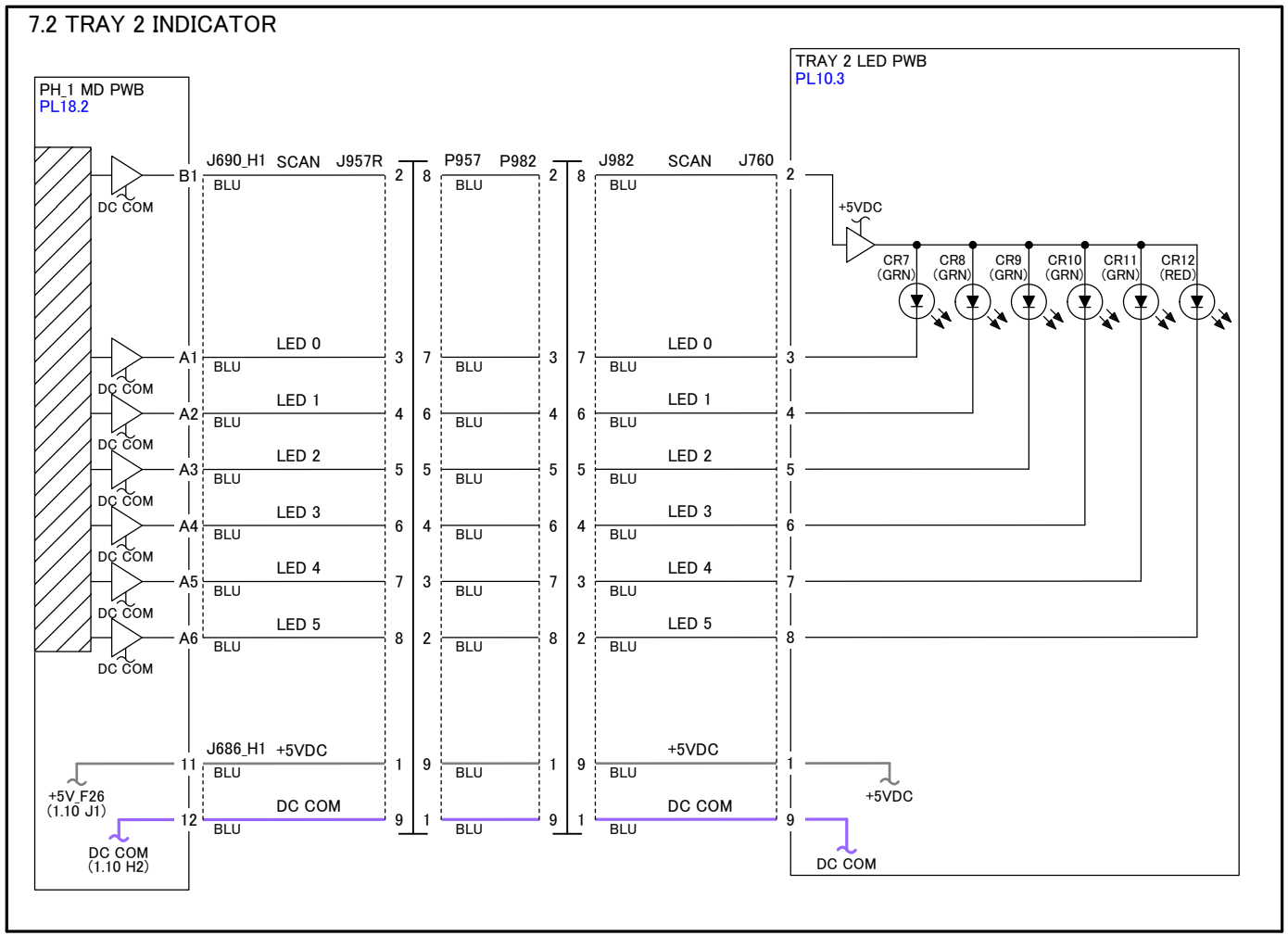
7.1 TRAY 1 INDICATOR



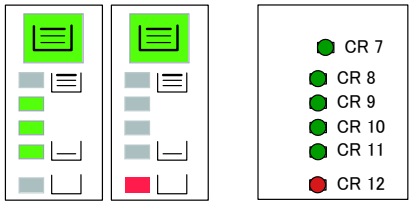
TRAY 1 LED



j0cx730701

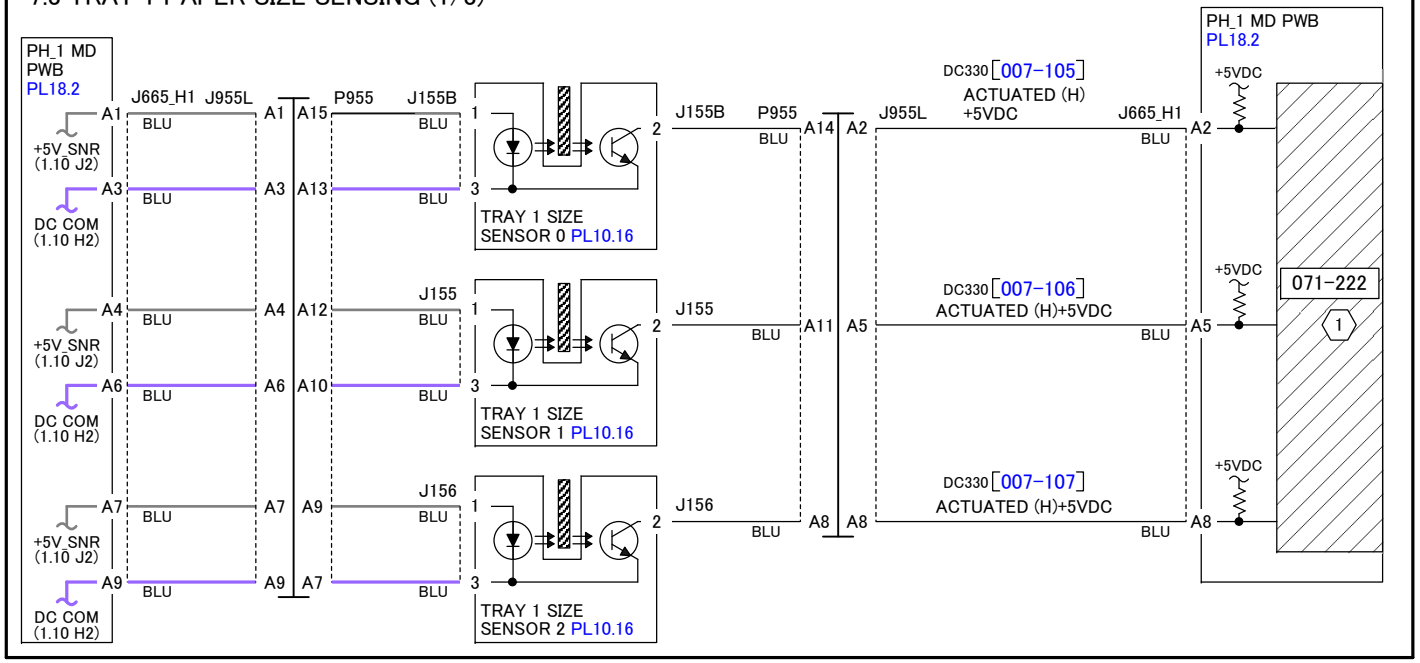


TRAY 2 LED



j0cx730702

7.3 TRAY 1 PAPER SIZE SENSING (1/3)



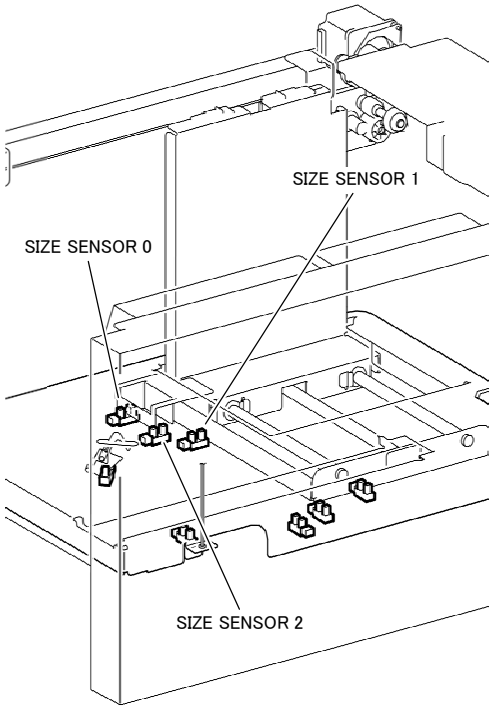
NOTE: (1) Paper size is sensed by a combination of outputs from Tray Size Sensors 0 to 6.
The table shows the relation between paper size and combination of outputs from the Size Sensors.

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide) 0	1	2	Size Sensor (on End Guide) 3	4	5	6
Postcard S (*7)	100.0 x 148.0	L	L	L	L	L	L	–
4″X6″S (*7)	101.6 x 152.4	L	L	L	L	L	L	–
B5S	182.0 x 257.0	L	L	L	L	L	H	–
B5L	257.0 x 182.0	L	H	L	L	L	L	–
7.25″X10.5″L (*1)	266.7 x 184.2	L	H	H	L	L	L	–
16K-T L(*1)(*2)	267.0 x 194.0	L	H	H	L	L	L	–
16K-C L(*1)(*2)	270.0 x 195.0	L	H	H	L	L	L	–
8″X10″L	254.0 x 203.2	L	H	L	L	L	H	–
A4L (*3)	297.0 x 210.0	L	L	H	L	L	H	–
DT Special A4L (*3)	310.0 x 226.0	L	L	H	L	L	H	–
8.5″X11″L	279.4 x 215.9	L	H	H	L	L	H	–
8.5″X11″S	215.9 x 279.4	L	L	L	L	H	H	–
A4S (*4)	210.0 x 297.0	L	L	L	H	L	H	–
DT特A4S (*4)	226.0 x 310.0	L	L	L	H	L	H	–
8.5″X13″S	215.9 x 330.2	L	L	L	H	H	H	–
8.5″X14″S	215.9 x 355.6	L	L	L	H	H	L	–
B4S	257.0 x 364.0	L	H	L	H	H	L	–

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide) 0	1	2	Size Sensor (on End Guide) 3	4	5	6
8K-T S (*2)	267.0 x 388.0	L	H	H	H	H	L	0 (*6)
8K-C S (*2)	270.0 x 390.0	L	H	H	H	H	L	0 (*6)
A3S	297.0 x 420.0	L	L	H	H	H	L	–
11″X17″S	279.4 x 431.8	L	H	H	H	–	L	1 (*6)
SRA3 S (*5)	320.0 x 450.0	H	L	H	H	L	L	–
12″X18″S (*5)	304.8 x 457.2	L	L	H	H	L	L	–
DT Special A3S (*5)	310.0 x 432.0	–	L	H	H	L	L	–
8.5″X13″L	330.2 x 215.9	H	L	L	L	L	H	–
13″X18″S	330.2 x 457.2	H	L	L	H	L	L	–
13″X19″S	330.2 x 482.6	H	L	L	L	L	L	–
12.6″X19.2″S	320.0 x 488.0	H	L	H	L	L	L	–

H : Light to Sensor blocked
L : Light received by Sensor
– : Either is all right.

ELECTRICAL COMPONENTS



FAIL CODE

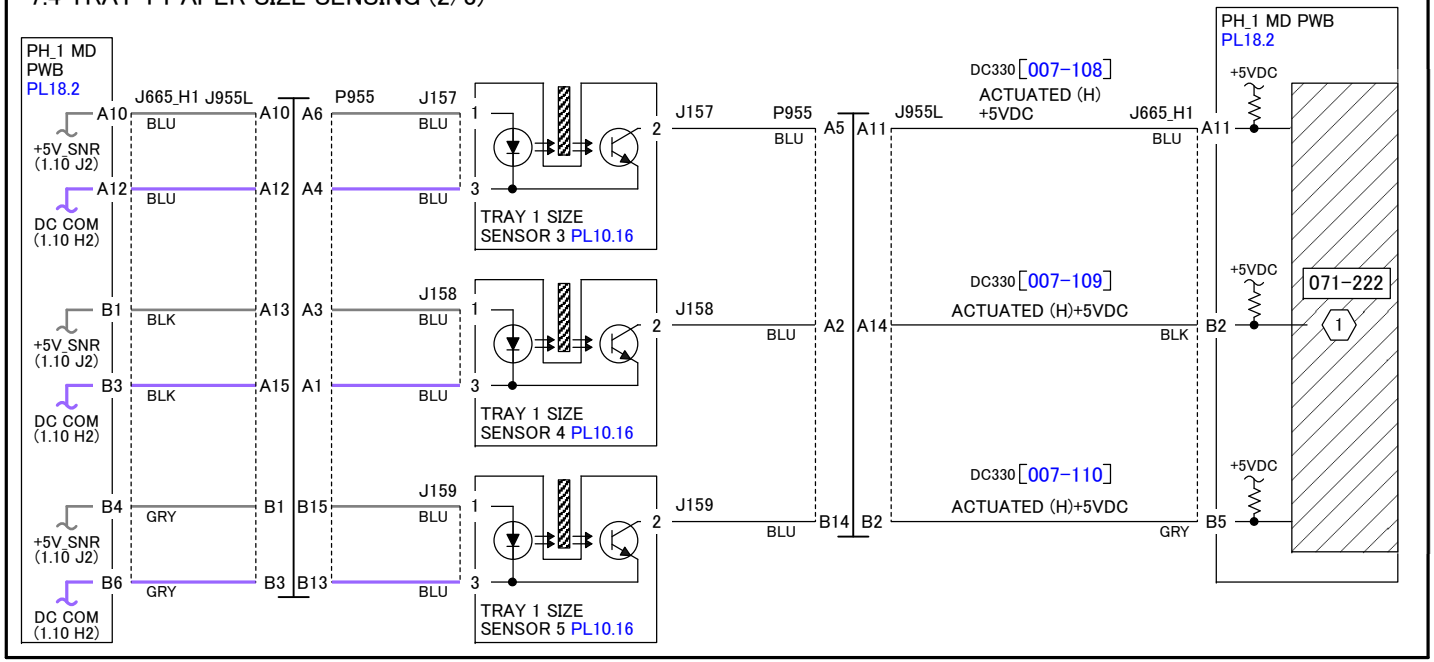
071-222

Tray 1 Size Sensor Broken

*1,*2,*3, *4,*5,*7 : When a paper size cannot be distinguished by the Tray Size Sensors 0-6 paper size sensing patterns, the size selected under Paper Settings on UI is used.

*6 : At paper size sensing, output from Size Sensor 6 is used to distinguish 11″x17″S from 8KS.

7.4 TRAY 1 PAPER SIZE SENSING (2/3)



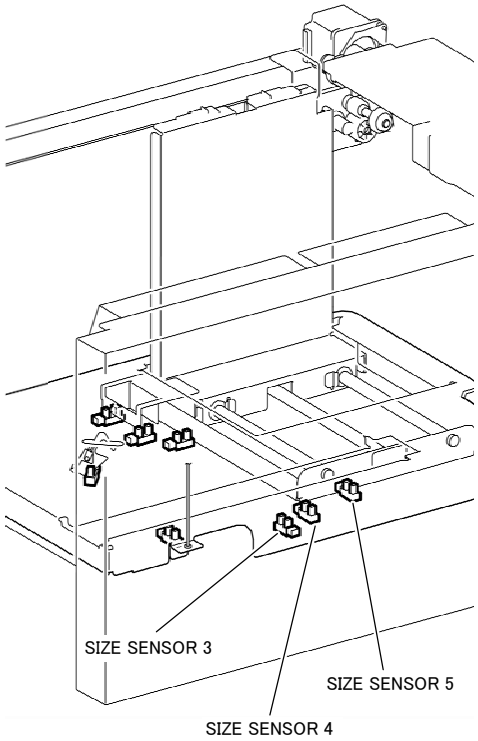
NOTE: (1) Paper size is sensed by a combination of outputs from Tray Size Sensors 0 to 6.
The table shows the relation between paper size and combination of outputs from the Size Sensors.

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide) 0	1	2	Size Sensor (on End Guide) 3	4	5	6
Postcard S (*7)	100.0 x 148.0	L	L	L	L	L	L	–
4″X6″S (*7)	101.6 x 152.4	L	L	L	L	L	L	–
B5S	182.0 x 257.0	L	L	L	L	L	H	–
B5L	257.0 x 182.0	L	H	L	L	L	L	–
7.25″X10.5″L (*1)	266.7 x 184.2	L	H	H	L	L	L	–
16K-T L(*1)(*2)	267.0 x 194.0	L	H	H	L	L	L	–
16K-C L(*1)(*2)	270.0 x 195.0	L	H	H	L	L	L	–
8″X10″L	254.0 x 203.2	L	H	L	L	L	H	–
A4L (*3)	297.0 x 210.0	L	L	H	L	L	H	–
DT Special A4L (*3)	310.0 x 226.0	L	L	H	L	L	H	–
8.5″X11″L	279.4 x 215.9	L	H	H	L	L	H	–
8.5″X11″S	215.9 x 279.4	L	L	L	L	H	H	–
A4S (*4)	210.0 x 297.0	L	L	L	H	L	H	–
DT特A4S (*4)	226.0 x 310.0	L	L	L	H	L	H	–
8.5″X13″S	215.9 x 330.2	L	L	L	H	H	H	–
8.5″X14″S	215.9 x 355.6	L	L	L	H	H	L	–
B4S	257.0 x 364.0	L	H	L	H	H	L	–

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide) 0	1	2	Size Sensor (on End Guide) 3	4	5	6
8K-T S (*2)	267.0 x 388.0	L	H	H	H	H	L	0 (*6)
8K-C S (*2)	270.0 x 390.0	L	H	H	H	H	L	0 (*6)
A3S	297.0 x 420.0	L	L	H	H	H	L	–
11″X17″S	279.4 x 431.8	L	H	H	H	–	L	1 (*6)
SRA3 S (*5)	320.0 x 450.0	H	L	H	H	L	L	–
12″X18″S (*5)	304.8 x 457.2	L	L	H	H	L	L	–
DT Special A3S (*5)	310.0 x 432.0	–	L	H	H	L	L	–
8.5″X13″L	330.2 x 215.9	H	L	L	L	L	H	–
13″X18″S	330.2 x 457.2	H	L	L	H	L	L	–
13″X19″S	330.2 x 482.6	H	L	L	L	L	L	–
12.6″X19.2″S	320.0 x 488.0	H	L	H	L	L	L	–

H : Light to Sensor blocked
L : Light received by Sensor
– : Either is all right.

ELECTRICAL COMPONENTS



FAIL CODE

071-222

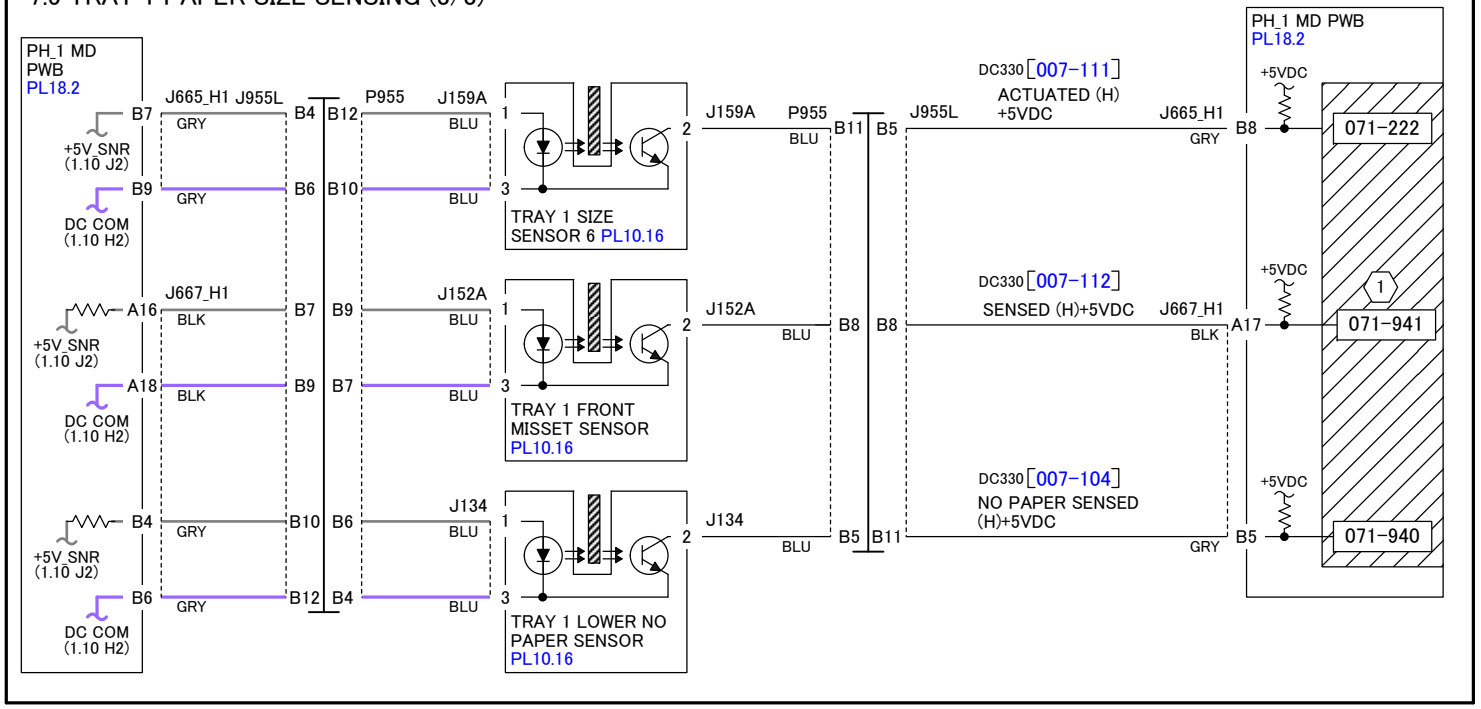
Tray 1 Size Sensor Broken

*1,*2,*3, *4,*5,*7 : When a paper size cannot be distinguished by the Tray Size Sensors 0-6 paper size sensing patterns, the size selected under Paper Settings on UI is used.

*6 : At paper size sensing, output from Size Sensor 6 is used to distinguish 11″x17″S from 8KS.

j0cx730704

7.5 TRAY 1 PAPER SIZE SENSING (3/3)



NOTE:

(1) Paper Misset Detection
M/C checks what combination of outputs Tray 1 Size Sensors 0 to 6 have issued.
If it is one of the combinations listed on Table 2, M/C determines whether to lift up Tray 1 by output from Tray 1 Front Misset Sensor. (See Table 1.)

Tray1 Front Misset Sensor	No paper	Paper exists
Lift Up operation	ON	OFF

Table 1

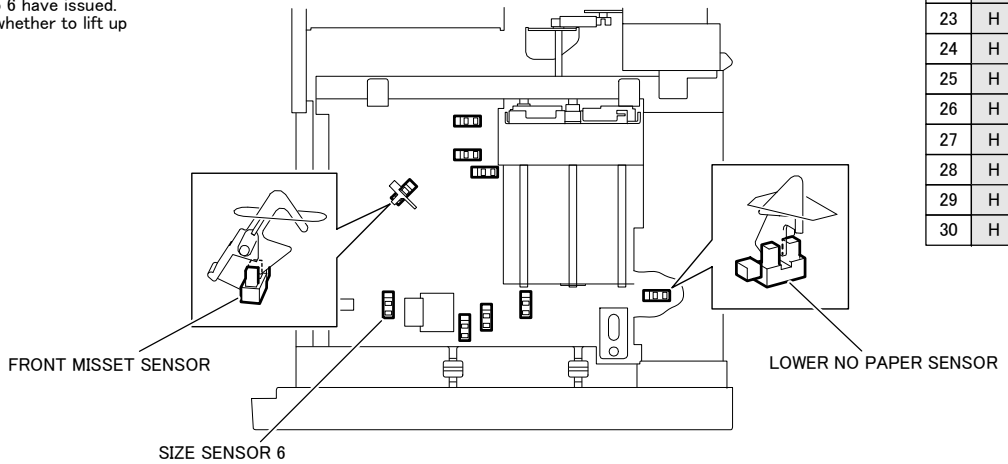
FAIL CODE

071-222
Tray 1 Size Sensor Broken

071-940
Tray 1 No Paper

071-941
Tray 1 Paper Wrong Position

ELECTRICAL COMPONENTS



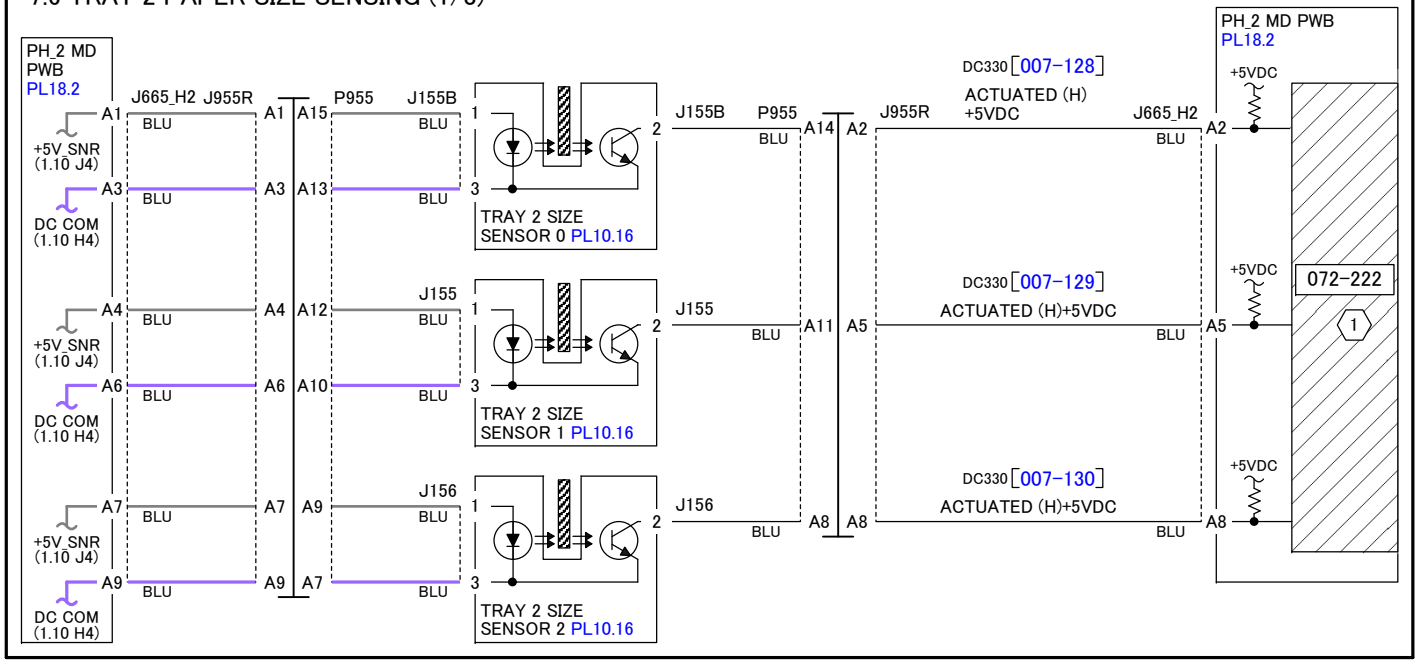
No.	Size Sensor (on Side Guide)			Size Sensor (on End Guide)			
	0	1	2	3	4	5	6
1	L	L	L	L	L	L	L
2	L	L	L	L	L	H	–
3	L	L	L	L	H	H	–
4	L	L	L	H	L	H	–
5	L	L	L	H	H	H	–
6	L	L	H	L	L	L	L
7	L	L	H	L	L	H	–
8	L	L	H	L	H	H	–
9	L	L	H	H	H	H	–
10	L	L	H	H	L	H	–
11	L	H	L	L	L	L	L
12	L	H	L	L	L	H	–
13	L	H	L	L	H	H	–
14	L	H	L	H	H	H	–
15	L	H	L	H	L	H	–
16	L	H	H	L	L	L	L
17	L	H	H	L	L	H	–
18	L	H	H	L	H	H	–
19	L	H	H	H	H	H	–
20	L	H	H	H	L	H	–
21	H	L	L	L	L	L	L
22	H	L	L	L	L	H	–
23	H	L	L	L	H	H	–
24	H	L	L	H	H	H	–
25	H	L	L	H	L	H	–
26	H	L	H	L	L	L	L
27	H	L	H	L	L	H	–
28	H	L	H	L	H	H	–
29	H	L	H	H	H	H	–
30	H	L	H	H	L	H	–

Table 2

H : Light to Sensor blocked
L : Light received by Sensor
– : Either is all right.

j0cx730705

7.6 TRAY 2 PAPER SIZE SENSING (1/3)



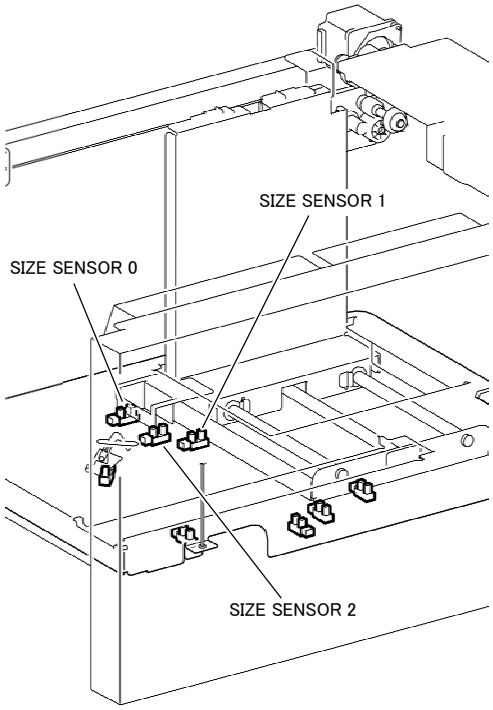
NOTE: (1) Paper size is sensed by a combination of outputs from Tray Size Sensors 0 to 6.
The table shows the relation between paper size and combination of outputs from the Size Sensors.

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide) 0	1	2	Size Sensor (on End Guide) 3	4	5	6
Postcard S (*7)	100.0 x 148.0	L	L	L	L	L	L	–
4″X6″S (*7)	101.6 x 152.4	L	L	L	L	L	L	–
B5S	182.0 x 257.0	L	L	L	L	L	H	–
B5L	257.0 x 182.0	L	H	L	L	L	L	–
7.25″X10.5″L (*1)	266.7 x 184.2	L	H	H	L	L	L	–
16K-T L(*1)(*2)	267.0 x 194.0	L	H	H	L	L	L	–
16K-C L(*1)(*2)	270.0 x 195.0	L	H	H	L	L	L	–
8″X10″L	254.0 x 203.2	L	H	L	L	L	H	–
A4L (*3)	297.0 x 210.0	L	L	H	L	L	H	–
DT Special A4L (*3)	310.0 x 226.0	L	L	H	L	L	H	–
8.5″X11″L	279.4 x 215.9	L	H	H	L	L	H	–
8.5″X11″S	215.9 x 279.4	L	L	L	L	H	H	–
A4S (*4)	210.0 x 297.0	L	L	L	H	L	H	–
DT Special A4S (*4)	226.0 x 310.0	L	L	L	H	L	H	–
8.5″X13″S	215.9 x 330.2	L	L	L	H	H	H	–
8.5″X14″S	215.9 x 355.6	L	L	L	H	H	L	–
B4S	257.0 x 364.0	L	H	L	H	H	L	–

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide) 0	1	2	Size Sensor (on End Guide) 3	4	5	6
8K-T S (*2)	267.0 x 388.0	L	H	H	H	H	L	0 (*6)
8K-C S (*2)	270.0 x 390.0	L	H	H	H	H	L	0 (*6)
A3S	297.0 x 420.0	L	L	H	H	H	L	–
11″X17″S	279.4 x 431.8	L	H	H	H	–	L	1 (*6)
SRA3 S (*5)	320.0 x 450.0	H	L	H	H	L	L	–
12″X18″S (*5)	304.8 x 457.2	L	L	H	H	L	L	–
DT Special A3S (*5)	310.0 x 432.0	–	L	H	H	L	L	–
8.5″X13″L	330.2 x 215.9	H	L	L	L	L	H	–
13″X18″S	330.2 x 457.2	H	L	L	H	L	L	–
13″X19″S	330.2 x 482.6	H	L	L	L	L	L	–
12.6″X19.2″S	320.0 x 488.0	H	L	H	L	L	L	–

H : Light to Sensor blocked
L : Light received by Sensor
– : Either is all right.

ELECTRICAL COMPONENTS



FAIL CODE

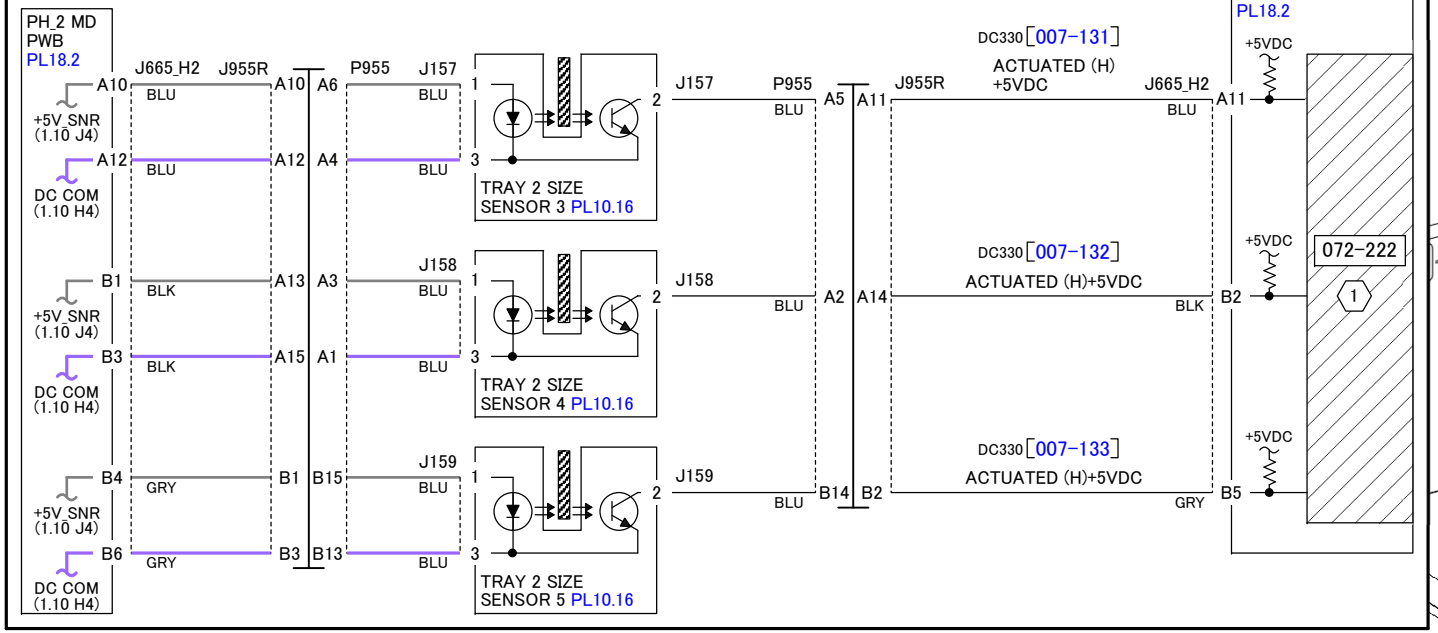
072-222	Tray 2 Size Sensor Broken

*1,*2,*3,*4,*5,*7 : When a paper size cannot be distinguished by the Tray Size Sensors 0-6 paper size sensing patterns, the size selected under Paper Settings on UI is used.

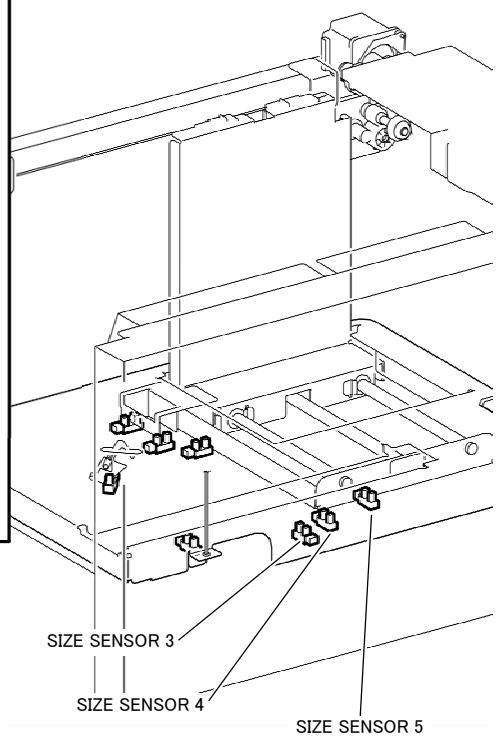
*6 : At paper size sensing, output from Size Sensor 6 is used to distinguish 11″x17″S from 8KS.

j0cx730706

7.7 TRAY 2 PAPER SIZE SENSING (2/3)



ELECTRICAL COMPONENTS



NOTE: (1) Paper size is sensed by a combination of outputs from Tray Size Sensors 0 to 6.
The table shows the relation between paper size and combination of outputs from the Size Sensors.

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide)			Size Sensor (on End Guide)			
		0	1	2	3	4	5	6
Postcard S (*7)	100.0 x 148.0	L	L	L	L	L	L	–
4″X6″S (*7)	101.6 x 152.4	L	L	L	L	L	L	–
B5S	182.0 x 257.0	L	L	L	L	L	H	–
B5L	257.0 x 182.0	L	H	L	L	L	L	–
7.25″X10.5″L (*1)	266.7 x 184.2	L	H	H	L	L	L	–
16K-T L(*1)(*2)	267.0 x 194.0	L	H	H	L	L	L	–
16K-C L(*1)(*2)	270.0 x 195.0	L	H	H	L	L	L	–
8″X10″L	254.0 x 203.2	L	H	L	L	L	H	–
A4L (*3)	297.0 x 210.0	L	L	H	L	L	H	–
DT Special A4L (*3)	310.0 x 226.0	L	L	H	L	L	H	–
8.5″X11″L	279.4 x 215.9	L	H	H	L	L	H	–
8.5″X11″S	215.9 x 279.4	L	L	L	L	H	H	–
A4S (*4)	210.0 x 297.0	L	L	L	H	L	H	–
DT Special A4S (*4)	226.0 x 310.0	L	L	L	H	L	H	–
8.5″X13″S	215.9 x 330.2	L	L	L	H	H	H	–
8.5″X14″S	215.9 x 355.6	L	L	L	H	H	L	–
B4S	257.0 x 364.0	L	H	L	H	H	L	–

Paper size	Dimensions (mm) (W) x (L)	Size Sensor (on Side Guide)			Size Sensor (on End Guide)			
		0	1	2	3	4	5	6
8K-T S (*2)	267.0 x 388.0	L	H	H	H	H	L	0 (*6)
8K-C S (*2)	270.0 x 390.0	L	H	H	H	H	L	0 (*6)
A3S	297.0 x 420.0	L	L	H	H	H	L	–
11″X17″S	279.4 x 431.8	L	H	H	H	–	L	1 (*6)
SRA3 S (*5)	320.0 x 450.0	H	L	H	H	L	L	–
12″X18″S (*5)	304.8 x 457.2	L	L	H	H	L	L	–
DT Special A3S (*5)	310.0 x 432.0	–	L	H	H	L	L	–
8.5″X13″L	330.2 x 215.9	H	L	L	L	L	H	–
13″X18″S	330.2 x 457.2	H	L	L	H	L	L	–
13″X19″S	330.2 x 482.6	H	L	L	L	L	L	–
12.6″X19.2″S	320.0 x 488.0	H	L	H	L	L	L	–

H : Light to Sensor blocked
L : Light received by Sensor
– : Either is all right.

FAIL CODE

072-222

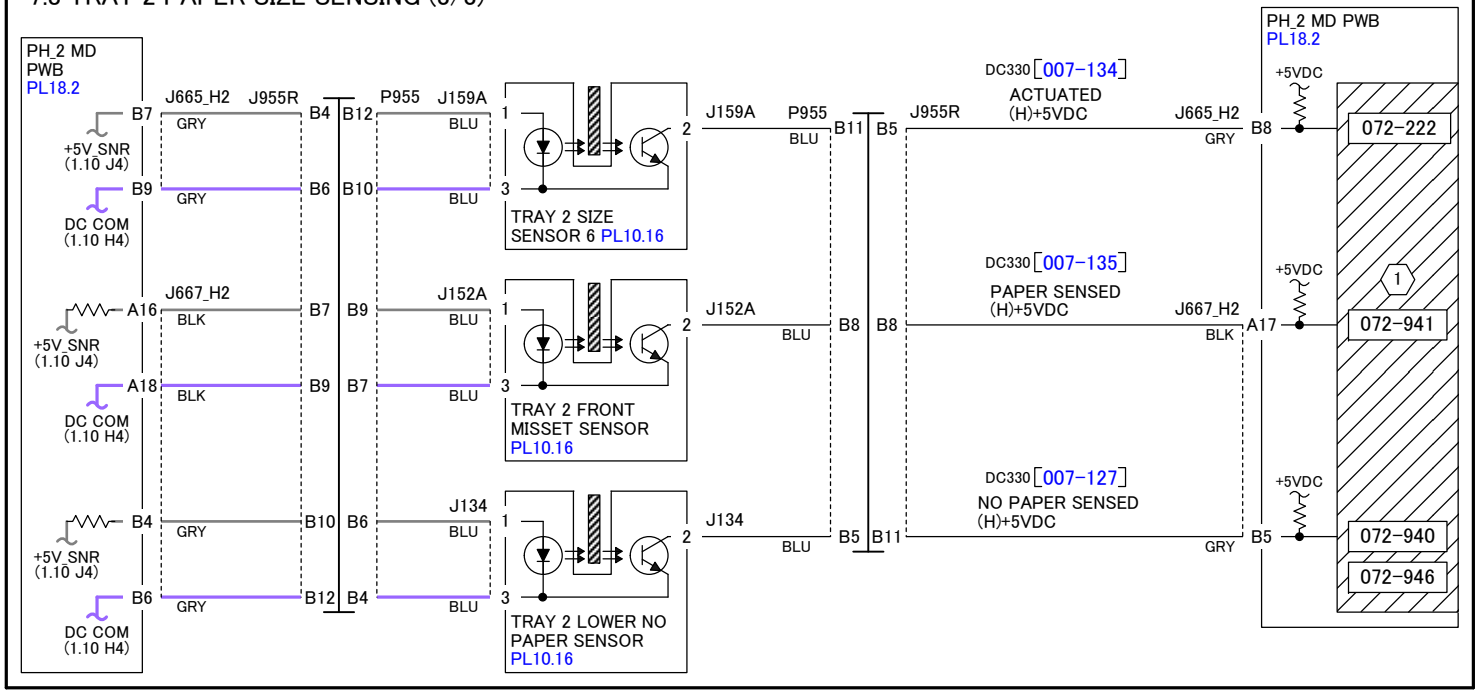
Tray 2 Size Sensor Broken

*1,*2,*3,*4,*5,*7 : When a paper size cannot be distinguished by the Tray Size Sensors 0-6 paper size sensing patterns, the size selected under Paper Settings on UI is used.

*6 : At paper size sensing, output from Size Sensor 6 is used to distinguish 11″x17″S from 8KS.

j0cx730707

7.8 TRAY 2 PAPER SIZE SENSING (3/3)



NOTE:

(1) Paper Misset Detection
M/C checks what combination of outputs Tray 2 Size Sensors 0 to 6 have issued.
If it is one of the combinations listed on Table 2, M/C determines whether to lift up Tray 2 by output from Tray 2 Front Misset Sensor. (See Table 1.)

Tray2 Front Misset Sensor	No paper	Paper exists
Lift Up operation	ON	OFF

Table 1

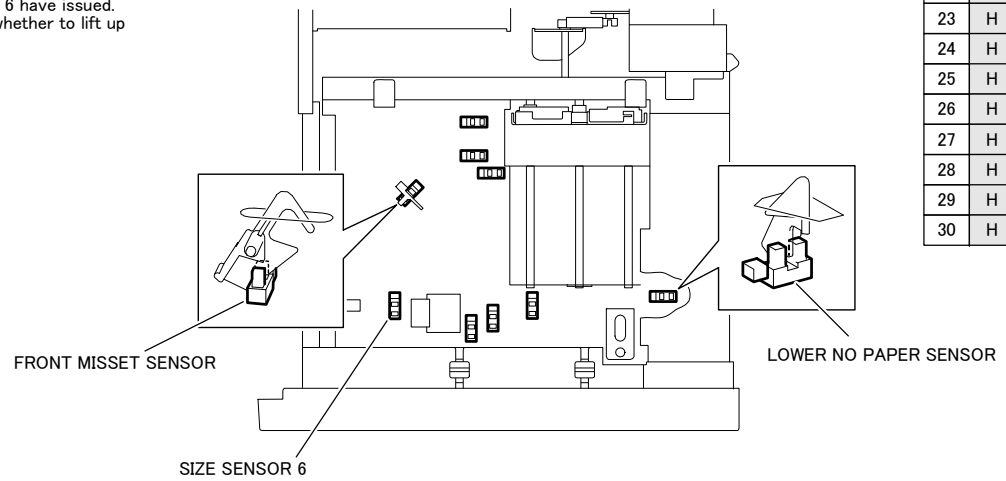
FAIL CODE

072-222
Tray 2 Size Sensor Broken

072-940
Tray 2 No Paper

072-941
Tray 2 Paper Wrong Position

ELECTRICAL COMPONENTS



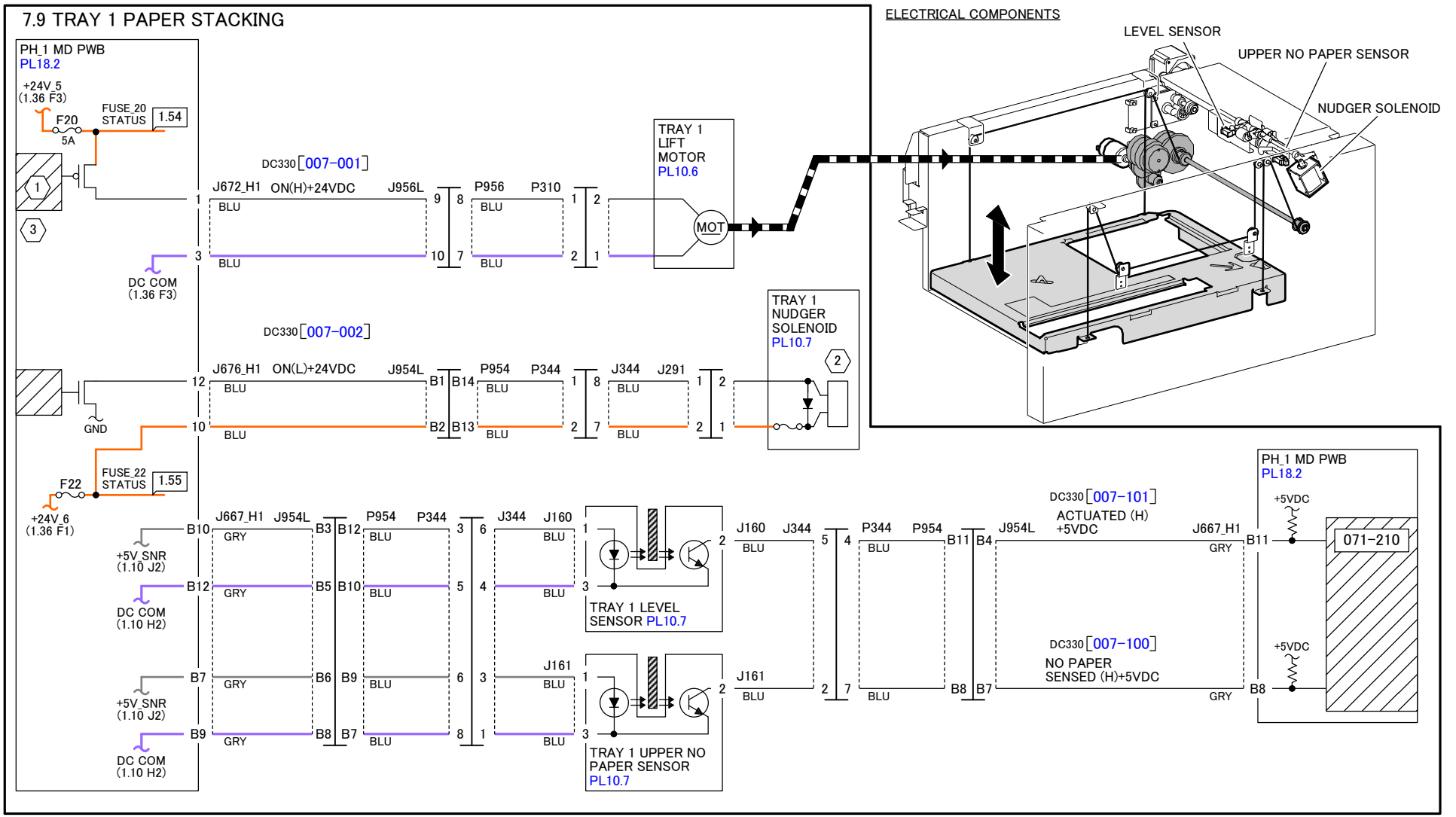
No.	Size Sensor (on Side Guide)			Size Sensor (on End Guide)			
	0	1	2	3	4	5	6
1	L	L	L	L	L	L	L
2	L	L	L	L	L	H	–
3	L	L	L	L	H	H	–
4	L	L	L	H	L	H	–
5	L	L	L	H	H	H	–
6	L	L	H	L	L	L	L
7	L	L	H	L	L	H	–
8	L	L	H	L	H	H	–
9	L	L	H	H	H	H	–
10	L	L	H	H	L	H	–
11	L	H	L	L	L	L	L
12	L	H	L	L	L	H	–
13	L	H	L	L	H	H	–
14	L	H	L	H	H	H	–
15	L	H	L	H	L	H	–
16	L	H	H	L	L	L	L
17	L	H	H	L	L	H	–
18	L	H	H	L	H	H	–
19	L	H	H	H	H	H	–
20	L	H	H	H	L	H	–
21	H	L	L	L	L	L	L
22	H	L	L	L	L	H	–
23	H	L	L	L	H	H	–
24	H	L	L	H	H	H	–
25	H	L	L	H	L	H	–
26	H	L	H	L	L	L	L
27	H	L	H	L	L	H	–
28	H	L	H	L	H	H	–
29	H	L	H	H	H	H	–
30	H	L	H	H	L	H	–

Table 2

H : Light to Sensor blocked
L : Light received by Sensor
– : Either is all right.

j0cx730708

7.9 TRAY 1 PAPER STACKING



ELECTRICAL COMPONENTS

NOTE:

(1) Lift Up Operation
When Tray 1 Level Sensor is receiving light, Tray 1 starts lifting up at the following timings. However if light to Tray 1 Level Sensor is already blocked, Tray 1 will not lift up.
- 500ms after IOT turns ON
- 500ms after Tray is inserted
- 500ms after recovery from diag mode

(2) The coil resistance of Tray 1 Nudger Solenoid is 30Ω ±10% (coil temp 20℃)

(3) Chip Fuse

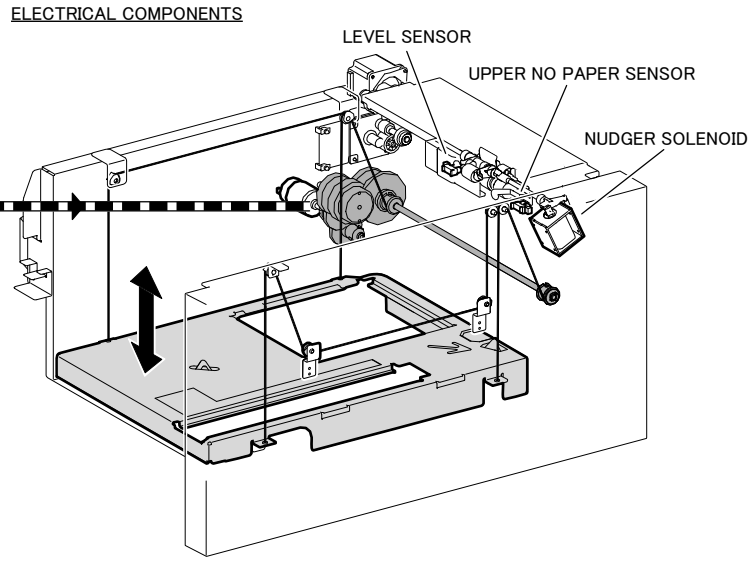
FAIL CODE

071-210

Tray1 Lift Up Fail

j0cx730709

7.10 TRAY 2 PAPER STACKING



PH_2 MD PWB PL18.2
+24V_5 (1.35 F3)
F20 5A
FUSE_20 STATUS 1.56
DC330 [007-029]
J672_H2 ON(H)+24VDC J956R P956 P310
TRAY 2 LIFT MOTOR PL10.6
DC COM (1.35 F2)
DC330 [007-030]
J676_H2 ON (L)+24VDC J954R P954 P344 J344 J291
TRAY 2 NUDGER SOLENOID PL10.7
GND
F22 +24V_6 (1.35 F2)
FUSE_22 STATUS 1.57
J667_H2 J954R P954 P344 J344 J160
+5V_SNR (1.10 J4)
DC COM (1.10 H4)
TRAY 2 LEVEL SENSOR PL10.7
J161
TRAY 2 UPPER NO PAPER SENSOR PL10.7
DC330 [007-124] ACTUATED (H) +5VDC
DC330 [007-123] NO PAPER SENSED (H)+5VDC
+5VDC
072-210

NOTE:

1. Lift Up Operation
When Tray 1 Level Sensor is receiving light, Tray 1 starts lifting up at the following timings. However if light to Tray 1 Level Sensor is already blocked, Tray 1 will not lift up.
   - 500ms after IOT turns ON
   - 500ms after Tray is inserted
   - 500ms after recovery from diag mode

2. The coil resistance of Tray 1 Nudger Solenoid is 30Ω ±10% (coil temp 20°C)

FAIL CODE

072-210

Tray2 Lift Up Fail

j0cx730710

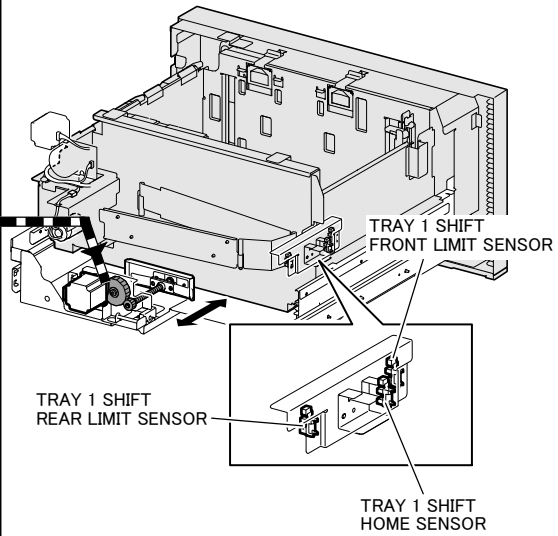
7.11 TRAY 1 SHIFTING

PH CORE PWB PL18.2
A10 — J648_H BLK — CLOCK — J660_H1 B3
DC COM

PH_1 MD PWB PL18.2
+3.3VDC
DC COM ×4
(1)
FUSE_12 STATUS 1.54
(2) F12 5A
+24V 4 (1.36 F2)

DC330 [007-025] Front
DC330 [007-026] Rear
DC330 [007-027] Initialize

J684_H1 — CLOCK A — J953L B4 B9 — P953 J312 — TRAY 1 SHIFT MOTOR PL10.4 1
CLOCK /A B3 B10 3
CLOCK B B2 B11 4
CLOCK /B B1 B12 6
ACOM B6 B7 2
BCOM B5 B8 5
GRY
MOT



PH_1 MD PWB PL18.2
+5V_SNR (1.10 J2)
DC COM (1.10 H2)
A7 A9 A1 A3 A4 A6
J667_H1 J963L — P963 J135C
J136C
J137C
BLU

TRAY 1 SHIFT HOME SENSOR PL10.17
TRAY 1 SHIFT FRONT LIMIT SENSOR PL10.17
TRAY 1 SHIFT REAR LIMIT SENSOR PL10.17

J135C P963 — J963L — J667_H1 A8
J136C — A2
J137C — A5

DC330 [007-120] BLOCKED(H) +5VDC
DC330 [007-121] BLOCKED(H) +5VDC
DC330 [007-122] BLOCKED(H) +5VDC

PH_1 MD PWB PL18.2
+5VDC ×3
071-211

ELECTRICAL COMPONENTS

FAIL CODE
071-211
Tray1 Shift Mech Fail

NOTE:
(1) After the Initialize operation, M/C determines side shift amount from paper size (width) info, then drives Tray Shift Motor for a spec. time.
(2) Chip Fuse

j0cx730711

7.12 TRAY 2 SHIFTING

DC330 [007-053] Front
DC330 [007-054] Rear
DC330 [007-055] Initialize

PH CORE PWB PL18.2
A11 DC COM
J649_H BLK CLOCK J660_H2 B3

PH_2 MD PWB PL18.2
+3.3VDC
DC COM
FUSE_12 STATUS 1.56
F12 5A
+24V_4 (1.35 F1)

J684_H2 GRY CLOCK A J953R B4 B9 P953 GRY J312 1
CLOCK /A B3 B10 GRY 3
CLOCK B B2 B11 GRY 4
CLOCK /B B1 B12 GRY 6
ACOM B6 B7 GRY 2
BCOM GRY B5 B8 GRY 5

TRAY 2 SHIFT MOTOR PL10.4
MOT

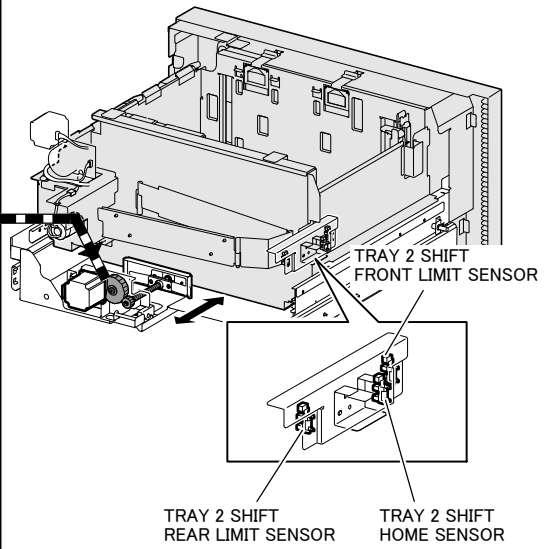
PH_2 MD PWB PL18.2
A7 J667_H2 BLU J963R 7 3 P963 BLU J135C 1 2 TRAY 2 SHIFT HOME SENSOR PL10.17
A9 BLU 9 1 BLU 3
DC COM (1.10 H4)
A1 BLU 1 9 J136C BLU 1 2 TRAY 2 SHIFT FRONT LIMIT SENSOR PL10.17
A3 BLU 3 7 BLU 3
DC COM (1.10 H4)
A4 BLU 4 6 J137C BLU 1 2 TRAY 2 SHIFT REAR LIMIT SENSOR PL10.17
+5V_SNR (1.10 J4)
A6 BLU 6 4 BLU 3
DC COM (1.10 H4)

J135C P963 BLU 2 8 J963R J667_H2 BLU A8
J136C BLU 8 2 A2
J137C BLU 5 5 A5

DC330 [007-143] BLOCKED(H) +5VDC
DC330 [007-144] BLOCKED(H) +5VDC
DC330 [007-145] BLOCKED(H) +5VDC
+5VDC

PH_2 MD PWB PL18.2
072-211

ELECTRICAL COMPONENTS



FAIL CODE

072-211

Tray2 Shift Mech Fail

NOTE:

(1) After the Initialize operation, M/C determines side shift amount from paper size (width) info, then drives Tray Shift Motor for a spec. time.

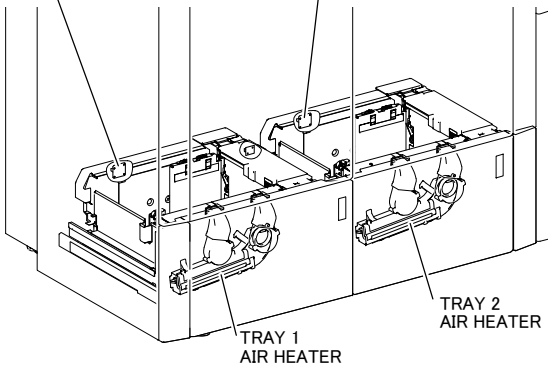
(2) Chip Fuse

j0cx730712

7.13 AIR HEATING-1

1.3 POWER ON ACH (TRAY HEATER) BRN
P920 4 J920 P921 6 J921 CE28 BRN
J7B_1 1 BRN
PH_1 MD PWB PL18.2
A5 J678_H1 ON(L) +24VDC J7AL BLU
DC COM
P949 9 J949 BLU
SHORTING PLUG
4 SJ127 ORN
+24VDC (1.46 H3)
TRAY 1 AIR HEATER PWB PL10.17
2
1
5
J7B_1 BRN P8_1 1 J8 BRN J9_1 1 P9
TRAY 1 AIR HEATER PL10.11
ON ACH BLU
A
2 BLU 2
F.G T44_1 F.G T45_1
J7B_2 1 BRN
PH_2 MD PWB PL18.2
A5 J678_H2 ON(L) +24VDC J7AR BLU
DC COM
P949 7 J949 BLU
SHORTING PLUG
3 SJ127 ORN
+24VDC (1.46 H3)
TRAY 2 AIR HEATER PWB PL10.17
2
1
5
J7B_2 BRN P8_2 1 J8_2 BRN J9_2 1 P9
TRAY 2 AIR HEATER PL10.11
ON ACH BLU
2 BLU 2
F.G T44_2 F.G T45_2
1.3 POWER ON ACN (TRAY HEATER) BLU
1 BLU 3 BLU
GN/YL T22 F.G
1 GN/YL F.G T23
CE29 BLU
A
BLU

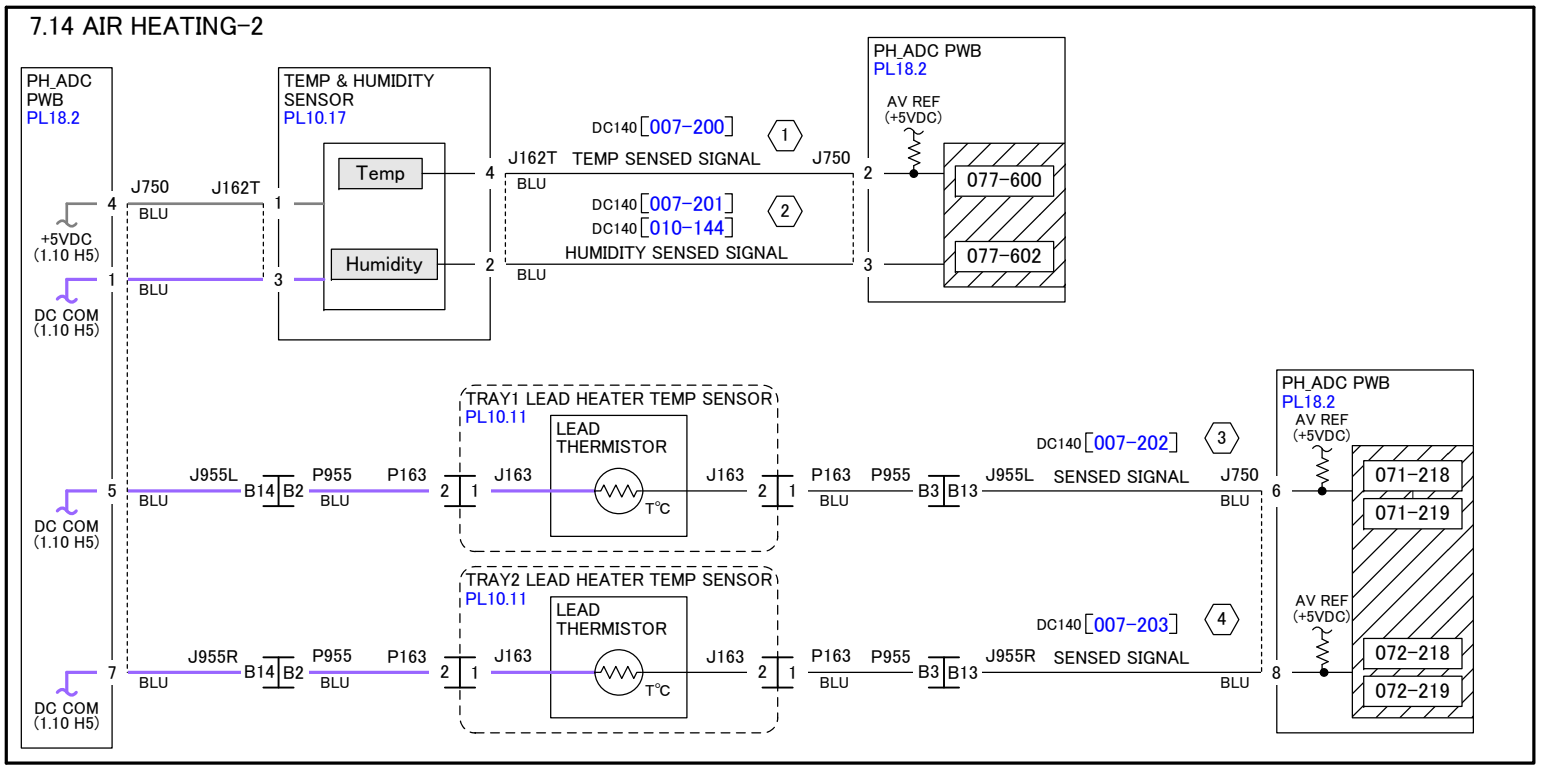
ELECTRICAL COMPONENTS



NOTE:
1 144(0/−5)℃ Off
2 120±5℃ Off

j0cx730713

7.14 AIR HEATING-2



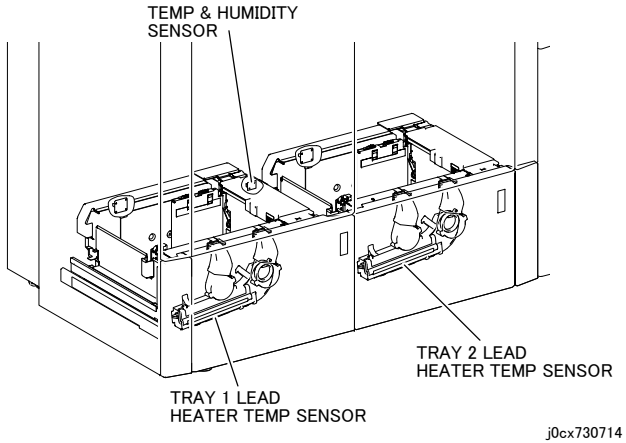
NOTE:

1. DC140[078-200] Normal output range:196~790
2. DC140[078-201] Normal output range:0~412
3. DC140[078-202] Normal output range:119~909
4. DC140[078-203] Normal output range:119~909

FAIL CODE

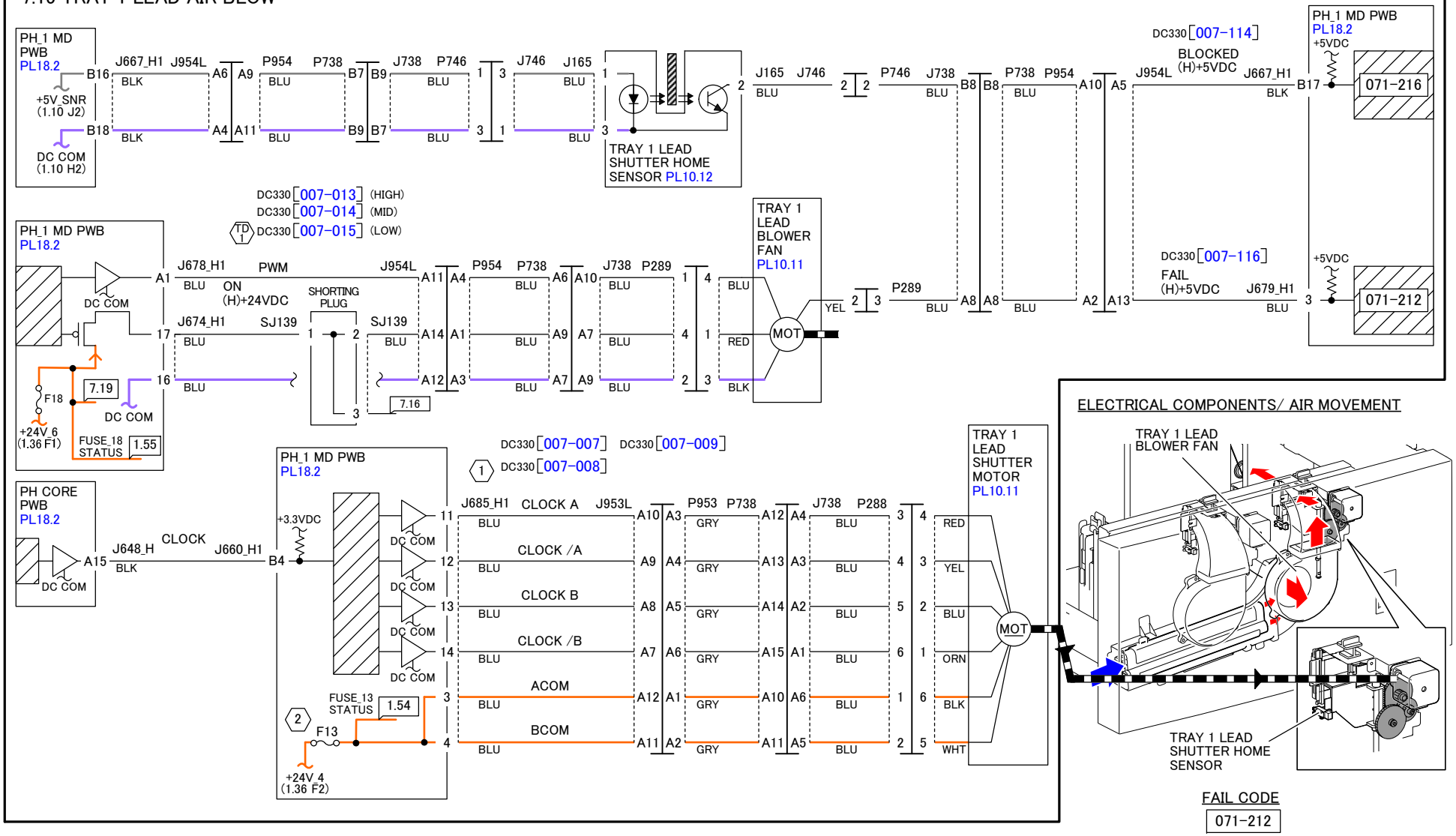
071-218	Tray1 Lead Heater Fail
071-219	Tray1 Lead Heater Temp Sensor Fail
072-218	Tray2 Lead Heater Fail
072-219	Tray2 Lead Heater Temp Sensor Fail
077-600	Tray Temp Sensor Fail
077-602	Tray Humidity Sensor Fail

ELECTRICAL COMPONENTS



j0cx730714

7.15 TRAY 1 LEAD AIR BLOW



NOTE:

(1) DC330[007-007] Performs the Initialize operation then the DC330[007-008] Shutter opening/closing operation.

DC330[007-009] Performs the Initialize operation.

(2) Chip Fuse

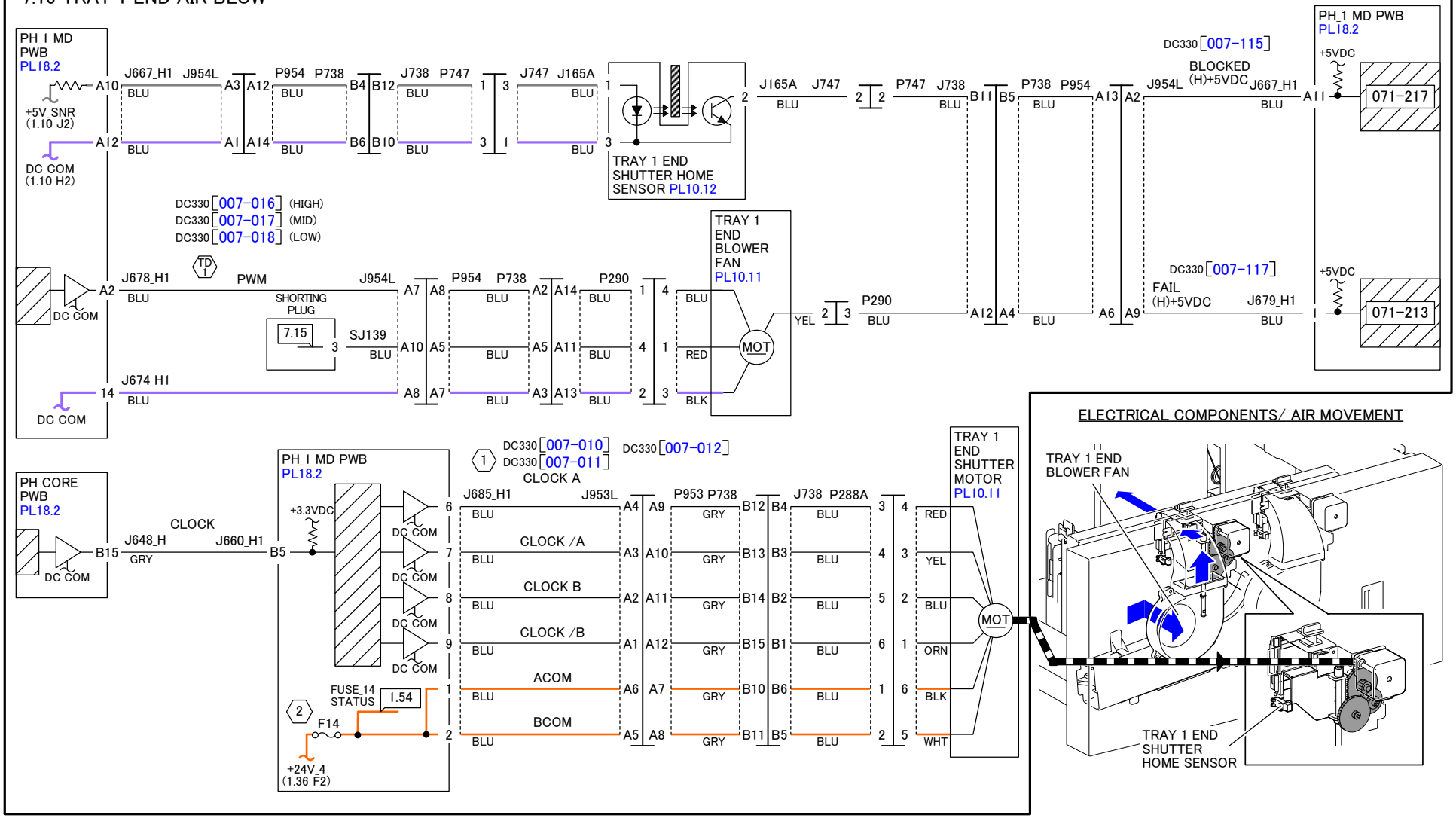
TD 1 Test Point: PH_1 MD PWB J678_H1_A1(+) to GND(-)
DC330[007-013](High) On : approx. +3.84VDC
DC330[007-014](Mid) On : approx. +3.04VDC
DC330[007-015](Low) On : approx. +2.06VDC

FAIL CODE

071-212	Tray1 Lead Blower Fail
071-216	Tray1 Lead Shutter Fail

j0cx730715

7.16 TRAY 1 END AIR BLOW



ELECTRICAL COMPONENTS/ AIR MOVEMENT

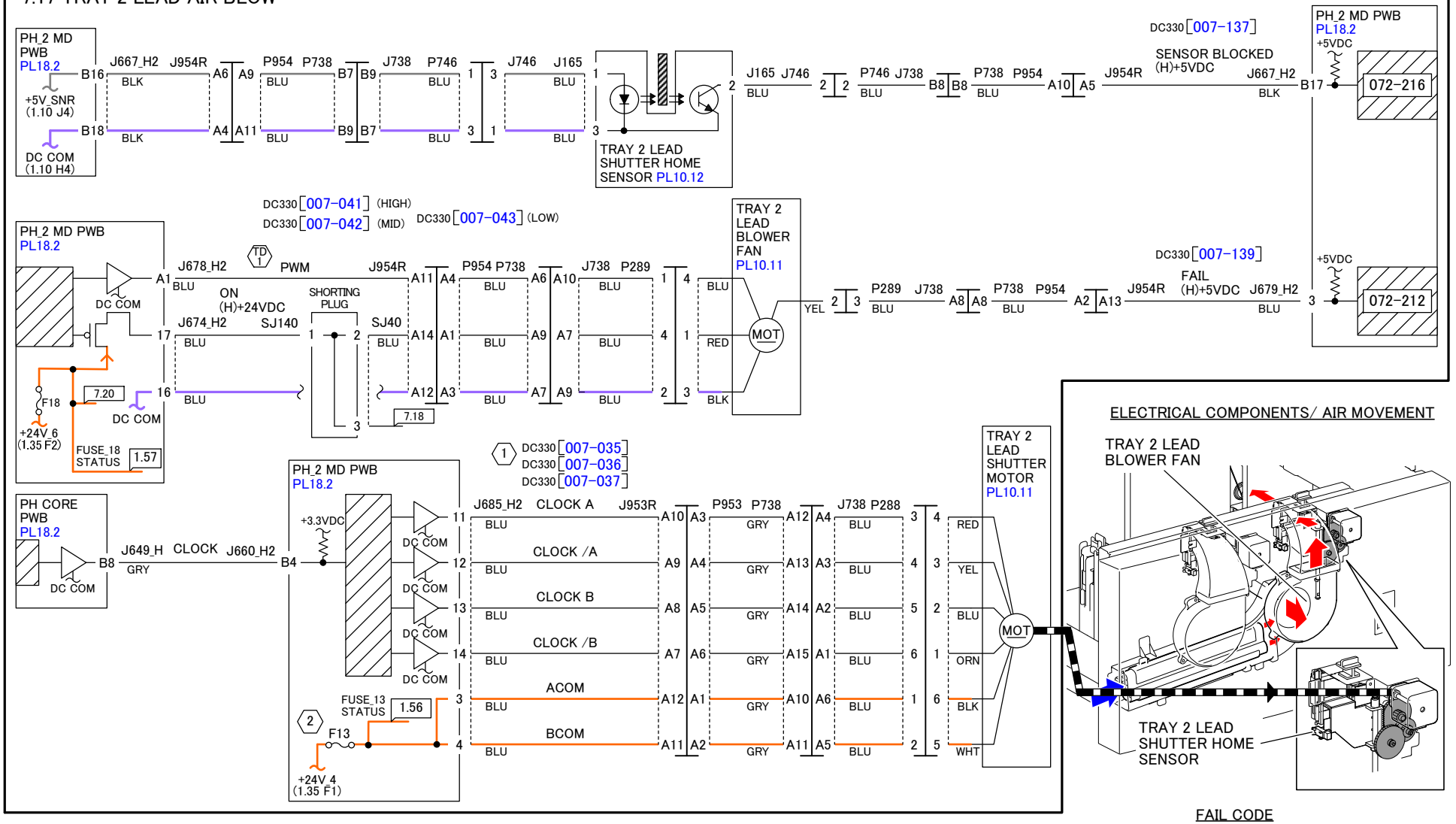
NOTE:
- (1) DC330[007-010] DC330[007-011] Performs the Initialize operation then the Shutter opening/closing operation.
- DC330[007-012] Performs the Initialize operation.
- (2) Chip Fuse
- (TD 1) Test Point: PH_1 MD PWB J678_H1-A2(+) to GND(-)
  DC330[007-016](High) On : approx. +3.36VDC
  DC330[007-017](Mid) On : approx. +2.88VDC
  DC330[007-018](Low) On : approx. +1.95VDC

FAIL CODE

071-213	Tray1 End Blower Fail
071-217	Tray1 End Shutter Fail

j0cx730716

7.17 TRAY 2 LEAD AIR BLOW



FAIL CODE

072-212
Tray2 Lead Blower Fail

072-216
Tray2 Lead Shutter Fail

j0cx730717

1 DC330[007-035] DC330[007-036] Performs the Initialize operation then the Shutter opening/closing operation.

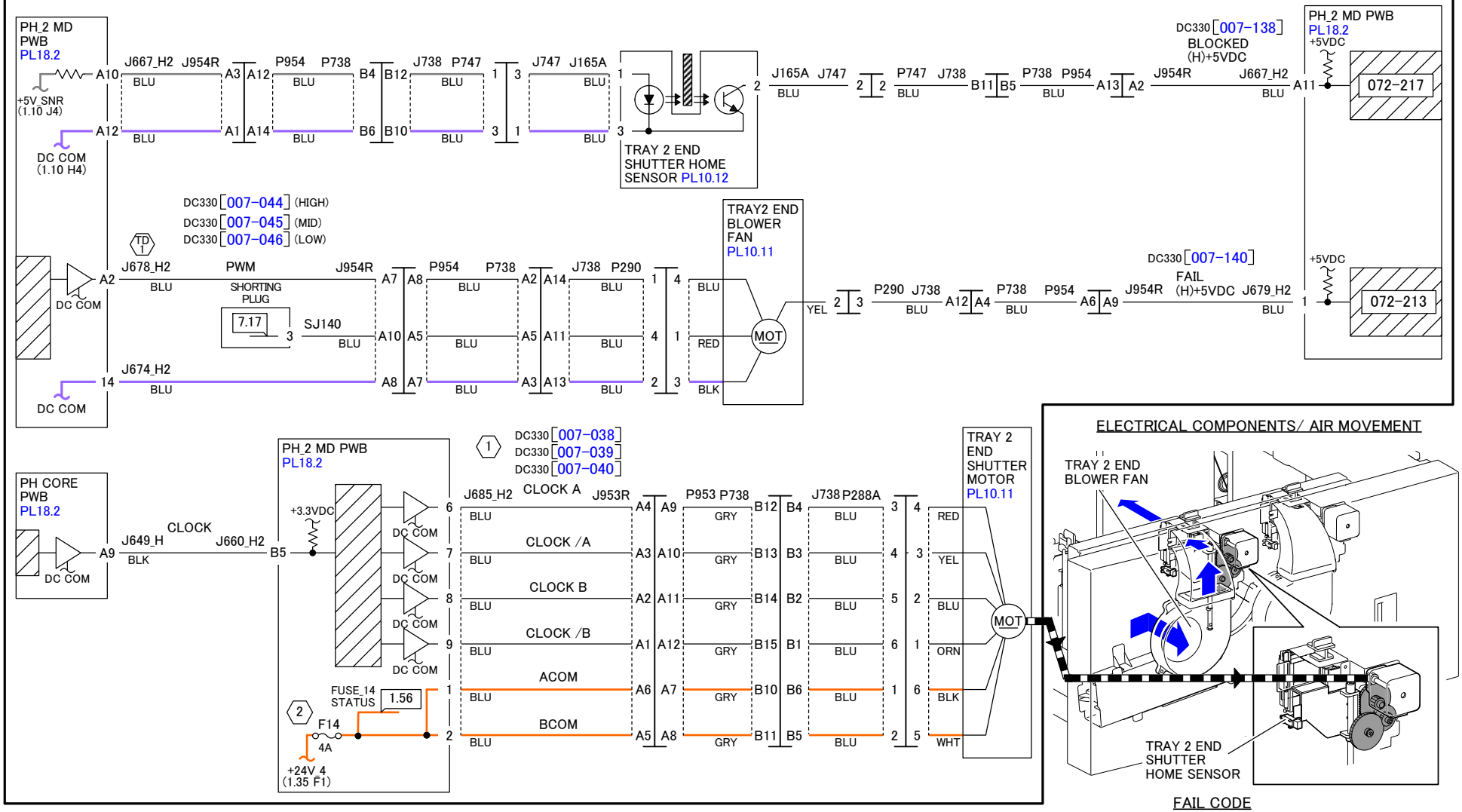
DC330[007-037] Performs the Initialize operation.

2 CHIP FUSE

TD 1 Test Point: PH_2 MD PWB J678_H2-A1(+) to GND(-)
DC330[007-041](High) On : approx. +3.86VDC
DC330[007-042](Mid) On : approx. +3.08VDC
DC330[007-043](Low) On : approx. +2.09VDC

NOTE:

7.18 TRAY 2 END AIR BLOW



ELECTRICAL COMPONENTS/ AIR MOVEMENT

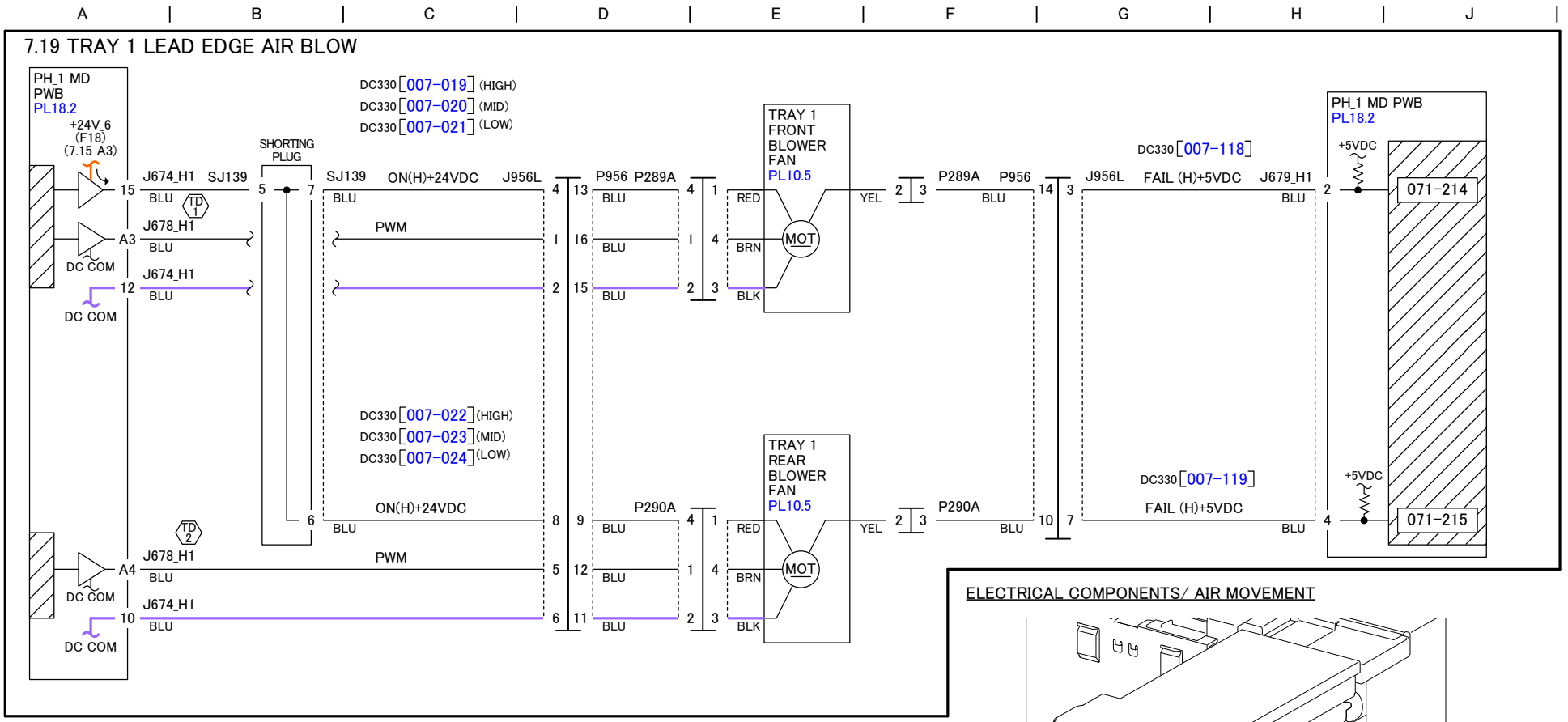
NOTE:
1. DC330 [007-038] DC330 [007-039] Performs the Initialize operation then the Shutter opening/closing operation.
   DC330 [007-040] Performs the Initialize operation.
2. Chip Fuse
TD 1 Test Point: PH_2 MD PWB J678_H2-A2(+) to GND(−)
DC330[007-044](High) On : approx. +3.65VDC
DC330[007-045](Mid) On : approx. +2.89VDC
DC330[007-046](Low) On : approx. +1.95VDC

FAIL CODE

072-213	Tray2 End Blower Fail
072-217	Tray2 End Shutter Fail

j0cx730718

7.19 TRAY 1 LEAD EDGE AIR BLOW



TD 1 Test Point: PH_1 MD PWB J678_H1-A3(+) to GND(-)
DC330[007-019](High) On : approx. +3.59VDC
DC330[007-020](Mid) On : approx. +2.85VDC
DC330[007-021](Low) On : approx. +1.93VDC

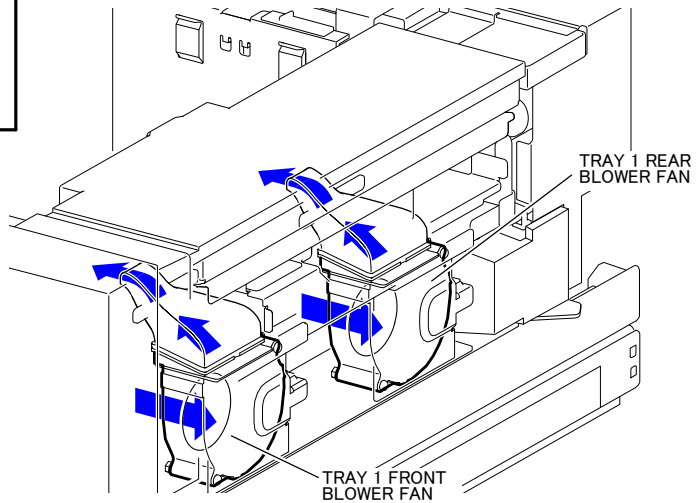
TD 2 Test Point: PH_1 MD PWB J678_H1-A4(+) to GND(-)
DC330[007-022](High) On : approx. +3.56VDC
DC330[007-023](Mid) On : approx. +2.83VDC
DC330[007-024](Low) On : approx. +1.93VDC

FAIL CODE

071-214
Tray1 Front Blower Fail

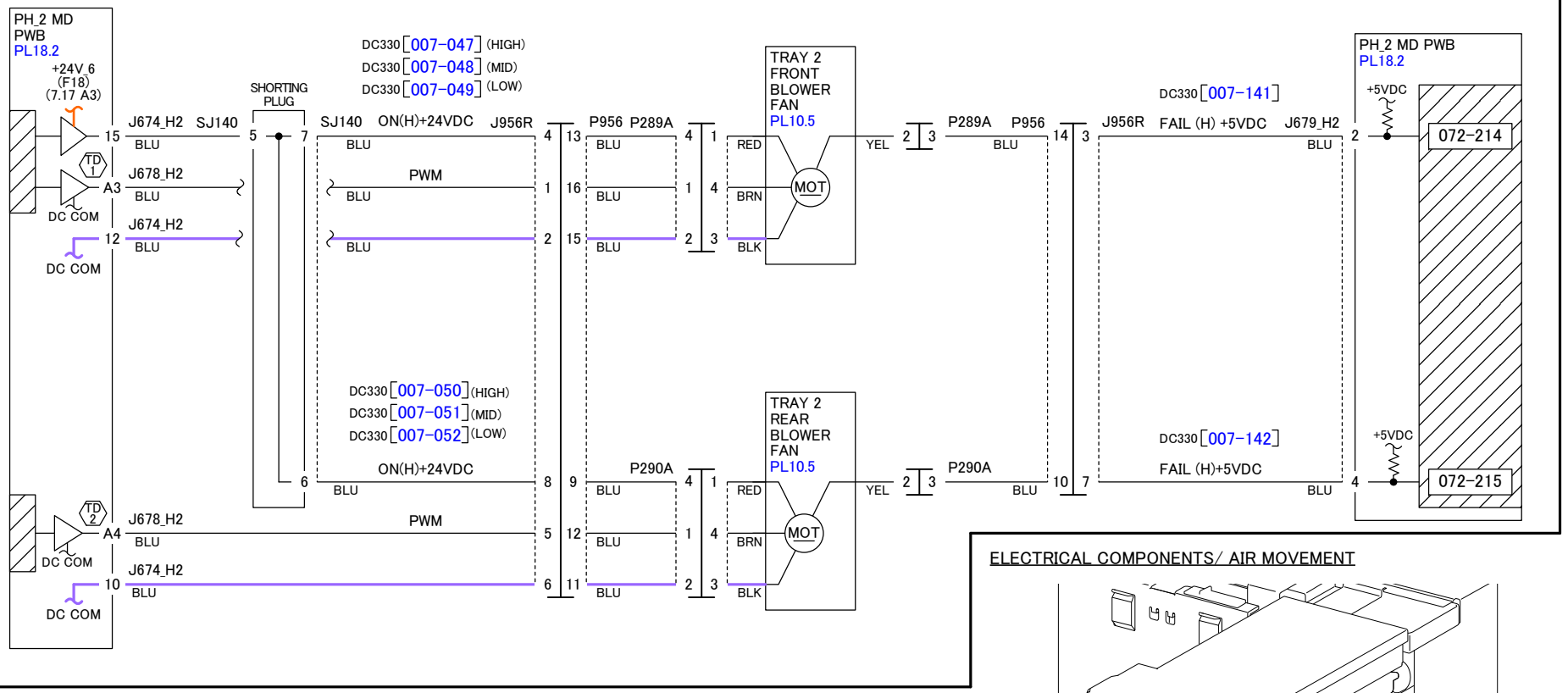
071-215
Tray1 Rear Blower Fail

ELECTRICAL COMPONENTS/ AIR MOVEMENT



j0cx730719

7.20 TRAY 2 LEAD EDGE AIR BLOW



TD 1 Test Point: PH_2 MD PWB J678_H2-A3(+) to GND(-)
DC330[007-047](High) On : approx. +3.56VDC
DC330[007-048](Mid) On : approx. +2.83VDC
DC330[007-049](Low) On : approx. +1.93VDC

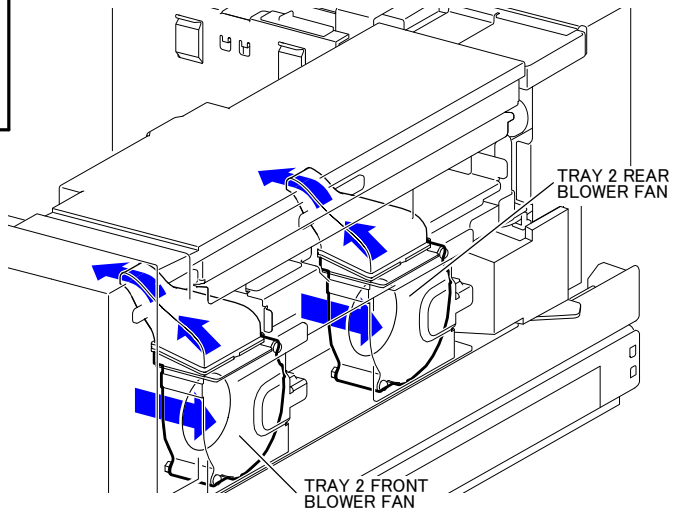
TD 2 Test Point: PH_2 MD PWB J678_H2-A4(+) to GND(-)
DC330[007-050](High) On : approx. +3.55VDC
DC330[007-051](Mid) On : approx. +2.83VDC
DC330[007-052](Low) On : approx. +1.93VDC

FAIL CODE

072-214
Tray2 Front Blower Fail

072-215
Tray2 Rear Blower Fail

ELECTRICAL COMPONENTS/ AIR MOVEMENT



j0cx730720

7.21 PAPER PATH & PH DRIVE TRANSMISSION

IOT-L

No.	Sensor Name
1	Tray 1 Pre Feed Sensor
2	Tray 1 Feed Out Sensor
3	J-Tra 1 Feed Out Sensor
4	Tray 2 Pre Feed Sensor
5	Tray 2 Feed Out Sensor
6	J-Tra 2 Feed Out Sensor
7	H-Tra Path Sensor 5
8	H-Tra Path Sensor 3
9	Burr Press Path Sensor
10	H-Tra Path Sensor 2

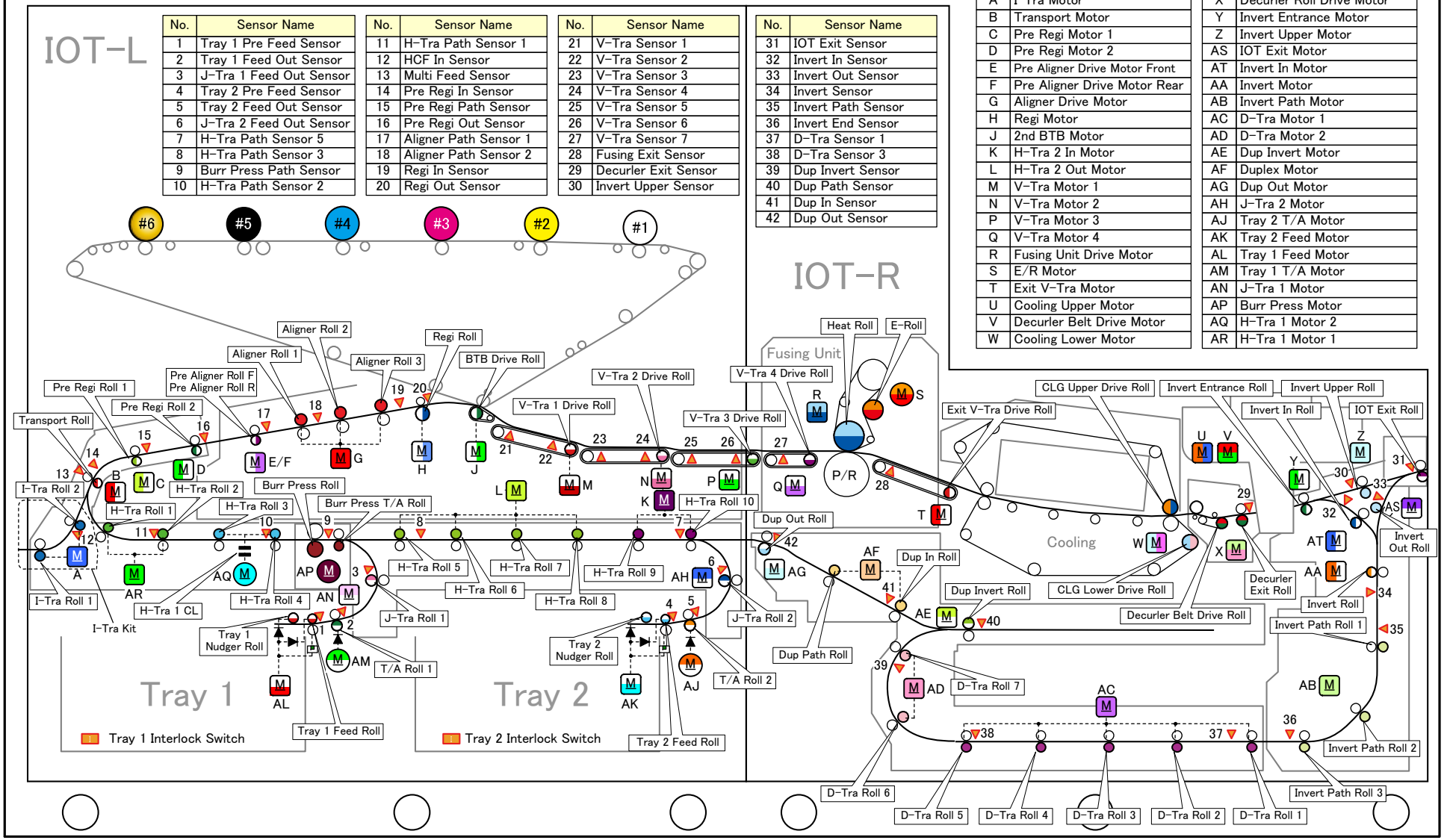
No.	Sensor Name
11	H-Tra Path Sensor 1
12	HCF In Sensor
13	Multi Feed Sensor
14	Pre Regi In Sensor
15	Pre Regi Path Sensor
16	Pre Regi Out Sensor
17	Aligner Path Sensor 1
18	Aligner Path Sensor 2
19	Regi In Sensor
20	Regi Out Sensor

No.	Sensor Name
21	V-Tra Sensor 1
22	V-Tra Sensor 2
23	V-Tra Sensor 3
24	V-Tra Sensor 4
25	V-Tra Sensor 5
26	V-Tra Sensor 6
27	V-Tra Sensor 7
28	Fusing Exit Sensor
29	Decurler Exit Sensor
30	Invert Upper Sensor

No.	Sensor Name
31	IOT Exit Sensor
32	Invert In Sensor
33	Invert Out Sensor
34	Invert Sensor
35	Invert Path Sensor
36	Invert End Sensor
37	D-Tra Sensor 1
38	D-Tra Sensor 3
39	Dup Invert Sensor
40	Dup Path Sensor
41	Dup In Sensor
42	Dup Out Sensor

No.	Motor Name
A	I-Tra Motor
B	Transport Motor
C	Pre Regi Motor 1
D	Pre Regi Motor 2
E	Pre Aligner Drive Motor Front
F	Pre Aligner Drive Motor Rear
G	Aligner Drive Motor
H	Regi Motor
J	2nd BTB Motor
K	H-Tra 2 In Motor
L	H-Tra 2 Out Motor
M	V-Tra Motor 1
N	V-Tra Motor 2
P	V-Tra Motor 3
Q	V-Tra Motor 4
R	Fusing Unit Drive Motor
S	E/R Motor
T	Exit V-Tra Motor
U	Cooling Upper Motor
V	Decurler Belt Drive Motor
W	Cooling Lower Motor

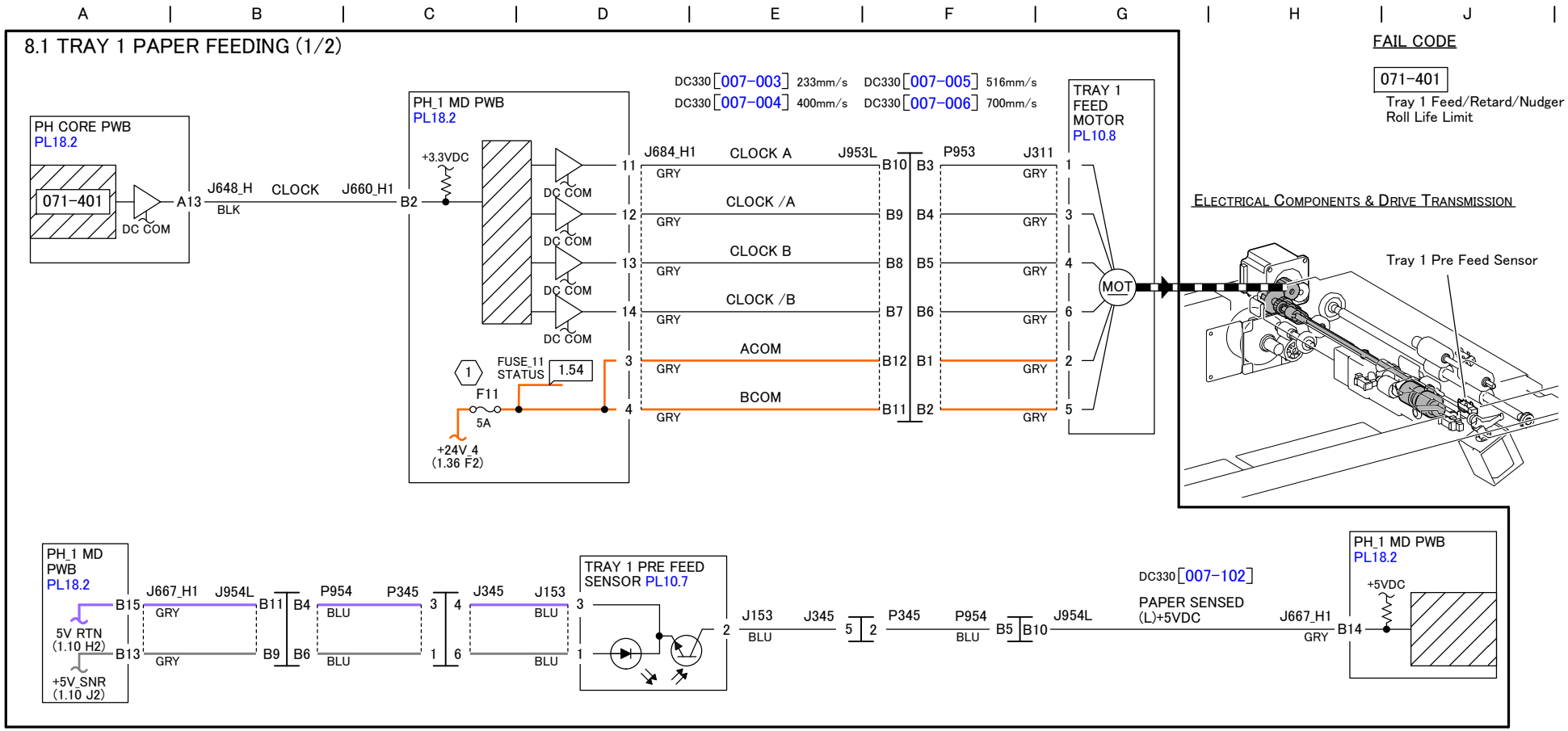
No.	Motor Name
X	Decurler Roll Drive Motor
Y	Invert Entrance Motor
Z	Invert Upper Motor
AS	IOT Exit Motor
AT	Invert In Motor
AA	Invert Motor
AB	Invert Path Motor
AC	D-Tra Motor 1
AD	D-Tra Motor 2
AE	Dup Invert Motor
AF	Duplex Motor
AG	Dup Out Motor
AH	J-Tra 2 Motor
AJ	Tray 2 T/A Motor
AK	Tray 2 Feed Motor
AL	Tray 1 Feed Motor
AM	Tray 1 T/A Motor
AN	J-Tra 1 Motor
AP	Burr Press Motor
AQ	H-Tra 1 Motor 2
AR	H-Tra 1 Motor 1



The meaning of symbols: Stepping Motor, DC Motor, Clutch, Oneway Clutch, Torque Limiter, Sensor

NOTE: The position of motors on the figure is different from the actual one.

j0cx730721



NOTE:

(1) CHIP FUSE

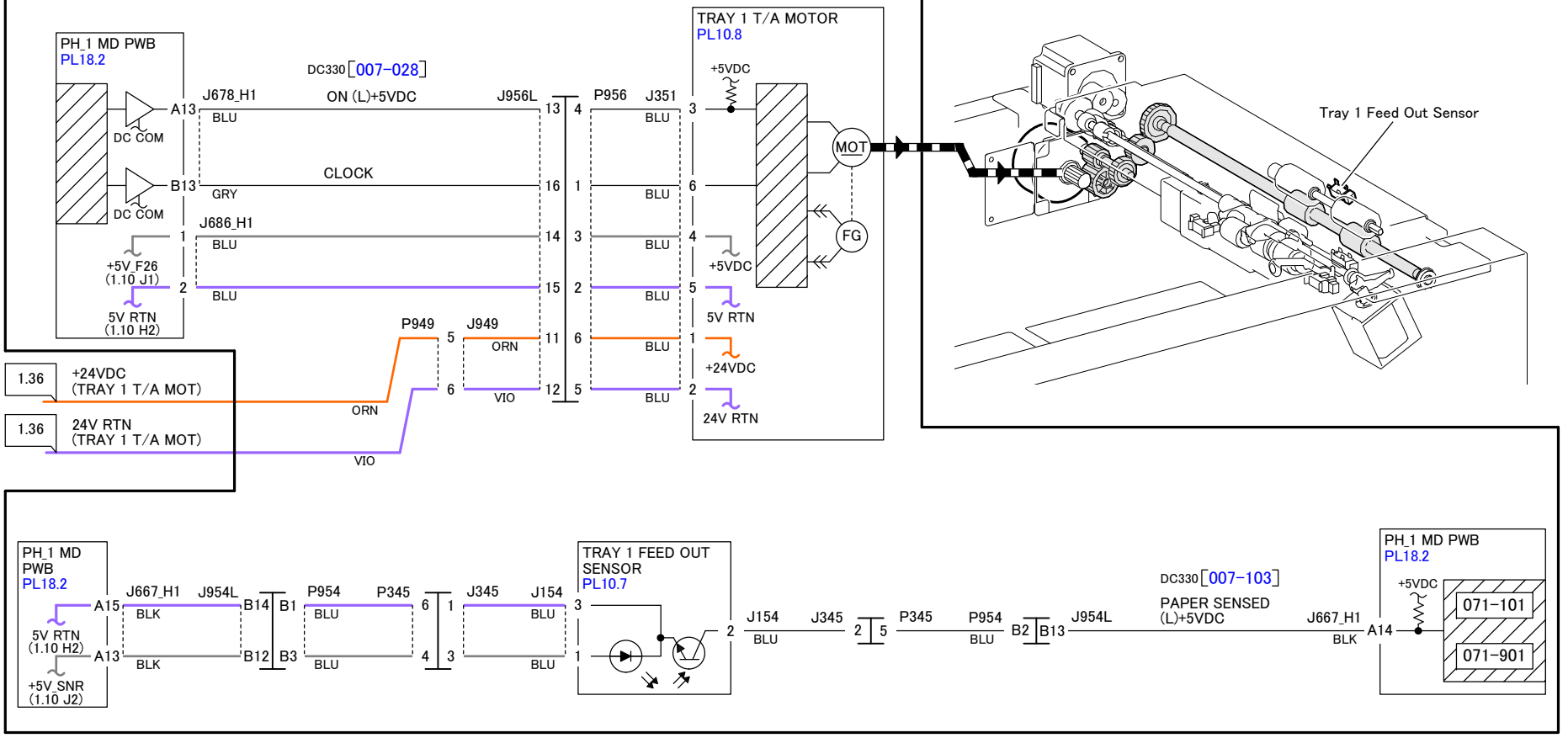
(TP1) Test Point: PH_1 MD PWB J660_H1-B4 (+) to GND (-)

DC330	Frequency
007-003	approx. 0.76kHz
007-004	approx. 1.30kHz
007-005	approx. 1.67kHz
007-006	approx. 2.27kHz

j0cx730801

8.2 TRAY 1 PAPER FEEDING (2/2)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FAIL CODE

071-101
Tray 1 Feed Out Sensor On Jam

071-901
Tray 1 Feed Out Sensor Static On Jam

j0cx730802

8.3 TRAY 2 PAPER FEEDING (1/2)

FAIL CODE

072-401
Tray 2 Feed/Retard/Nudger Roll Life Limit

DC330 [007-031] 233mm/s
DC330 [007-032] 400mm/s
DC330 [007-033] 516mm/s
DC330 [007-034] 700mm/s

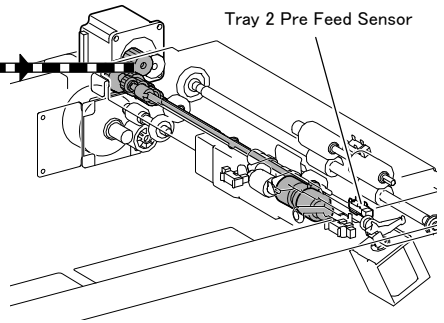
PH CORE PWB
PL18.2
072-401
A10
DC COM
J649_H
BLK
CLOCK
J660_H2
B2

PH_2 MD PWB
PL18.2
+3.3VDC
DC COM
FUSE_11 STATUS 1.56
1 F11 5A
+24V_4 (1.35 F1)

J684_H2
GRY
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
J953R
P953
J311

TRAY 2 FEED MOTOR
PL10.8
MOT

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



PH_2 MD PWB
PL18.2
B15
5V RTN (1.10 H4)
B13
+5V_SNR (1.10 J4)
J667_H2
J954R
P954
P345
J345
J153
BLU
GRY

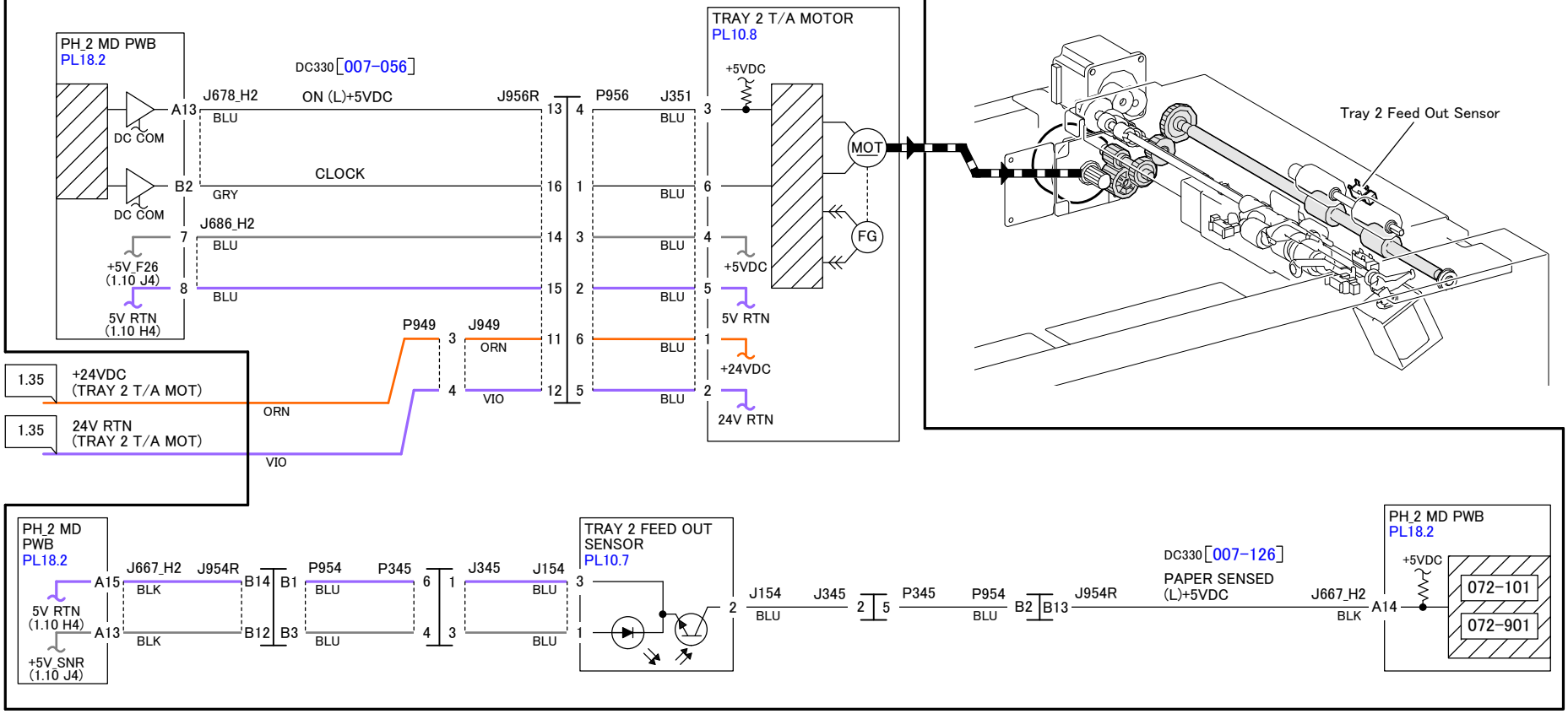
TRAY 2 PRE FEED SENSOR
PL10.7

DC330 [007-125]
PAPER SENSED (L)+5VDC
J667_H2
GRY
B14
+5VDC

NOTE:
1 CHIP FUSE

j0cx730803

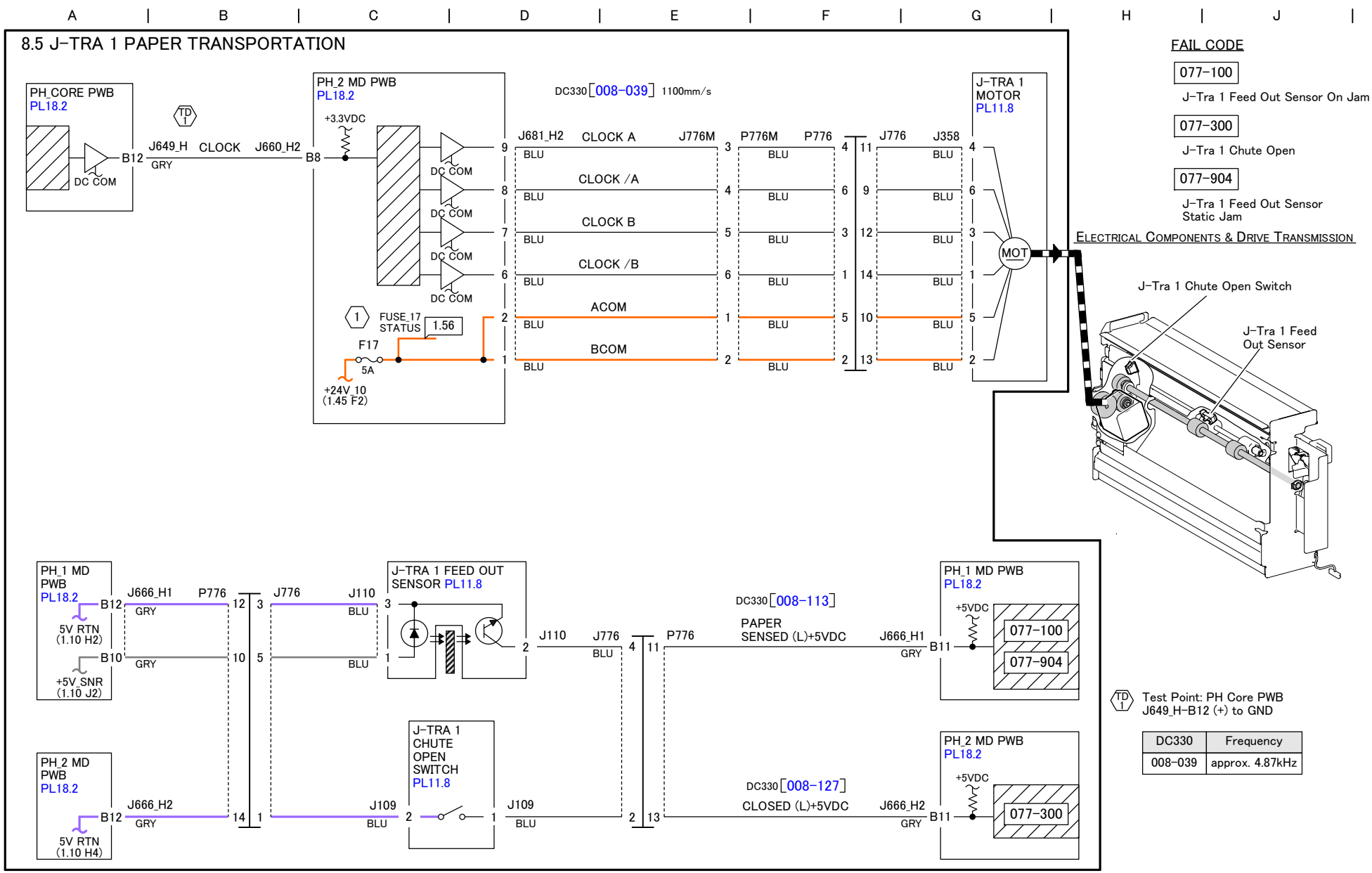
8.4 TRAY 2 PAPER FEEDING (2/2)



FAIL CODE

072-101	Tray 2 Feed Out Sensor On Jam
072-901	Tray 2 Feed Out Static On Jam

j0cx730804


8.5 J-TRA 1 PAPER TRANSPORTATION
PH_CORE PWB
PL18.2
DC COM
B12
J649_H
GRY
CLOCK
J660_H2
B8
TD 1
PH_2 MD PWB
PL18.2
+3.3VDC
DC COM
DC COM
DC COM
DC COM
1
FUSE_17
STATUS
1.56
F17
5A
+24V_10
(1.45 F2)
DC330[008-039] 1100mm/s
J681_H2
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
BLU
J776M
P776M
P776
J776
J358
J-TRA 1
MOTOR
PL11.8
MOT
FAIL CODE
077-100
J-Tra 1 Feed Out Sensor On Jam
077-300
J-Tra 1 Chute Open
077-904
J-Tra 1 Feed Out Sensor
Static Jam
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION
J-Tra 1 Chute Open Switch
J-Tra 1 Feed
Out Sensor
PH_1 MD
PWB
PL18.2
5V RTN
(1.10 H2)
+5V_SNR
(1.10 J2)
J666_H1
P776
J776
J110
J-TRA 1 FEED OUT
SENSOR PL11.8
DC330[008-113]
PAPER
SENSED (L)+5VDC
PH_1 MD PWB
PL18.2
+5VDC
077-100
077-904
PH_2 MD
PWB
PL18.2
5V RTN
(1.10 H4)
J666_H2
J-TRA 1
CHUTE
OPEN
SWITCH
PL11.8
J109
DC330[008-127]
CLOSED (L)+5VDC
PH_2 MD PWB
PL18.2
+5VDC
077-300
TD 1
Test Point: PH Core PWB
J649_H-B12 (+) to GND
DC330
Frequency
008-039
approx. 4.87kHz
NOTE:
1 CHIP FUSE
j0cx730805

8.6 J-TRA 2 PAPER TRANSPORTATION

PH_CORE PWB PL18.2 — B13 — DC COM — J649_H — GRY — CLOCK — J660_H2 — B6 — TD 1

PH_2 MD PWB PL18.2 — +3.3VDC — DC COM ×4 — FUSE_15 STATUS 1.56 — 1 F15 5A — +24V_9 (1.34 H3)

DC330 [008-040] 1100mm/s

	J681_H2		J777M	P777M	P777	J777	J359	
18	BLU	CLOCK A	9	BLU	4 11	BLU	4	
17	BLU	CLOCK /A	10	BLU	6 9	BLU	6	
16	BLU	CLOCK B	11	BLU	3 12	BLU	3	
15	BLU	CLOCK /B	12	BLU	1 14	BLU	1	
20	BLU	ACOM	7	BLU	5 10	BLU	5	
19	BLU	BCOM	8	BLU	2 13	BLU	2	

J-TRA 2 MOTOR PL11.10 — MOT

PH_1 MD PWB PL18.2 — B15 — J666_H1 — GRY — 5V RTN (1.10 H2) — B13 — GRY — +5V_SNR (1.10 J2)

P777 12 3 — 10 5 — J777 — J112 BLU 3 — 1

J-TRA 2 FEED OUT SENSOR PL11.10 — 2

J112 — J777 BLU — 4 11 — P777

DC330 [008-114] PAPER SENSED (L)+5VDC — J666_H1 GRY — B14 — +5VDC — 077-101 — 077-900

PH_1 MD PWB PL18.2

PH_2 MD PWB PL18.2 — B15 — J666_H2 — GRY — 5V RTN (1.10 H4)

14 1 — J111 BLU — J-TRA 2 CHUTE OPEN SWITCH PL11.10 — 2 — 1 — J111 BLU — 2 13

DC330 [008-128] CLOSED (L)+5VDC — J666_H2 GRY — B14 — +5VDC — 077-301

PH_2 MD PWB PL18.2

NOTE:
1 CHIP FUSE

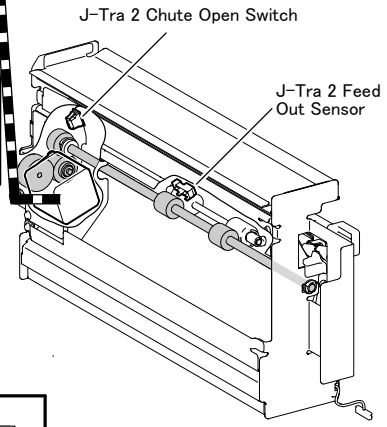
FAIL CODE

077-101
J-Tra 2 Feed Out Sensor On Jam

077-301
J-Tra 2 Chute Open

077-900
J-Tra 2 Feed Out Sensor Static Jam

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



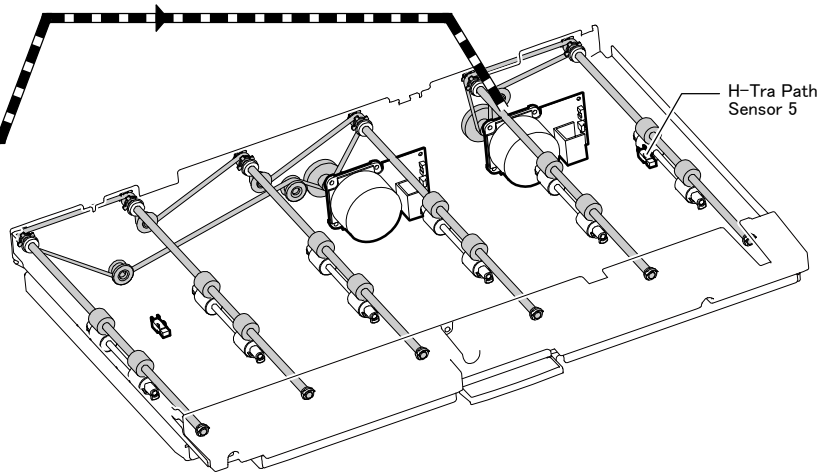
TD 1 Test Point: PH Core PWB J649_H-B13 (+) to GND (–)

DC330	Frequency
008-040	approx. 4.87kHz

j0cx730806

8.7 H-TRA 2 PAPER TRANSPORTATION (1/2)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



PH_2 MD PWB
PL18.2

DC330[008-045] 1100mm/s

J678_H2 B6 GRY — ON (L) +5VDC — J779 8 — P779 3 — J366S 3 BLU — +5VDC
CLOCK
J678_H2 B7 GRY — J779 9 — P779 2 — J366S 6 BLU — MOT
DC COM
DC COM
J686_H2 3 BLU — J779 4 — P779 7 — J366S 1 GRY — +5VDC
+5V_F26 (1.10 J4) — 4 BLU — J779 3 — P779 8 — J366S 2 VIO — 5V RTN
5V RTN (1.10 H4)
FUSE23 STATUS 1.57
J366P 1 ORN — +24VDC
F23 — 1 BLU — J779 1 — P779 10
+24V_7 (1.34 H4) — 8.11
J687_H2 2 BLU — J779 2 — P779 9 — J366S 2 VIO — 24V RTN
24V RTN (1.34 H2)
FG

H-TRA 2 IN MOTOR
PL11.7

PH_1 MD PWB
PL18.2

J666_H1 A15 BLU — J778 5 7 — P778 — J115 BLU
5V RTN (1.10 H2)
J666_H1 A13 BLU — J778 3 9 — P778 — J115 BLU
+5V_SNR (1.10 J2)

H-TRA PATH SENSOR 5 PL11.7
3
1
2

J115 — P778 BLU — J778 8 4 — DC330[008-119] PAPER SENSED (L) +5VDC — J666_H1 BLU A14

PH_1 MD PWB
PL18.2
+5VDC
077-102
077-103
077-170
077-903

FAIL CODE

077-102
H-Tra Path Sensor 5 On Jam (Simplex)

077-103
H-Tra Path Sensor 5 On Jam (Duplex)

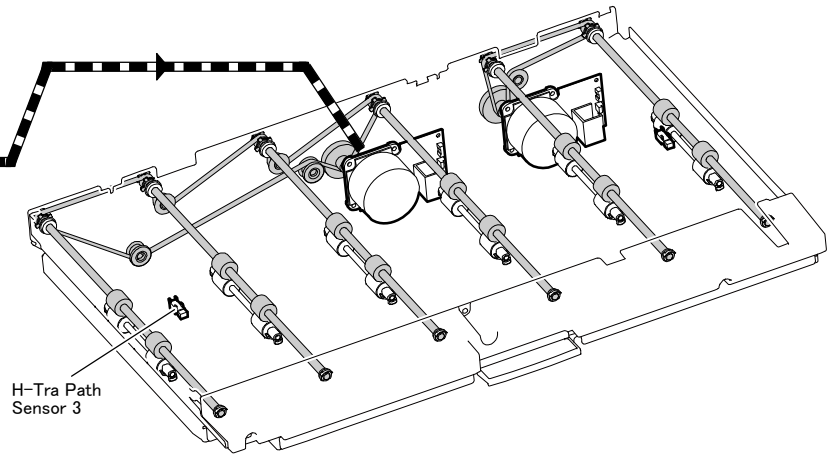
077-170
H-Tra Path Sensor 5 On Jam (UpPurge)

077-903
H-Tra Path Sensor 5 Static Jam

j0cx730807

8.8 H-TRA 2 PAPER TRANSPORTATION (2/2)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



PH_2 MD PWB
PL18.2

DC330 [008-412] 1100mm/s

J678_H2 B5 GRY — DC COM
J678_H2 B8 GRY — DC COM
ON (L) +5VDC
CLOCK
J7792 5 6 4 3 3 4 1 6 2 5
P7792
J367S 3 BLU, 6 BLU, 1 GRY, 2 VIO

J686_H2 9 BLU — +5V_F26 (1.10 J4)
J686_H2 10 BLU — 5V RTN (1.10 H4)

FUSE24 STATUS 1.57
F24
+24V_8 (1.44 E4)
J688_H2 1 BLU
J688_H2 2 BLU — 24V RTN (1.44 E5)

6 BLU Dummy Wire
8
12 BLU Dummy Wire
14

H-TRA 2 OUT MOTOR
PL11.6
+5VDC
MOT
FG
+5VDC
5V RTN
J367P 1 ORN — +24VDC
J367P 2 VIO — 24V RTN

PH_1 MD PWB
PL18.2
A9 — 5V RTN (1.10 H2)
A7 — +5V_SNR (1.10 J2)
J666_H1 BLU
J778 11 9 1 3
P778
J113 BLU

H-TRA PATH SENSOR 3 PL11.6
3
1
2

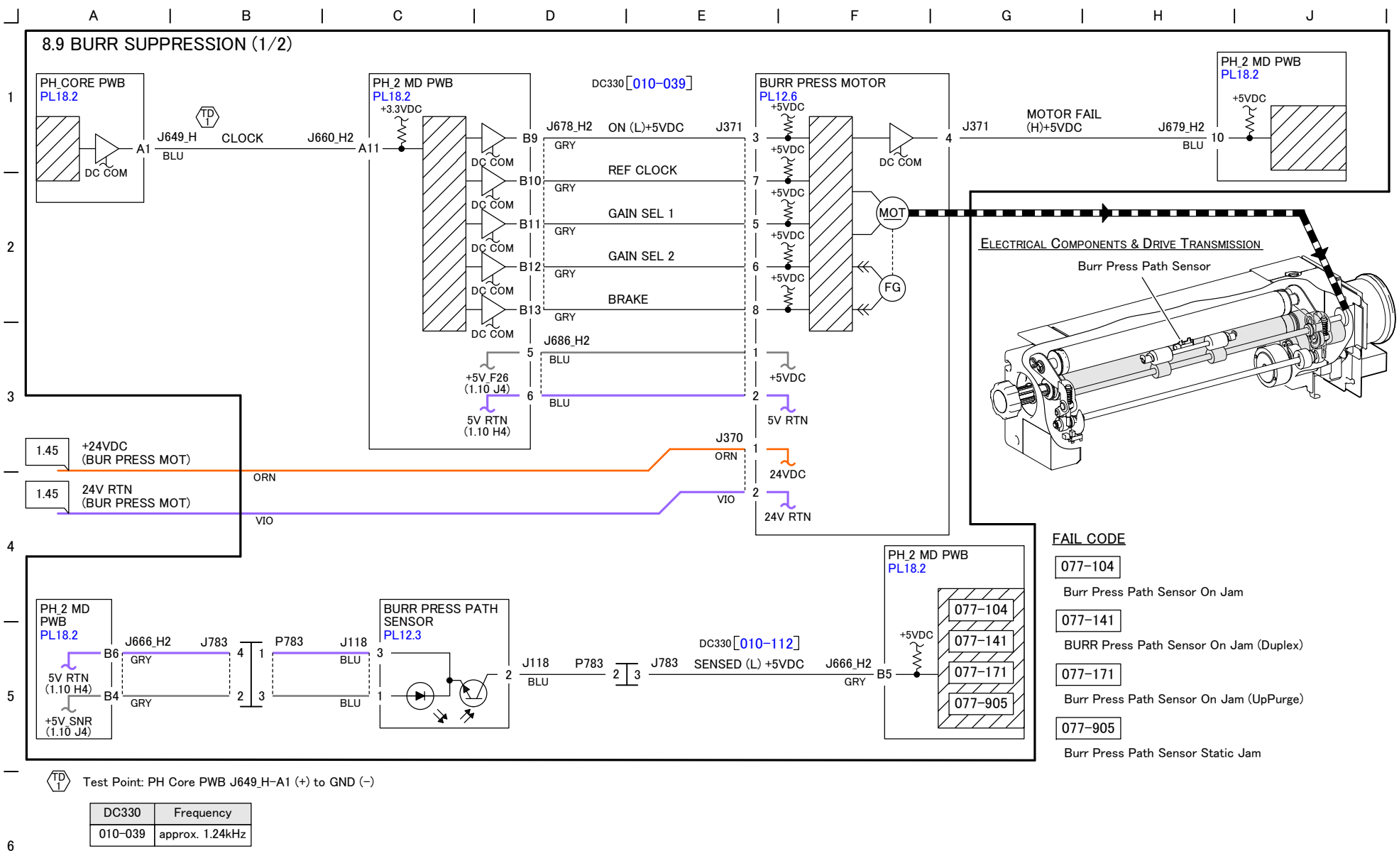
J113 P778 2 10 J778
DC330 [008-117]
PAPER SENSED (L) +5VDC
J666_H1 BLU A8

PH_1 MD PWB
PL18.2
+5VDC
077-901

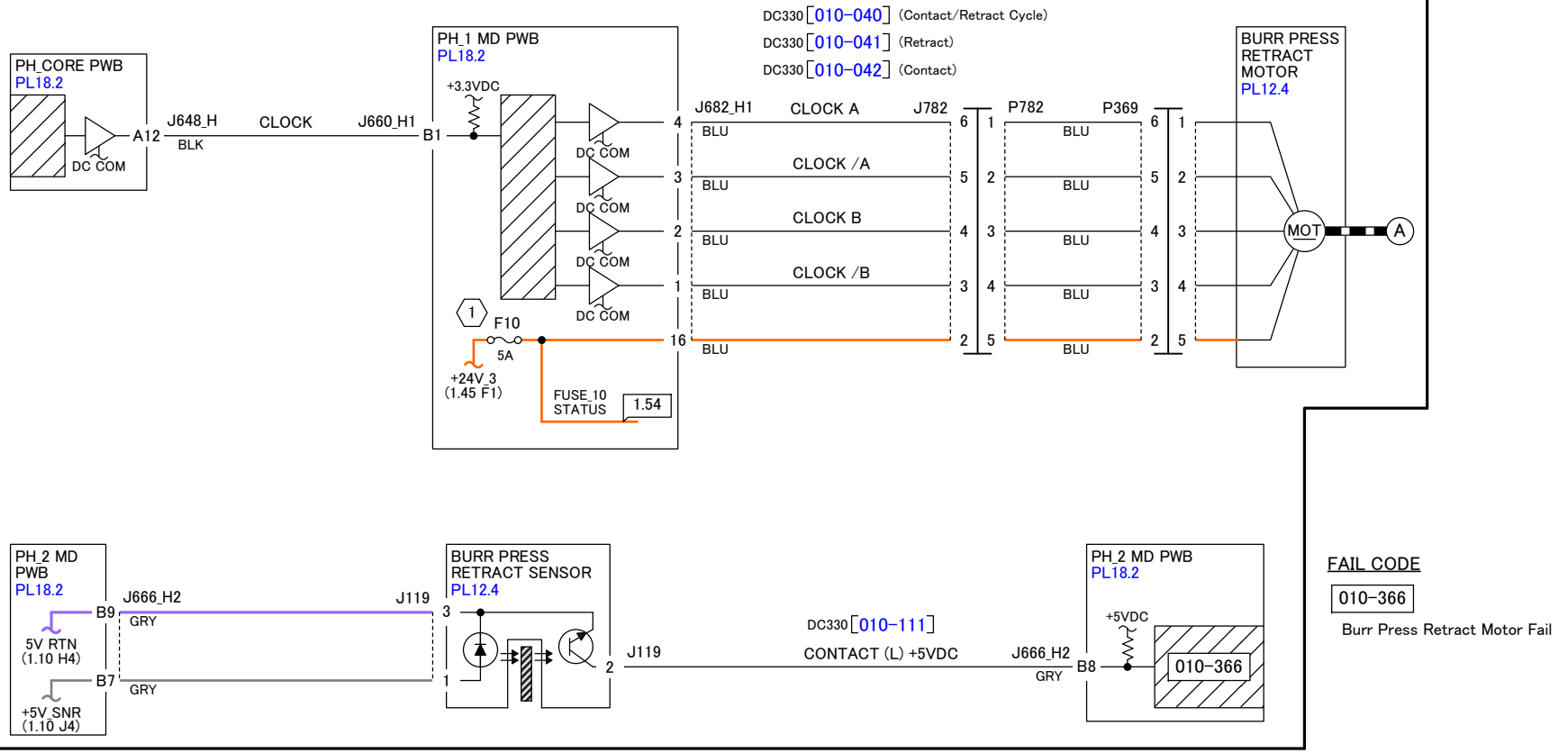
FAIL CODE

077-901
H-Tra Path Sensor 3 Static Jam

j0cx730808


8.9 BURR SUPPRESSION (1/2)
PH_CORE PWB
PL18.2
DC COM
A1
TD 1
J649_H
BLU
CLOCK
J660_H2
A11
PH_2 MD PWB
PL18.2
+3.3VDC
DC COM
B9
B10
B11
B12
B13
DC330 [010-039]
J678_H2
ON (L)+5VDC
REF CLOCK
GAIN SEL 1
GAIN SEL 2
BRAKE
GRY
J686_H2
BLU
+5V_F26
(1.10 J4)
5V RTN
(1.10 H4)
BURR PRESS MOTOR
PL12.6
+5VDC
J371
MOT
FG
MOTOR FAIL
(H)+5VDC
J679_H2
10
PH_2 MD PWB
PL18.2
+5VDC
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION
Burr Press Path Sensor
1.45
+24VDC
(BUR PRESS MOT)
ORN
24V RTN
(BUR PRESS MOT)
VIO
J370
24VDC
24V RTN
PH_2 MD
PWB
PL18.2
B6
B4
5V RTN
(1.10 H4)
+5V_SNR
(1.10 J4)
J666_H2
J783
P783
J118
BURR PRESS PATH
SENSOR
PL12.3
DC330 [010-112]
SENSED (L) +5VDC
077-104
077-141
077-171
077-905
FAIL CODE
077-104
Burr Press Path Sensor On Jam
077-141
BURR Press Path Sensor On Jam (Duplex)
077-171
Burr Press Path Sensor On Jam (UpPurge)
077-905
Burr Press Path Sensor Static Jam
TD 1
Test Point: PH Core PWB J649_H-A1 (+) to GND (-)
DC330
Frequency
010-039
approx. 1.24kHz
j0cx730809

8.10 BURR SUPPRESSION (2/2)



FAIL CODE

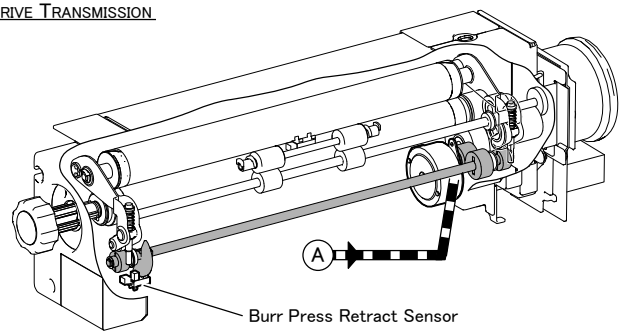
010-366

Burr Press Retract Motor Fail

NOTE:

1 CHIP FUSE

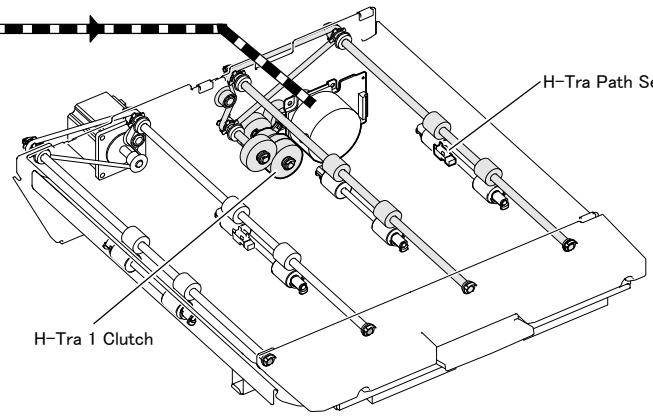
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730810

8.11 H-TRA 1 PAPER TRANSPORTATION (1/2)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



PH_2 MD PWB PL18.2
DC330 [008-043] 1100mm/s
J678_H2 ON (L) +5VDC J775 P775 J356
B3 GRY
DC COM
B4 GRY
DC COM
CLOCK
J686_H2
1 BLU
+5V_F26 (1.10 J4)
2 BLU
5V RTN (1.10 H4)
J687_H2
3 BLU
+24V_7 (F23) (8.7 A3)
4 BLU
24V RTN (1.34 H2)
H-TRA 1 MOTOR 2 PL11.4
+5VDC
+5VDC
MOT
FG
+5VDC
5V RTN
+24VDC
24V RTN

PH_1 MD PWB PL18.2
A6 J666_H1 J773 P773 J108
5V RTN (1.10 H2)
A4
+5V_SNR (1.10 J2)
H-TRA PATH SENSOR 2 PL11.4
J108 P773 J773 J666_H1 A5
DC330 [008-116]
PAPER SENSED (L) +5VDC
+5VDC
077-106
077-172
077-907

PH_2 MD PWB PL18.2
DC330 [008-044]
nMOS
GND
10 J687_H2 ON (L)+24VDC
8
+24V_7 (F23) (8.7 A3)
H-TRA 1 CLUTCH PL11.4 (1)
J357

FAIL CODE

077-106
H-Tra Path Sensor 2 On Jam

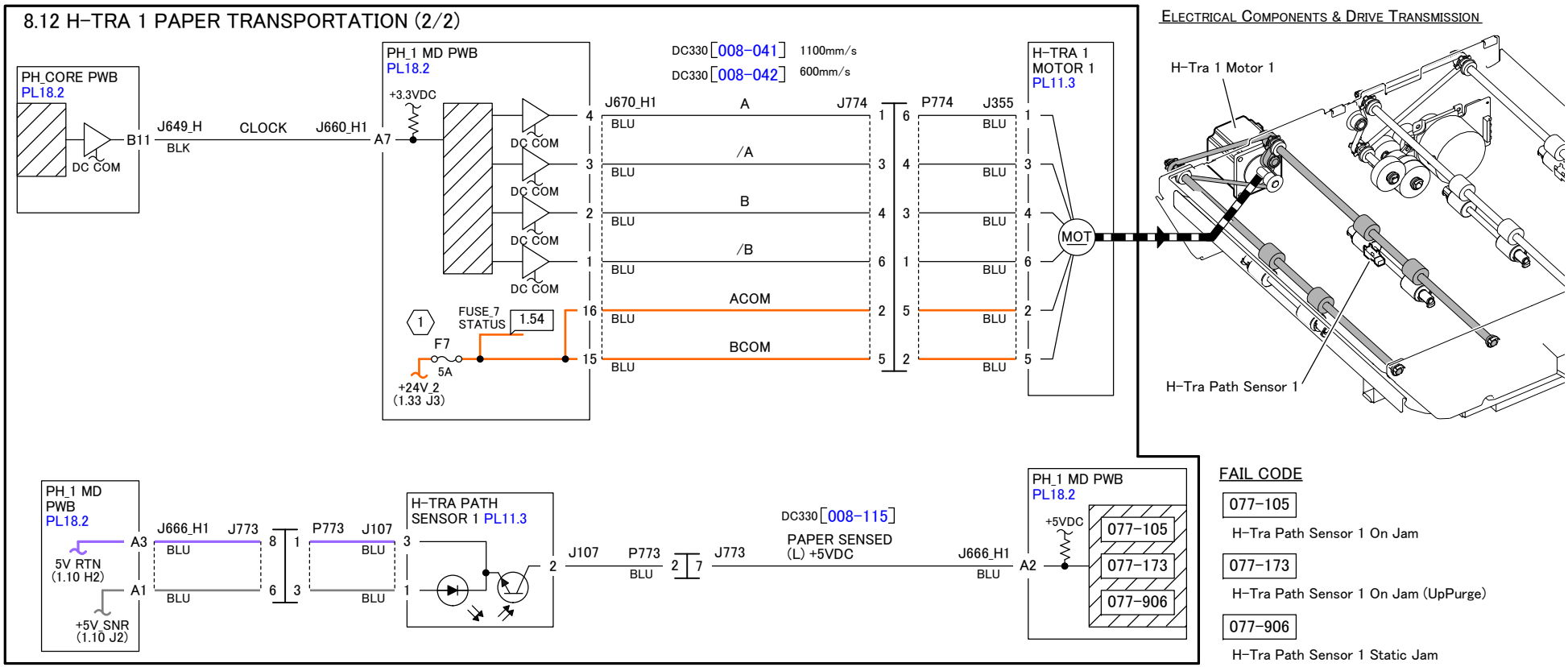
077-172
H-Tra Path Sensor 2 On Jam (UpPurge)

077-907
H-Tra Path Sensor 2 Static Jam

NOTE: (1) Coil resistance: 155Ω ±10% (coil temp 20°C)

j0cx730811

8.12 H-TRA 1 PAPER TRANSPORTATION (2/2)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

FAIL CODE

077-105	H-Tra Path Sensor 1 On Jam
077-173	H-Tra Path Sensor 1 On Jam (UpPurge)
077-906	H-Tra Path Sensor 1 Static Jam

NOTE:
1 CHIP FUSE

j0cx730812

8.13 I-TRA PAPER TRANSPORTATION

DC330 [008-047] 1100mm/s
DC330 [008-048] 600mm/s
DC330 [008-428] 640mm/s
DC330 [008-429] 300mm/s

PH_CORE PWB PL18.2 — B6 — J649_H — I-TRA MOTOR CLOCK — J660_H2 — B1 — PH_2 MD PWB PL18.2 — +3.3VDC — DC COM

J682_H2 — J781 — P781 — J368 — I-TRA MOTOR PL11.12

4	CLOCK A	1 6	1 6
3	CLOCK /A	3 4	3 4
2	CLOCK B	4 3	4 3
1	CLOCK /B	6 1	6 1
16	ACOM	2 5	2 5
15	BCOM	5 2	5 2

(1) F10 5A — FUSE_10 STATUS 1.56 — +24V_3 (1.34 H1)

PH_2 MD PWB PL18.2 — B12 — J665_H2 — J780 — P780 — J116 — I-TRA CHUTE OPEN SWITCH PL11.12 — J116 — P780 — J780 — DC330 [008-129] CLOSED (L)+5VDC — J665_H2 — B11 — PH_2 MD PWB PL18.2 — +5VDC — 077-302

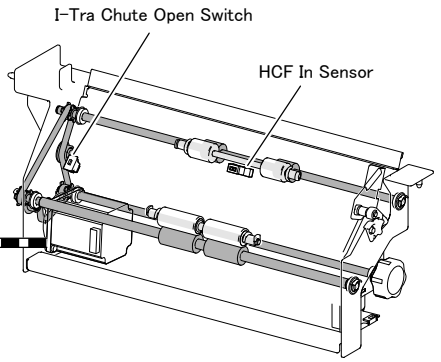
PH_1 MD PWB PL18.2 — B1 — J666_H1 — J117 — HCF IN SENSOR PL11.12 — J117 — DC330 [008-120] PAPER SENSED (L)+5VDC — J666_H1 — B2 — PH_1 MD PWB PL18.2 — +5VDC — 077-908, 078-107, 078-108, 078-110, 178-107, 178-108

+5V_SNR (1.10 J2) — B3 — 5V RTN (1.10 H2)

PH_2 MD PWB PL18.2 — 5V RTN (1.10 H4)

NOTE:
(1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FAIL CODE

077-302
I-Tra Chute Open

077-908
HCF In Sensor Static Jam

078-107
HCF In Sensor On Jam (HCF Upper Tray)

078-108
HCF In Sensor On Jam (HCF Lower Tray)

078-110
HCF in Sensor On Jam (HCF MBT)

178-107
HCF in Sensor On Jam (HCF-2 Tray A2-1)

178-108
HCF in Sensor On Jam (HCF-2 Tray A2-2)

j0cx730813

8.14 PRE REGISTRATION (1/5)

PH_CORE PWB PL18.2 — B7 — J649_H — BLK — CLOCK — J660_H2 — A9 — DC COM

PH_2 MD PWB PL18.2 — +3.3VDC — DC COM

DC330 [008-049] 1100mm/s
DC330 [008-050] 600mm/s
DC330 [008-430] 640mm/s
DC330 [008-431] 300mm/s

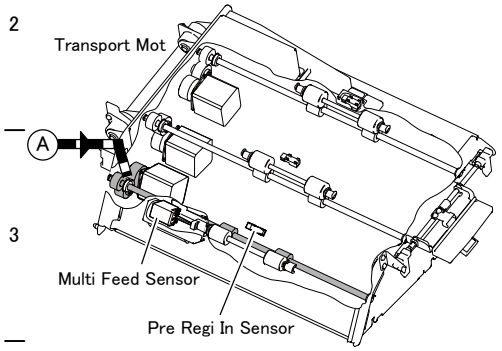
J682_H2 — CLOCK A — J772 — A4 A15 — P772 — J350 — BLU — 4 — BLU — TRANSPORT MOTOR PL15.5
CLOCK /A — A6 A13 — 6
CLOCK B — A3 A16 — 3
CLOCK /B — A1 A18 — 1
ACOM — A5 A14 — 5
BCOM — A2 A17 — 2
MOT — A

FUSE_9 STATUS 1.56 — (1) F9 5A — +24V_3 (1.34 H1)

FAIL CODE

077-107	Pre Regi In Sensor On Jam (IOT)
077-108	Pre Regi In Sensor On Jam
077-131	Paper Multi Feed
077-132	Previous Multi Feed
077-212	Multi Feed Sensor Broken Fail
077-174	Pre Regi In Sensor On Jam (UpPurge)
077-909	Pre Regi In Sensor Static Jam

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



MULTI FEED SENSOR PL15.3 — R2 — VR1 — +5VDC — AMP — DC COM — R1

PH_ADC PWB PL18.2 — J750 — J771 — P771 — J101 — GRY — P771 — B2 B11 — J771 — SENSED SIGNAL (ANALOG) — J750 — BLU — J641 — P641 — PH CORE PWB PL18.2 — 077-131 — 077-132 — 077-212

DC140 [008-200] (2)

PH_ADC PWB PL18.2 — 12 — J750 — BLU — J771 — B10 B3 — P771 — J101 — GRY — +5VDC (1.10 H5) — 10 — BLU — B12 B1 — GRY — 5V RTN (1.10 H5)

PH_2 SENSOR PWB PL18.2 — A9 — J597_H2 — BLU — B9 B4 — J100 — GRY — 5V RTN (1.10 H3) — A7 — BLU — B7 B6 — GRY — +5VDC (1.10 H2)

PRE REGI IN SENSOR PL15.3 — 3 — 1 — J100 — 2 — GRY — B5 B8 — J597_H2 — BLU — A8 — PH_2 SENSOR PWB PL18.2 — 3 — J596_H2 — BLU

PH CORE PWB PL18.2 — 077-107 — 077-108 — 077-174 — 077-909

DC330 [008-121] PAPER SENSED (L)+5VDC — J651_H — BLU — A10 — +5VDC

NOTE: (1) CHIP FUSE

(2) Normal output range
No paper: 293 to 786
When one sheet of standard paper (P paper) passes:
[a value when no paper exists] minus [a value between 12 and 18 (depending on paper thickness)]

j0cx730814

8.15 PRE REGISTRATION (2/5)

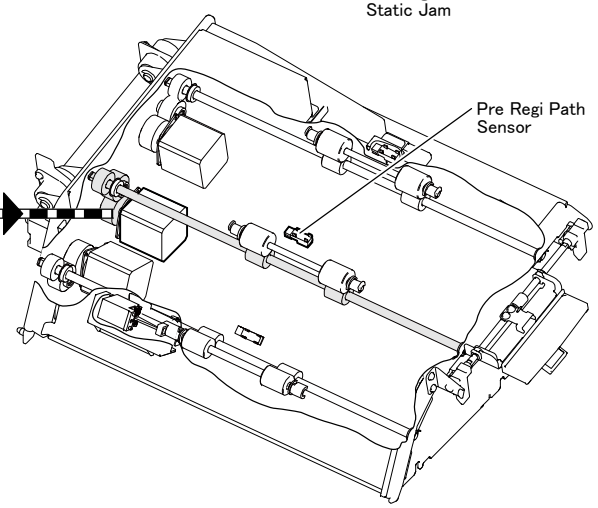
DC330 [008-051] 1100mm/s
DC330 [008-052] 600mm/s
DC330 [008-432] 640mm/s
DC330 [008-413] 300mm/s

PH_CORE PWB PL18.2
TD 1
B14 J649_H BLK CLOCK J660_H2 A5
DC COM

PH_2 MD PWB PL18.2
+3.3VDC
DC COM
13 J670_H2 BLU CLOCK A
12 BLU CLOCK /A
11 BLU CLOCK B
10 BLU CLOCK /B
20 BLU ACOM
19 BLU BCOM
J772 A10 A9 A12 A7 A9 A10 A7 A12 A11 A8 A8 A11
P772 J351 BLU
1 F5 4A
+24V_2 (1.34 H2)
FUSE_5 STATUS 1.56

PRE REGI MOTOR 1 PL15.5
4 6 3 1 5 2
MOT

FAIL CODE
077-910
Pre Regi Path Sensor Static Jam



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

PH_2 SENSOR PWB PL18.2
A15 J597_H2 BLU J771 A9 A4 P771 J103 BLU 3
5V RTN (1.10 H3)
A13 BLU A7 A6 BLU 1
+5VDC (1.10 H2)

PRE REGI PATH SENSOR PL15.3
2 J103 BLU P771 A5 A8 J771 J597_H2 BLU

PH_2 SENSOR PWB PL18.2
A14 5 J596_H2

DC330 [008-122]
PAPER SENSED (L)+5VDC

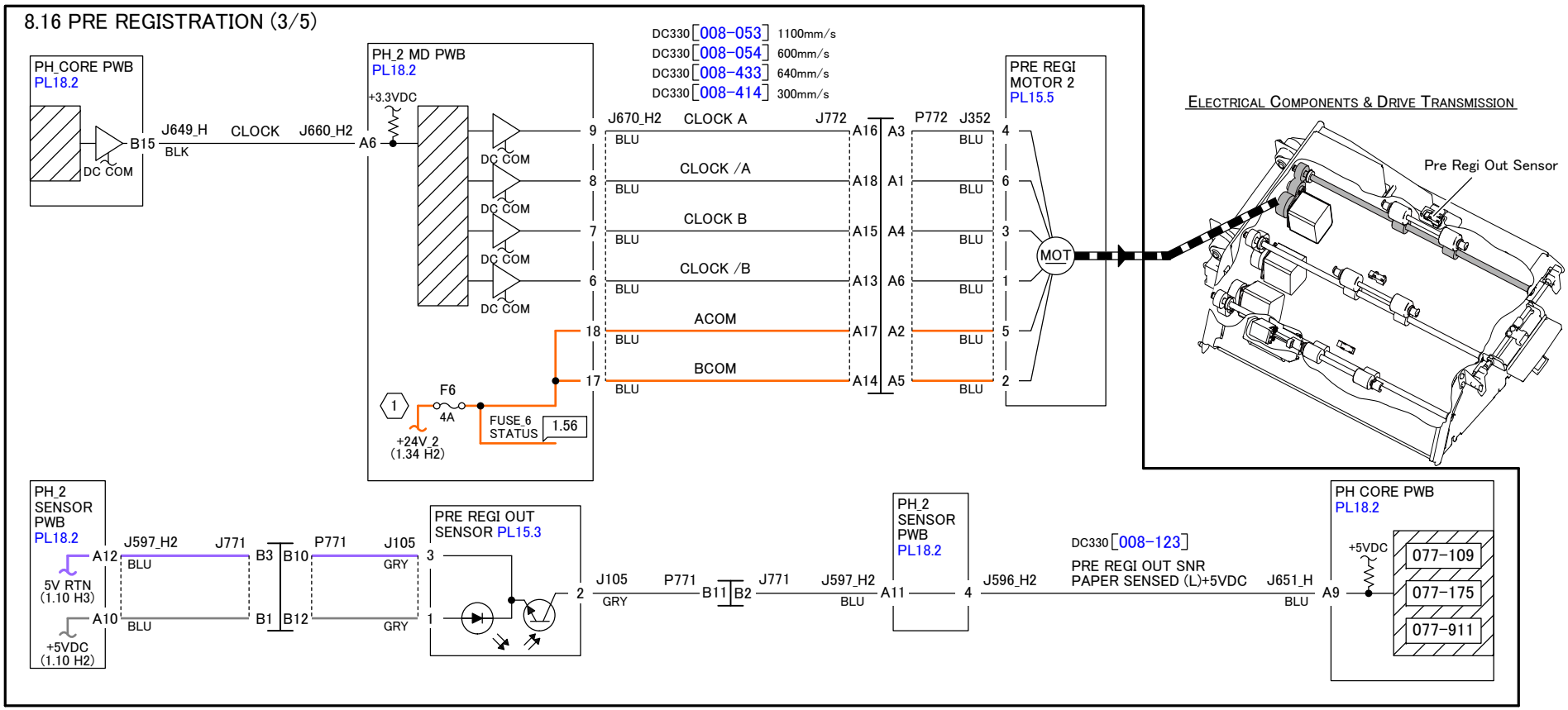
J651_H BLU A8

PH_CORE PWB PL18.2
+5VDC
077-910

NOTE:
1 CHIP FUSE

j0cx730815

8.16 PRE REGISTRATION (3/5)



NOTE:
(1) CHIP FUSE

FAIL CODE

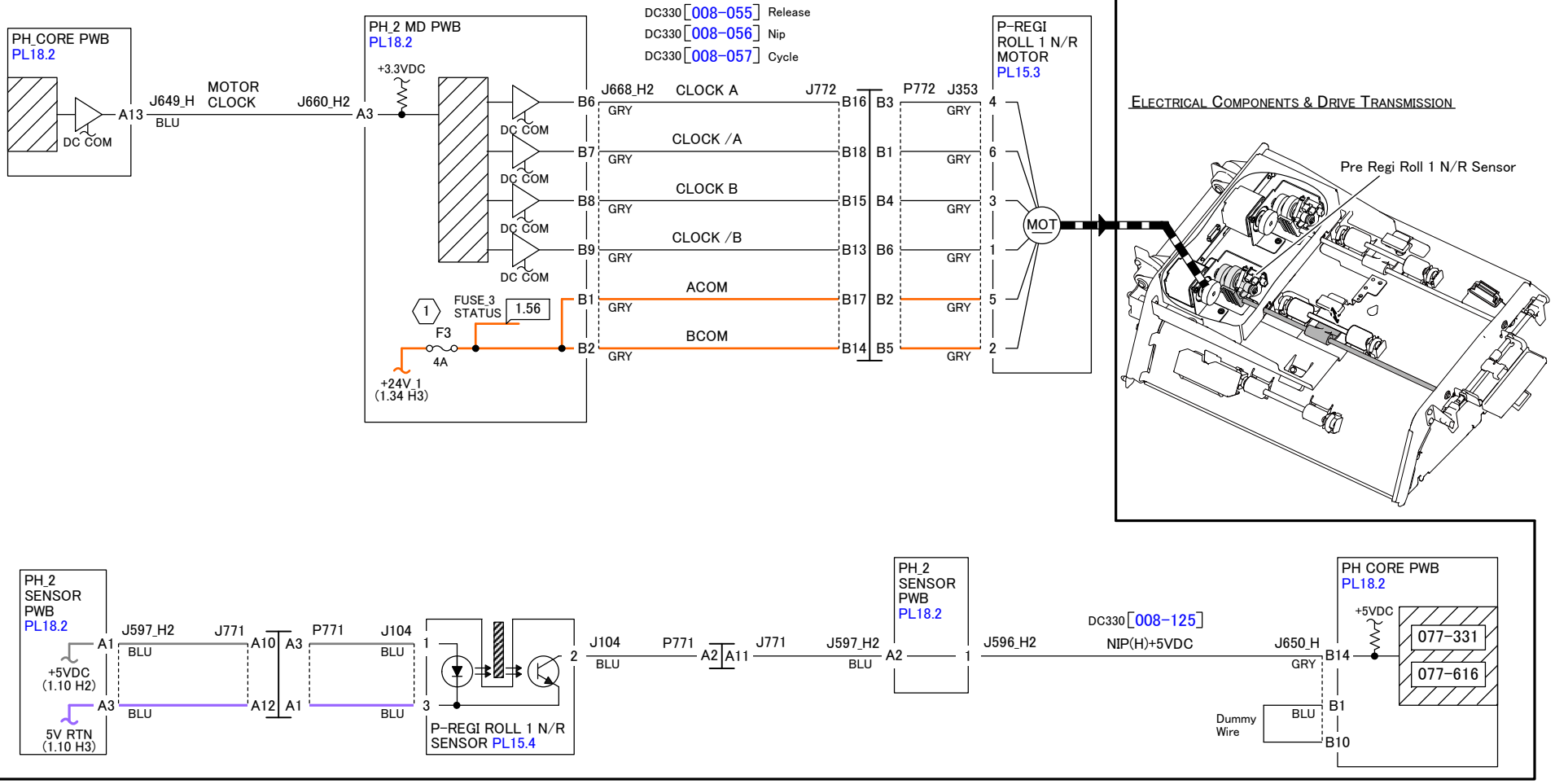
077-109
Pre Regi Out Sensor On Jam

077-175
Pre Regi Out Sensor On Jam (UpPurge)

077-911
Pre Regi Out Sensor Static Jam

j0cx730816

8.17 PRE REGISTRATION (4/5)



NOTE: 1 CHIP FUSE

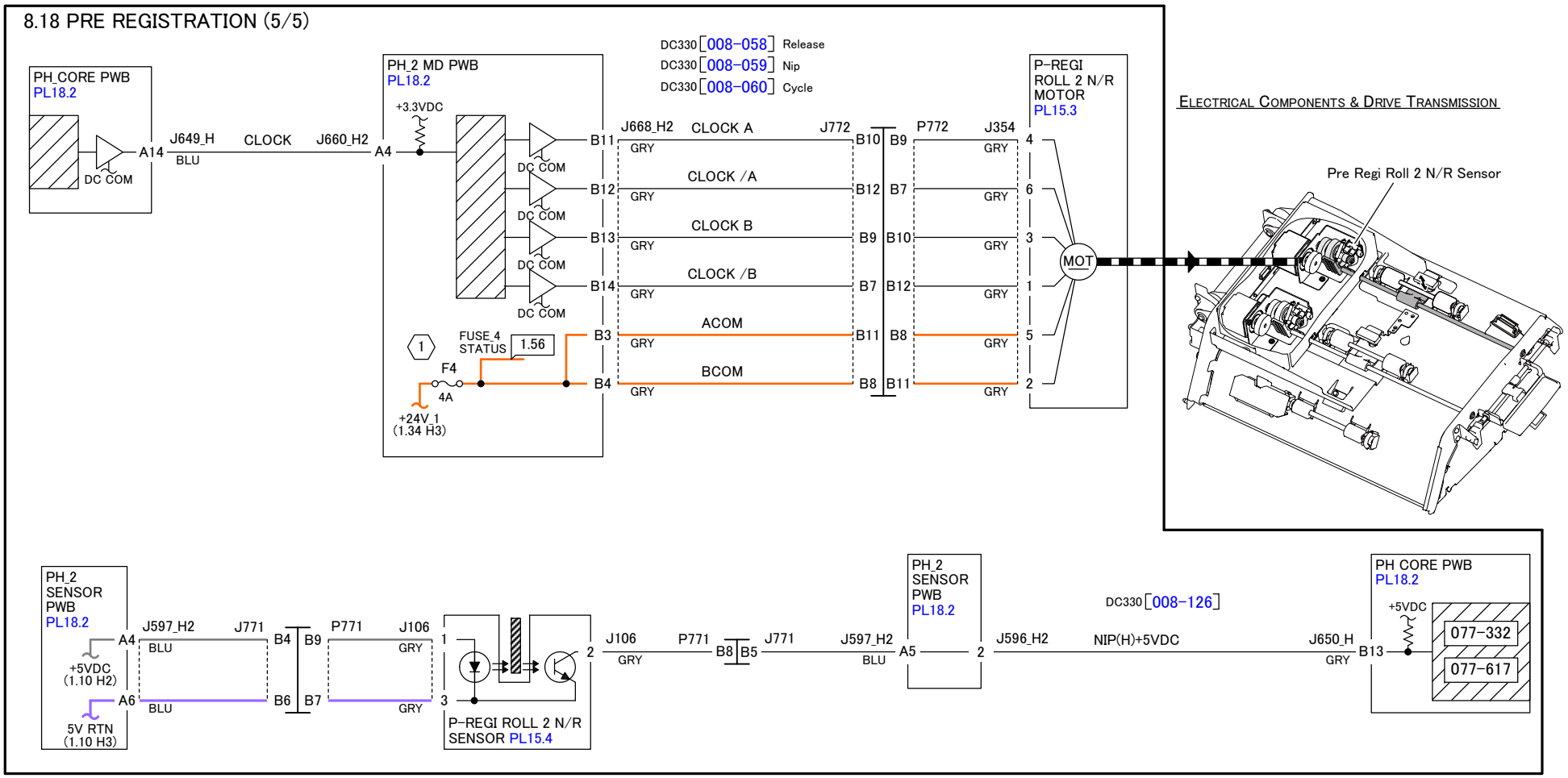
FAIL CODE

077-331
Pre Regi Roll 1 Up/Down Fail

077-616
Pre Regi Roll 1 Nip/Release Fail

j0cx730817

8.18 PRE REGISTRATION (5/5)



NOTE: (1) CHIP FUSE

FAIL CODE

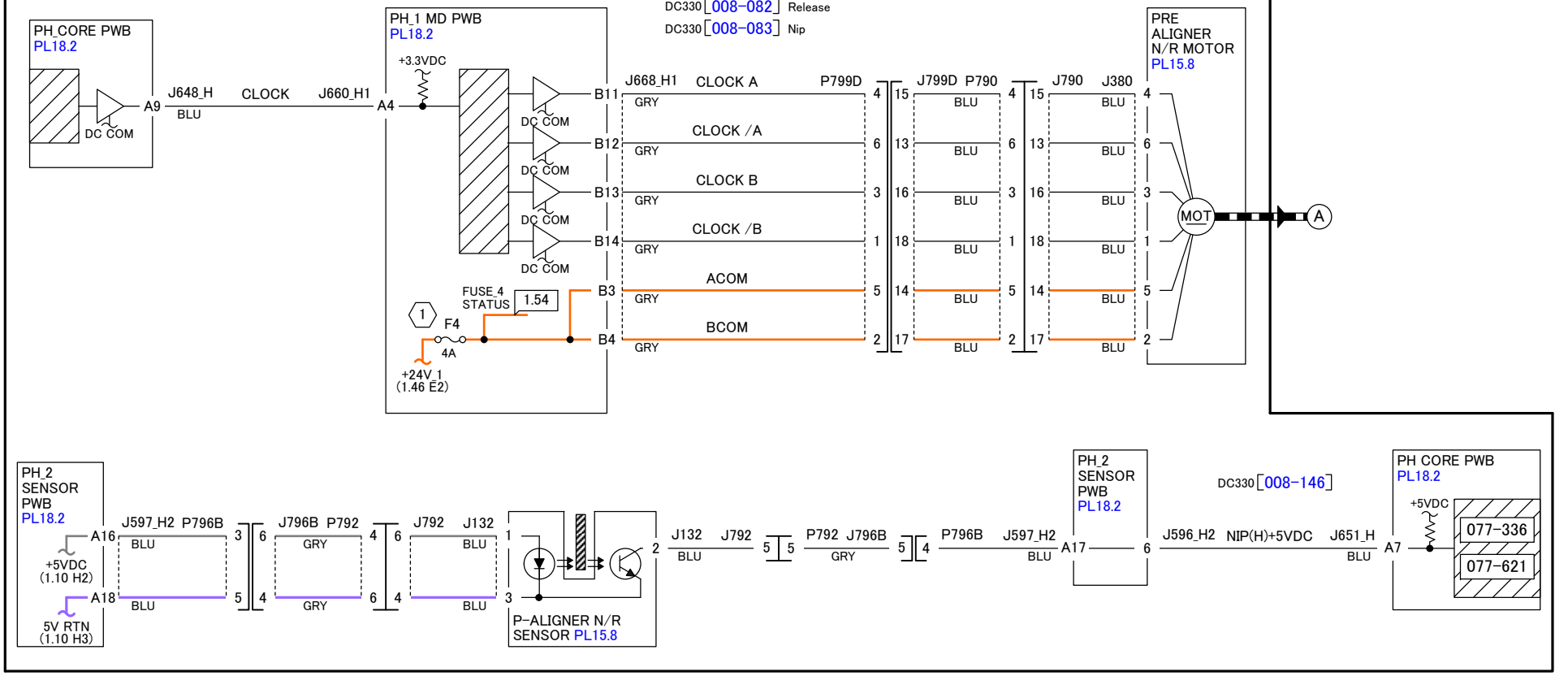
077-332
Pre Regi Roll 2 Up/Down Fail

077-617
Pre Regi Roll 2 Nip/Release Fail

j0cx730818

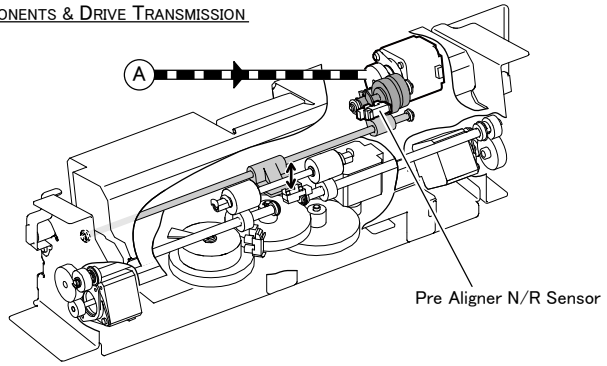
8.19 PRE ALIGNER TRANSPORTATION (1/3)

DC330 [008-081] Initialize DC330 [008-084] Cycle
DC330 [008-082] Release
DC330 [008-083] Nip



NOTE: (1) Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FAIL CODE

077-336
Pre Aligner Up/Down Fail

077-621
Pre Aligner Nip/Release Fail

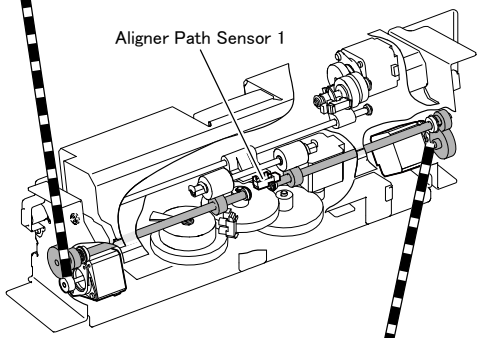
j0cx730819

8.20 PRE ALIGNER TRANSPORTATION (2/3)

FAIL CODE

077-913
Aligner Path Sensor 1 Static Jam

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



PH_CORE PWB PL18.2
PH_2 MD PWB PL18.2
PH_1 SENSOR PWB PL18.2
PRE ALIGNER DRIVE MOTOR FRONT PL15.9
PRE ALIGNER DRIVE MOTOR REAR PL15.9
ALIGNER PATH SENSOR 1 PL15.8
PH CORE PWB PL18.2

DC330[008-080] 600mm/s
DC330[008-417] 600mm/s
DC330[008-418] 570mm/s
DC330[008-419] 300mm/s
DC330[008-416] 300mm/s
DC330[008-136] PAPER SENSED (L)+5VDC

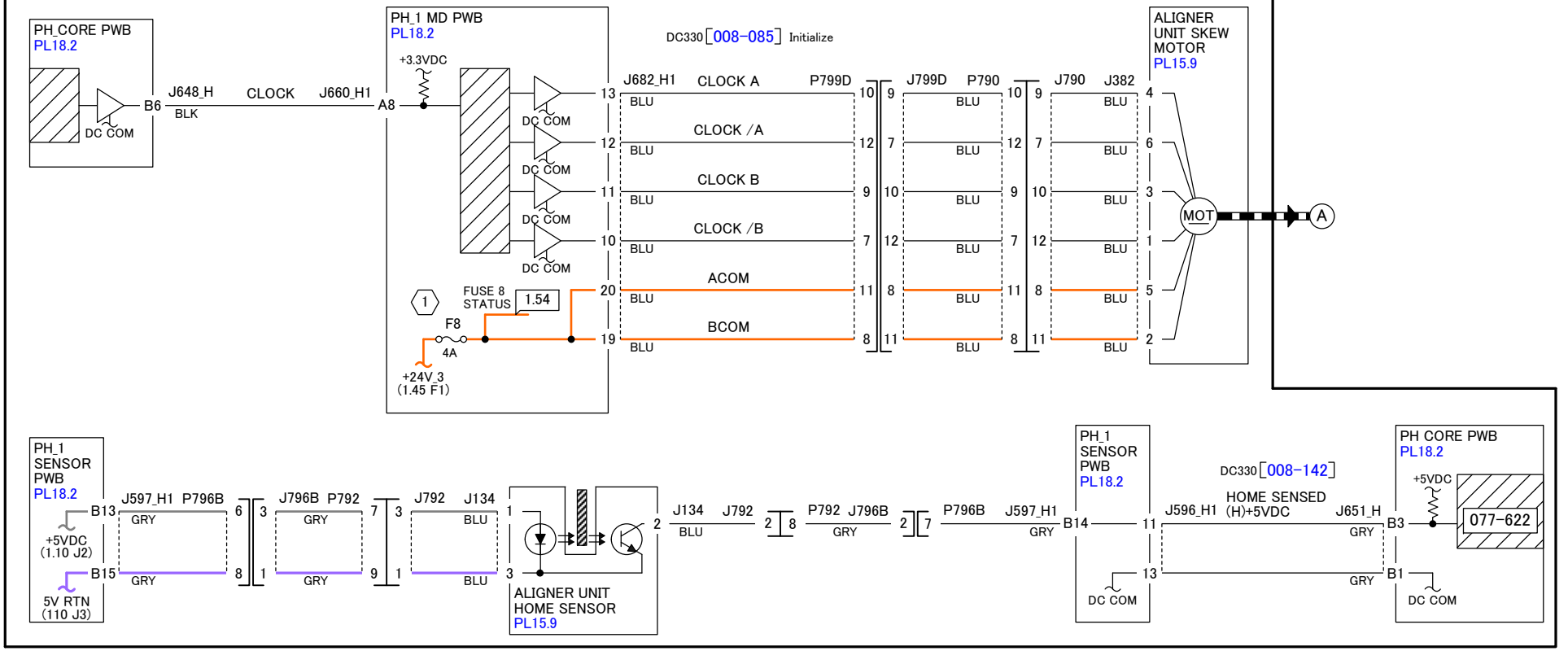
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM

+3.3VDC
+24V_1 (1.34 H3)
4A
FUSE_2 STATUS
FUSE_1 STATUS
1.56
5V RTN (1.10 J3)
+5VDC (1.10 J2)
DC COM
CLOCK
BLK
GRY
BLU
MOT

NOTE:
(1) CHIP FUSE

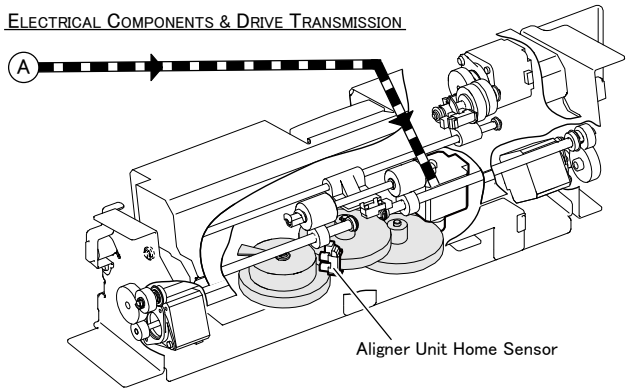
j0cx730820

8.21 PRE ALIGNER TRANSPORTATION (3/3)



NOTE: (1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FAIL CODE

077-622
Aligner Unit Skew Fail

j0cx730821

8.22 ALIGNER TRANSPORTATION (1/5)

DC330 [008-070] Initialize
DC330 [008-073] Nip Min
DC330 [008-076] Nip Max

PH_CORE PWB PL18.2
PH_1 MD PWB PL18.2
PH_2 SENSOR PWB PL18.2
ALIGNER CROSSED N/R MOTOR 1 PL15.16
ALIGNER CROSSED N/R SENSOR 1 PL15.16
PH_1 SENSOR PWB PL18.2
PH CORE PWB PL18.2

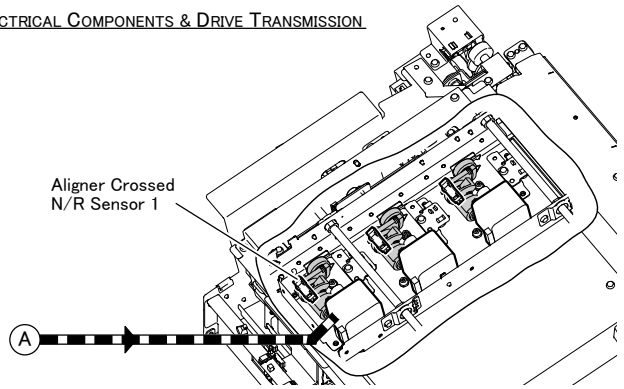
J648_H CLOCK J660_H1
J668_H1 CLOCK A P799B
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
J799B P788 J788 J377
J597_H2 P797A J797A
P789 J789 SJ42 SJ43 J126 J789 P797A
J597_H1 J596_H1 J651_H
DC330 [008-139] NIP (L)+5VDC

+3.3VDC
DC COM
FUSE_1 STATUS 1.54
F1 4A
+24V_1 (1.45 E2)
5V RTN (1.10 H3)
+5VDC (1.10 H2)
SHORTING PLUG
+5VDC ALL
5VRTN ALL
MOT

FAIL CODE
077-333 Aligner 1 Up/Down Fail
077-618 Aligner Nip/Release 1 Fail

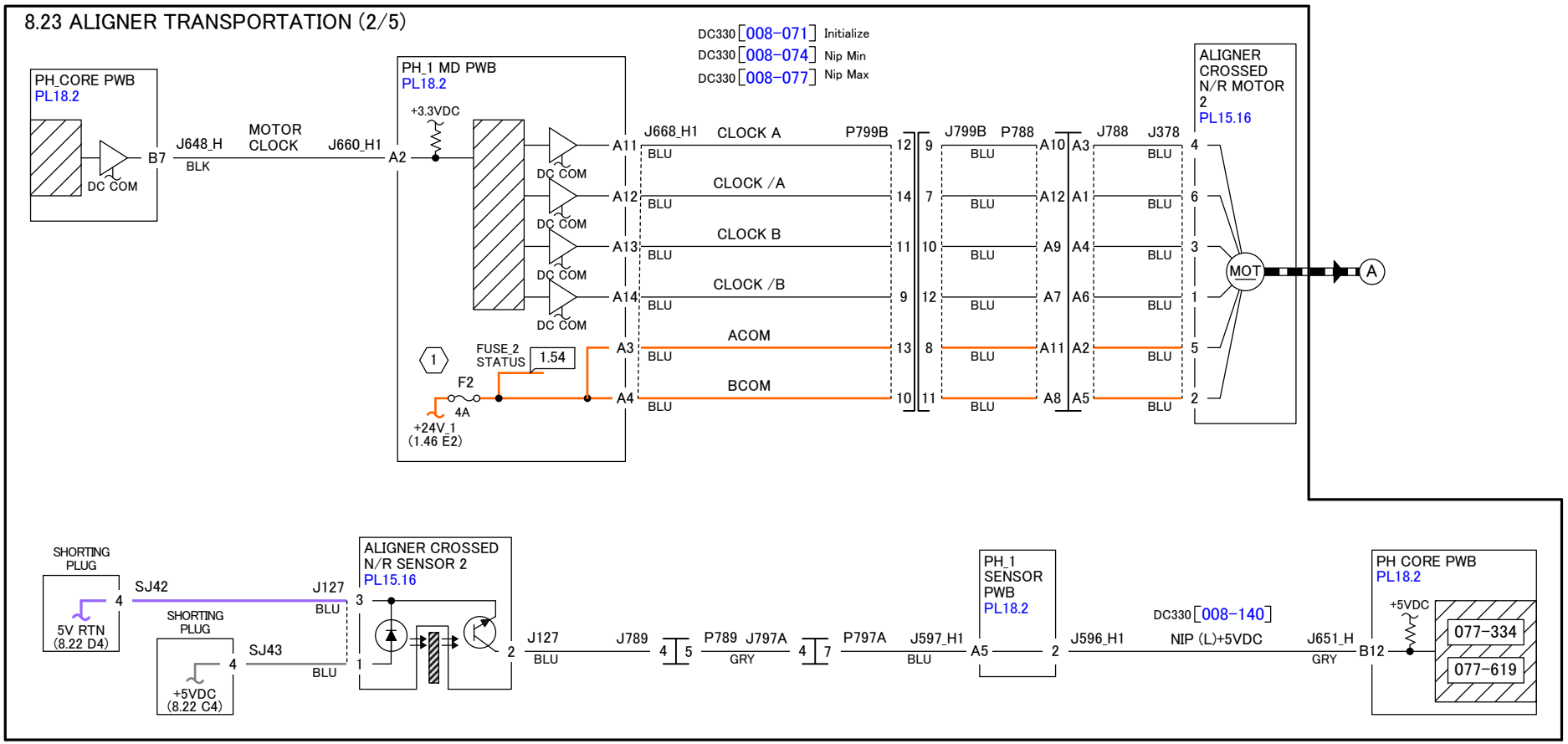
NOTE:
(1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



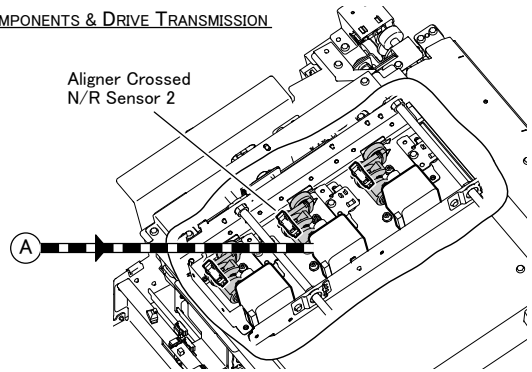
j0cx730822

8.23 ALIGNER TRANSPORTATION (2/5)



NOTE: (1) Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



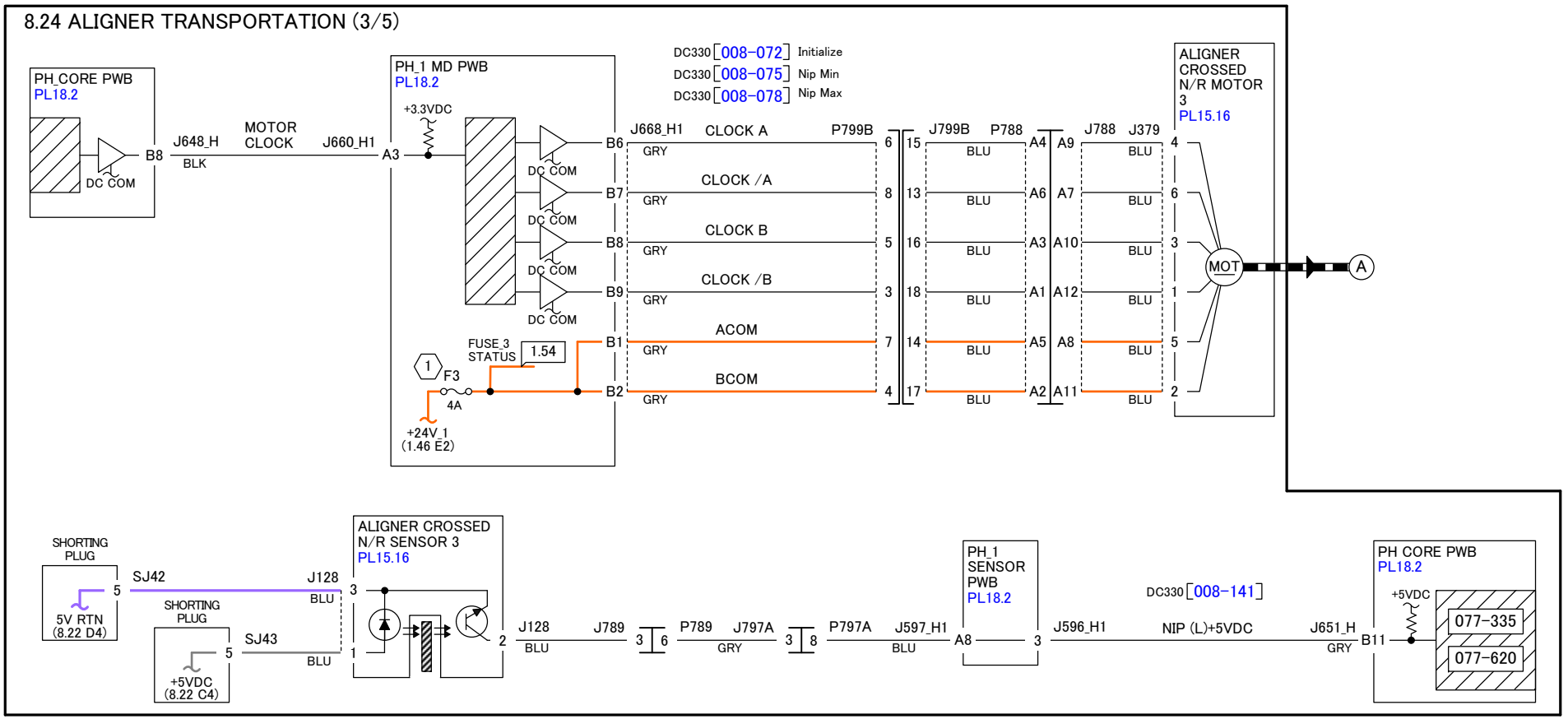
FAIL CODE

077-334
Aligner 2 Up/Down Fail

077-619
Aligner Nip/Release 2 Fail

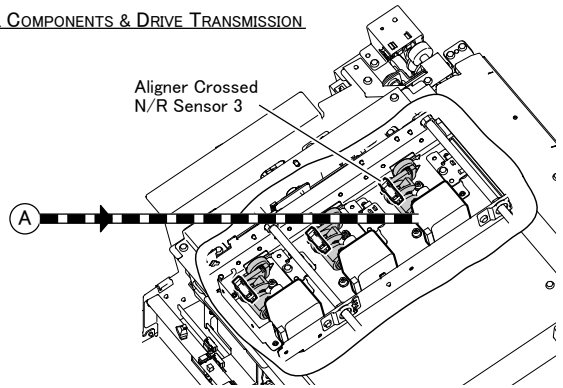
j0cx730823

8.24 ALIGNER TRANSPORTATION (3/5)



NOTE: (1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



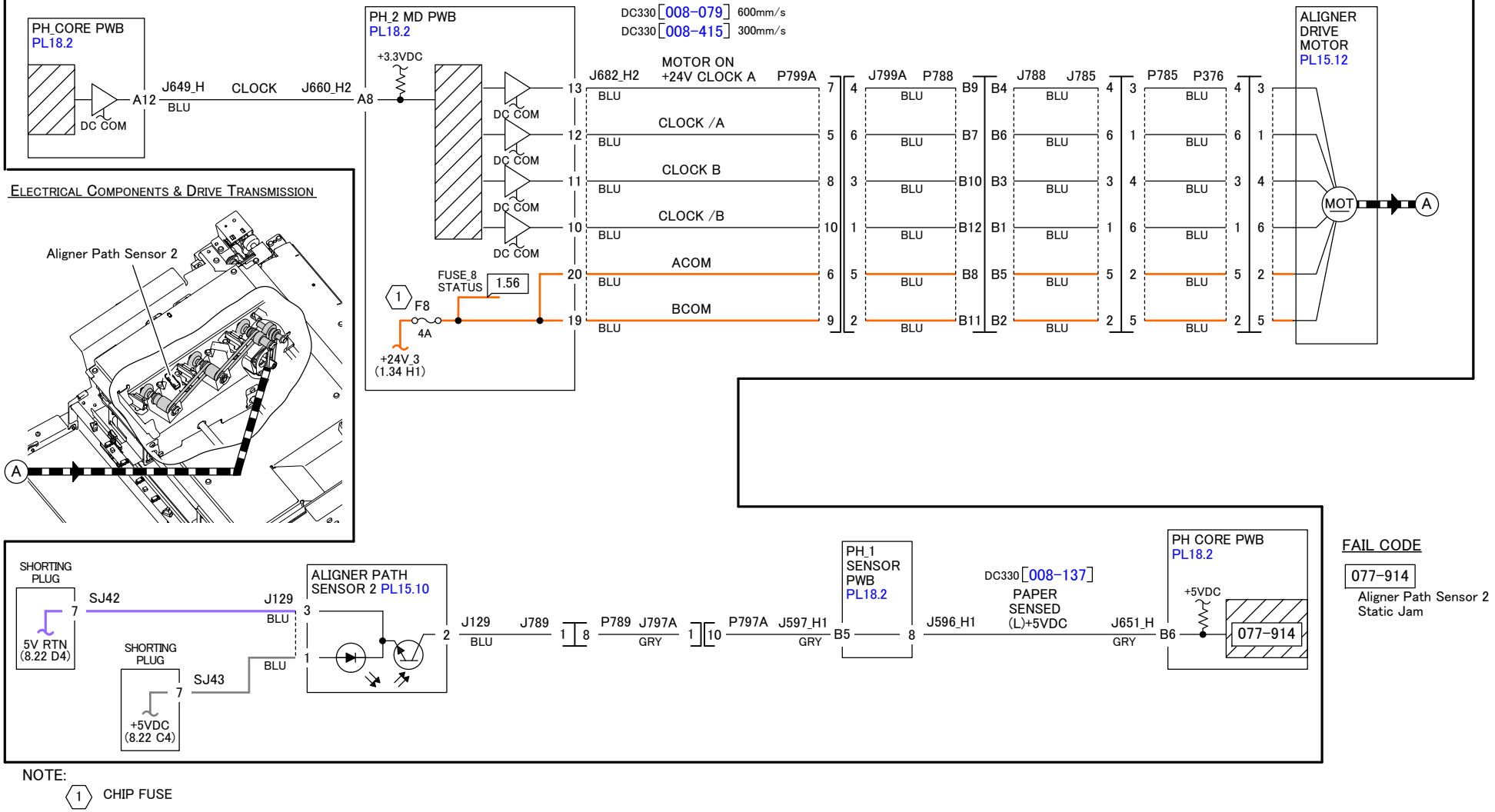
FAIL CODE

077-335
Aligner 3 Up/Down Fail

077-620
Aligner Nip/Release 3 Fail

j0cx730824

8.25 ALIGNER TRANSPORTATION (4/5)



j0cx730825

8.26 ALIGNER TRANSPORTATION (5/5)

DC330 [008-086] Initialize
DC330 [008-087] Shift Min
DC330 [008-088] Shift Max

PH_CORE PWB PL18.2 — B9 — J648_H — BLK — CLOCK — J660_H1 — A9 — PH_1 MD PWB PL18.2 +3.3VDC

DC COM

9 J682_H1 BLU MOTOR ON +24V CLOCK A P798B 14 3 J798B P786 B11 B3 J786 J784 4 3 P784 P375 4 3 BLU
8 BLU CLOCK /A 16 1 BLU B13 B1 6 1 BLU 6 1
7 BLU CLOCK B 13 4 BLU B10 B4 3 4 BLU 3 4
6 BLU CLOCK /B 11 6 BLU B8 B6 1 6 BLU 1 6
18 BLU ACOM 15 2 BLU B12 B2 5 2 BLU 5 2
17 BLU BCOM 12 5 BLU B9 B5 2 5 BLU 2 5

ALIGNER SHIFT MOTOR PL15.11 — MOT — A

FUSE_9 STATUS 1.54
1 F9 5A
+24V_3 (1.45 F1)

SHORTING PLUG — SJ41 — 3 — 4 — +5VDC (8.27 B4)

SHORTING PLUG — SJ40 — 3 — 4 — 5V RTN (8.27 B4)

J124 BLU — 1 — 2 — 3 — ALIGNER SHIFT HOME SENSOR PL15.10

J123 BLU — 1 — 2 — 3 — ALIGNER SHIFT REAR LIMIT SNR PL15.10

J124 BLU — J787 — 17 4 — P787 J797B GRY — 17 4 — P797B — J597_H1 GRY — B11 — 10 — PH_1 SENSOR PWB PL18.2

J123 BLU — 16 5 — GRY — 16 5

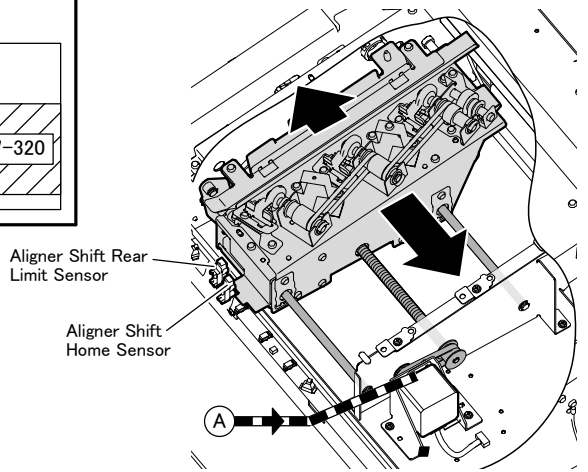
DC330 [008-143] HOME SENSED (H)+5VDC — J596_H1 — J651_H GRY — B4 — PH CORE PWB PL18.2 +5VDC

DC330 [008-145] REAR LIMIT SENSED (H)+5VDC — J666_H1 GRY — B8 — PH_1 MD PWB PL18.2 +5VDC — 077-320

FAIL CODE
077-320
Aligner Shift Fail

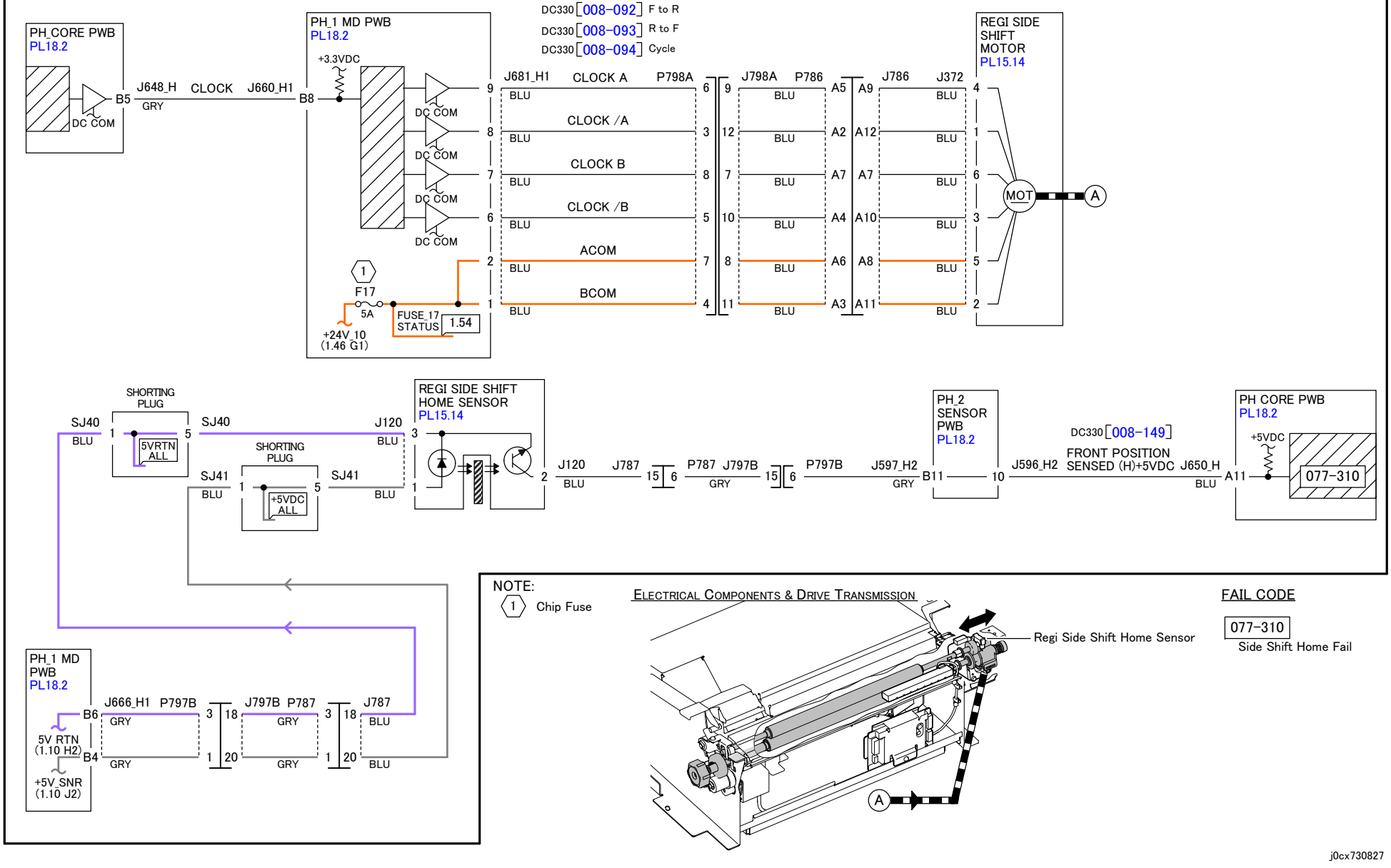
NOTE:
1 CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730826

8.27 SIDE REGISTRATION (1/2)



NOTE:
(1) Chip Fuse

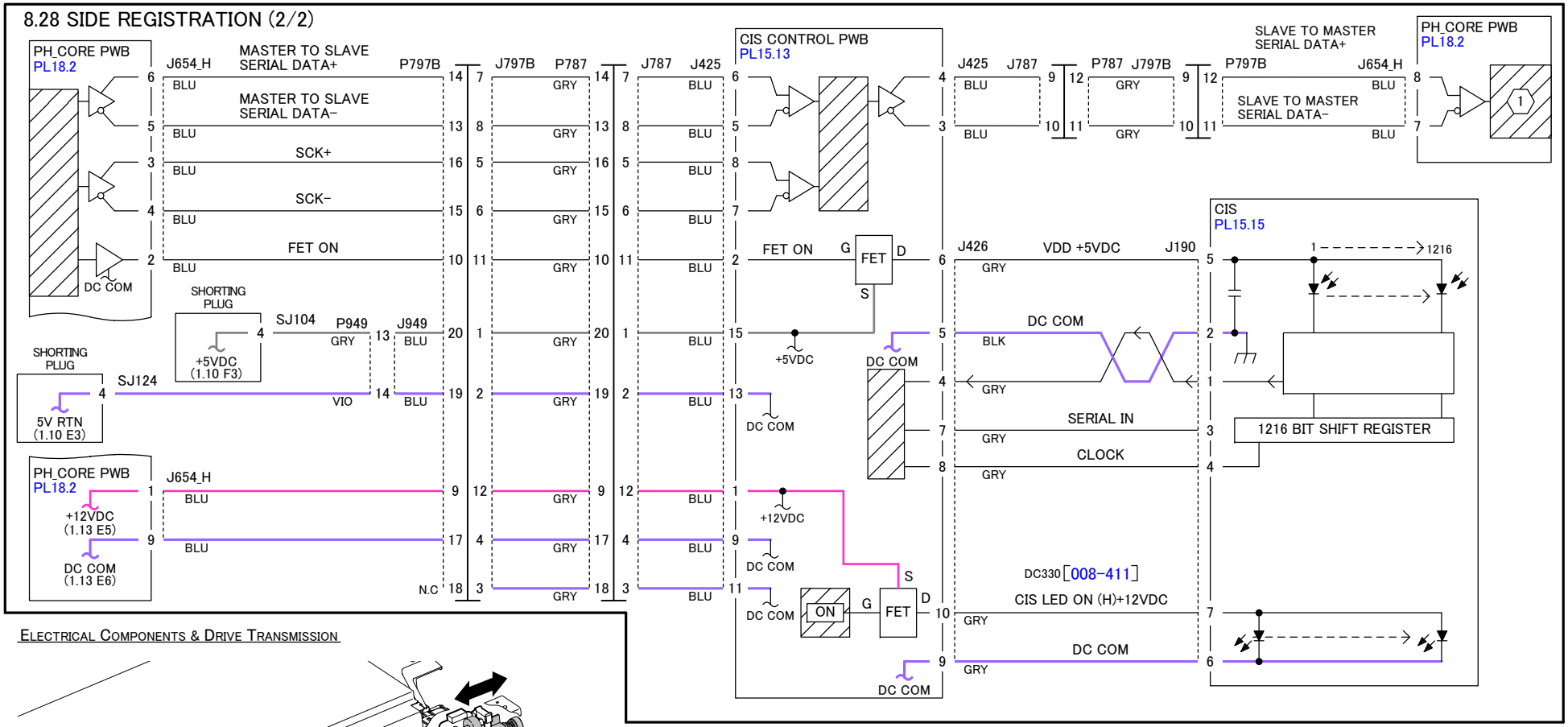
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

FAIL CODE

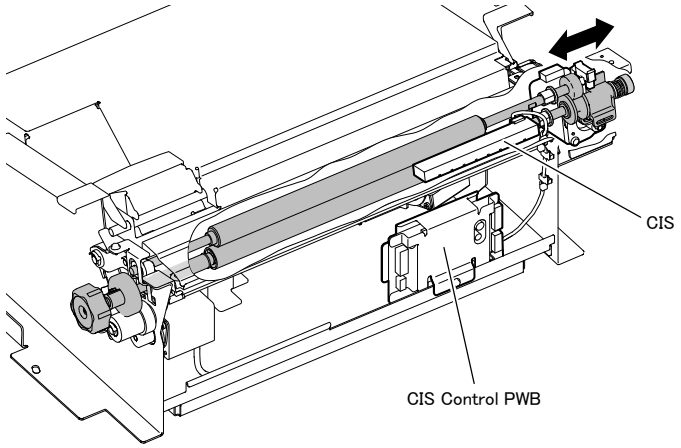
077-310
Side Shift Home Fail

j0cx730827

8.28 SIDE REGISTRATION (2/2)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



NOTE:

(1) FAIL CODE

077-135	CIS Side Regi Error	077-607	CIS FPGA Fail	077-612	CIS Detect High Fail
077-324	CIS Sub System Fail	077-608	CIS Communication Fail	077-613	CIS Detect Reverse Fail
077-603	CIS Dark Level 1 Error	077-609	CIS Hard Fail	077-614	CIS Side Edge Out of Range Fail
077-604	CIS White Level Error	077-610	CIS Side Edge Detect Fail	077-615	CIS Shading Recommend
077-605	CIS LED Power Control Fail	077-611	CIS Detect Low Fail		
077-606	CIS Shading Data Fail				

j0cx730828

8.29 REGISTRATION CONTROL (1/2)

DC330 [008-089] 600mm/s
DC330 [008-090] 440mm/s
DC330 [008-091] 379mm/s
DC330 [008-420] 528mm/s

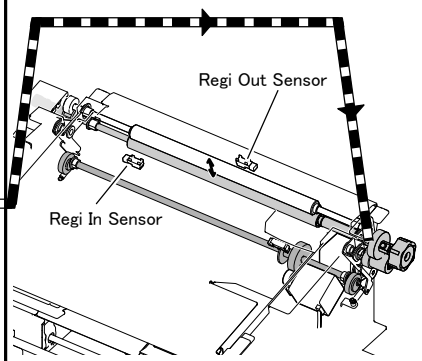
PH_CORE PWB PL18.2
PH_1 MD PWB PL18.2
REGI MOTOR PL15.13

J648_H CLOCK J660_H1 GRY
J681_H CLOCK A P798B J798B P786 J786 P373
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
BLU

NOTE: (1) CHIP FUSE

F15 5A
FUSE_15 STATUS 1.54
+24V_9 (1.34 H5)
+3.3VDC
DC COM

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



SHORTING PLUG
5V RTN (8.22 D4)
+5VDC (8.22 C4)
5V RTN (8.27 B4)
+5VDC (8.27 B4)
SJ42 SJ43 SJ40 SJ41
J131 J122 BLU

REGI IN SENSOR PL15.10
REGI OUT SENSOR PL15.15

J131 J789 P789 J797A P797A J597_H2 GRY
J122 J787 P787 J797B P797B GRY
PH_2 SENSOR PWB PL18.2
J596_H2 BLU

DC330 [008-147] PAPER SENSED (L)+5VDC
DC330 [008-148] PAPER SENSED (L)+5VDC
J651_H BLU

PH CORE PWB PL18.2
+5VDC
077-110
077-193
077-916
DC COM
J649_H GRY

J928 P928 GRY
REGI OUT SENSOR SIGNAL J679_X1 BLU
MK_EPG 1 MD PWB PL18.2

NOTE: (2) FAIL CODE

FAIL CODE

077-110	Regi In Sensor On Jam
077-193	Regi In Sensor On Jam (Up Purge)
077-916	Regi In Sensor Static Jam

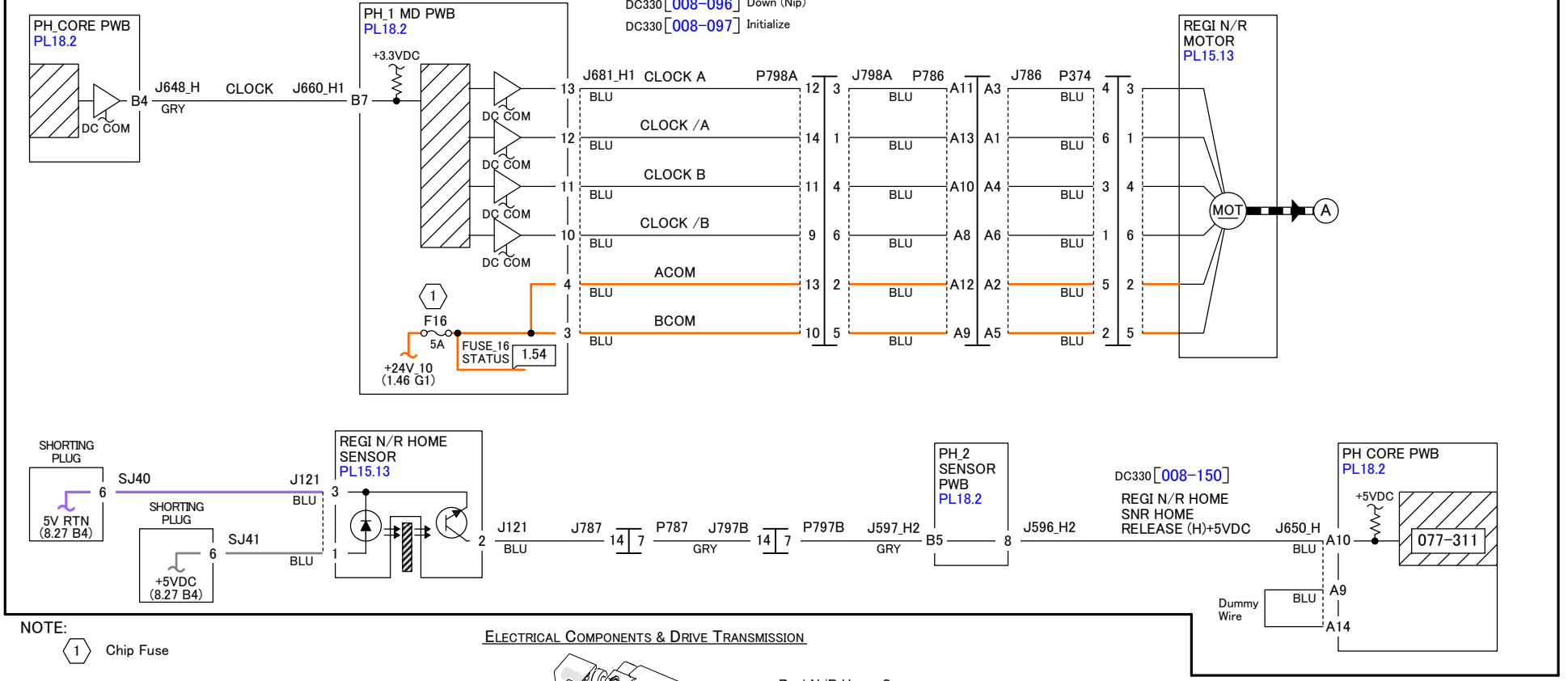
FAIL CODE

077-112	Regi Out Sensor On Jam
077-140	Regi Sync Not Found
077-177	Regi Out Sensor On Jam (UpPurge)
077-191	Lead Regi Error Over
077-192	Lead Regi Error Under
077-623	Lead Regi Over Of Range
077-624	Lead Regi Under Of Range
077-917	Regi Out Sensor Static Jam

j0cx730829

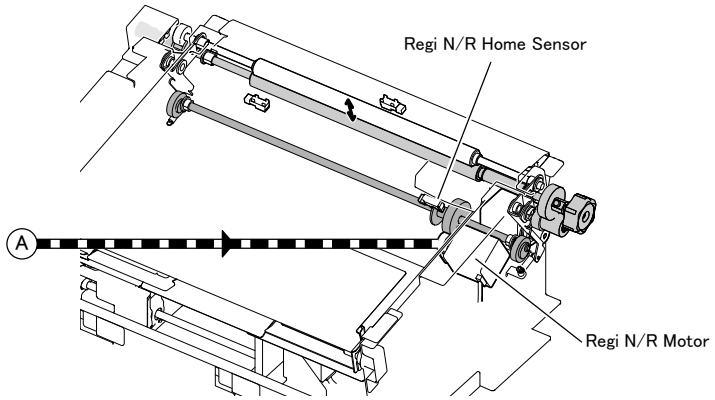
8.30 REGISTRATION CONTROL (2/2)

DC330 [008-095] Up (Release)
DC330 [008-096] Down (Nip)
DC330 [008-097] Initialize



NOTE:
(1) Chip Fuse

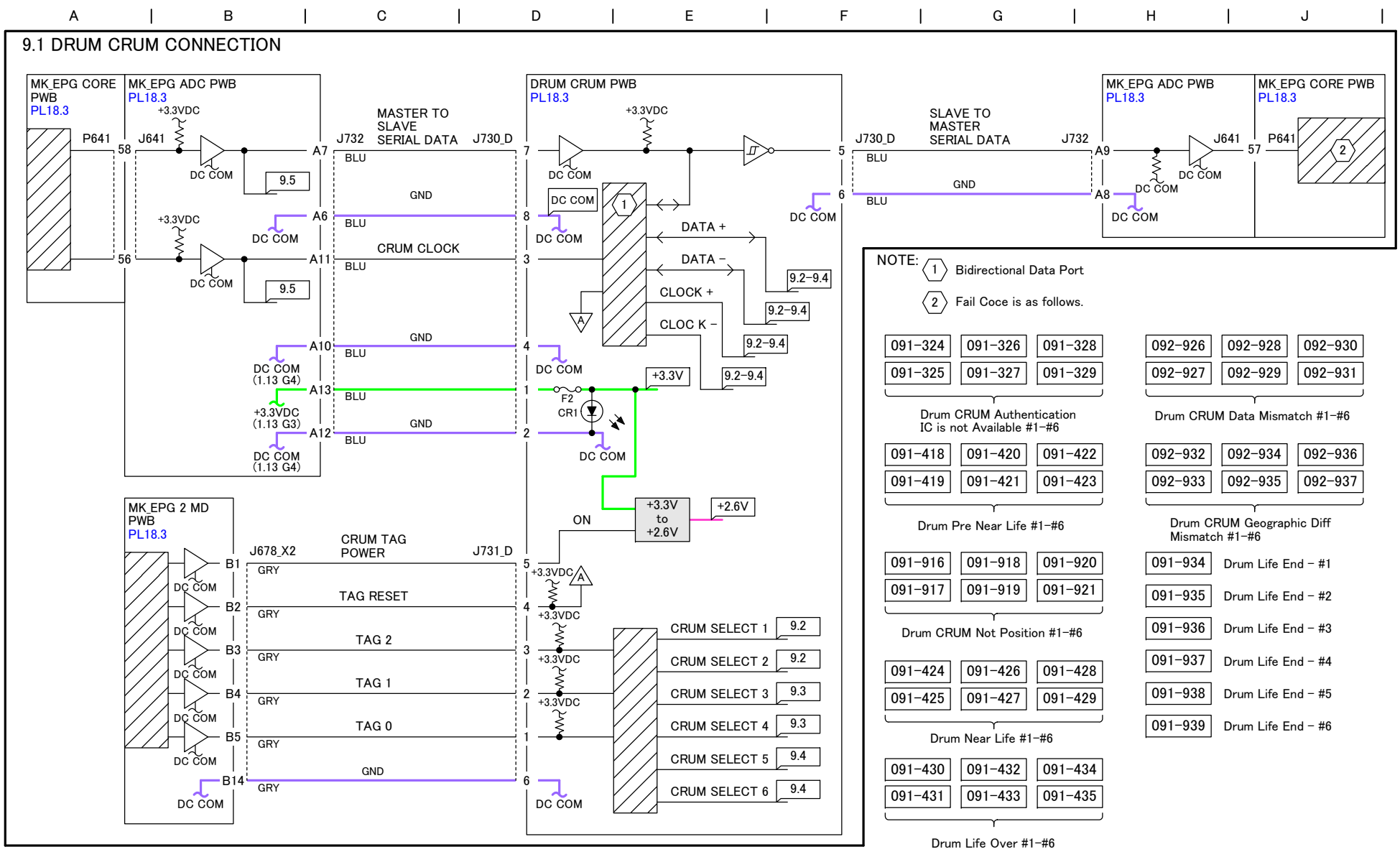
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FAIL CODE

077-311	Regi Nip/Release Fail

j0cx730830


9.1 DRUM CRUM CONNECTION
MK_EPG CORE PWB PL18.3
MK_EPG ADC PWB PL18.3
DRUM CRUM PWB PL18.3
MK_EPG ADC PWB PL18.3
MK_EPG CORE PWB PL18.3
MASTER TO SLAVE SERIAL DATA
SLAVE TO MASTER SERIAL DATA
P641
J641
J732
J730_D
+3.3VDC
DC COM
GND
BLU
CRUM CLOCK
DATA +
DATA −
CLOCK +
CLOC K −
+3.3V
F2
CR1
ON
+3.3V to +2.6V
+2.6V
MK_EPG 2 MD PWB PL18.3
J678_X2
J731_D
CRUM TAG POWER
TAG RESET
TAG 2
TAG 1
TAG 0
GRY
CRUM SELECT 1
CRUM SELECT 2
CRUM SELECT 3
CRUM SELECT 4
CRUM SELECT 5
CRUM SELECT 6
NOTE:
1 Bidirectional Data Port
2 Fail Coce is as follows.
091-324 091-326 091-328
091-325 091-327 091-329
Drum CRUM Authentication IC is not Available #1-#6
092-926 092-928 092-930
092-927 092-929 092-931
Drum CRUM Data Mismatch #1-#6
091-418 091-420 091-422
091-419 091-421 091-423
Drum Pre Near Life #1-#6
092-932 092-934 092-936
092-933 092-935 092-937
Drum CRUM Geographic Diff Mismatch #1-#6
091-916 091-918 091-920
091-917 091-919 091-921
Drum CRUM Not Position #1-#6
091-934 Drum Life End - #1
091-935 Drum Life End - #2
091-936 Drum Life End - #3
091-937 Drum Life End - #4
091-938 Drum Life End - #5
091-939 Drum Life End - #6
091-424 091-426 091-428
091-425 091-427 091-429
Drum Near Life #1-#6
091-430 091-432 091-434
091-431 091-433 091-435
Drum Life Over #1-#6

j0cx730901

9.2 DRUM LIFE CONTROL #1、Y (#2)

DRUM CRUM PWB
PL18.3

DRUM SUB CRUM PWB #1
PL5.5

DRUM SUB CRUM PWB Y (#2)
PL5.5

DRUM CARTRIDGE CRUM PWB #1
PL5.2

DRUM CARTRIDGE CRUM PWB Y (#2)
PL5.2

DRUM CRUM CARTRIDGE

DRUM CRUM CARTRIDGE

9.1 DATA + A7 BLU J733_D DATA + J735_D1 2
9.1 DATA − A8 YEL DATA − 1
9.1 CLOCK + A5 BLU CLOCK + 4
9.1 CLOCK − A6 YEL CLOCK − 3
9.1 CRUM SELECT 1 A1 BLU CRUM SELECT 1 8
A2 BLU 7
+3.3VDC (9.1 E3)
A3 BLU 6
+2.6VDC (9.1 E4)
A4 BLU 5
RTN (9.1 D2)

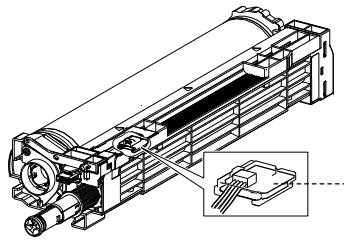
+3.3VDC
+2.6VDC
DC COM
+3.3VDC
+2.6VDC
RTN

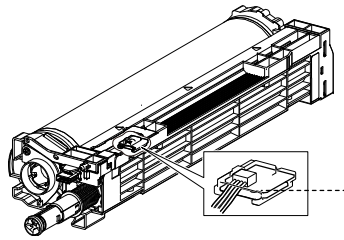
J736_D1 4 BLU EPG CRUM DATA DP1811 4 4 BLU DJ1811 J181_D1 1 4 DATA
3 +2.6VDC BLU 5 3 BLU 2 3 VCC
2 CRUM CLOCK BLU 6 2 BLU 3 2 CLOCK
1 DC COM BLU 7 1 BLU 4 1 GND

9.1 DATA + B3 GRY J735_D2 2
9.1 DATA − B4 YEL 1
9.1 CLOCK + B1 GRY 4
9.1 CLOCK − B2 YEL 3
9.1 CRUM SELECT 2 A9 BLU 8
A10 BLU 7
+3.3VDC (9.1 E3)
A11 BLU 6
+2.6VDC (9.1 E4)
A12 BLU 5
RTN (9.1 D2)

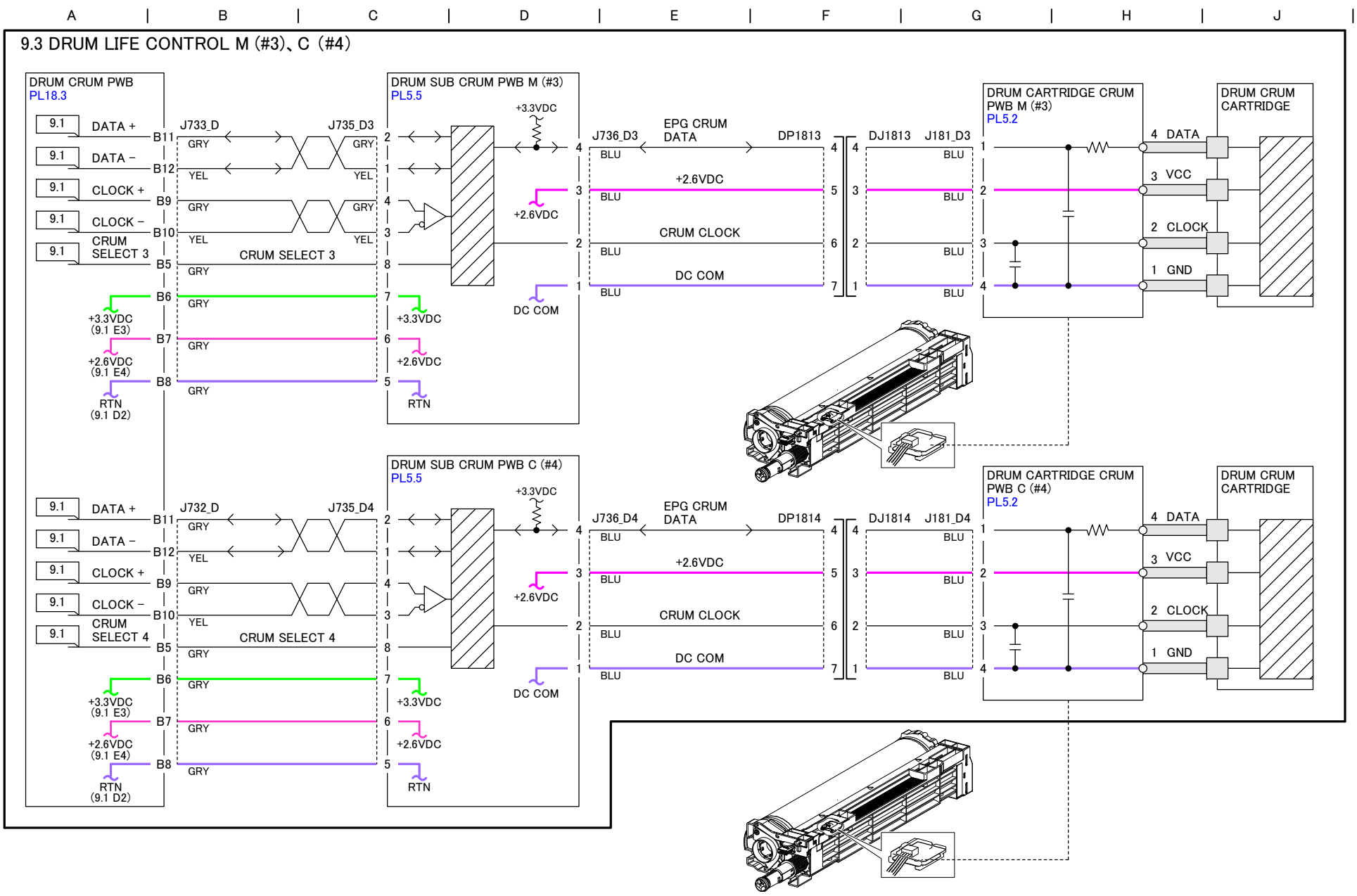
+3.3VDC
+2.6VDC
DC COM
+3.3VDC
+2.6VDC
RTN

J736_D2 4 BLU EPG CRUM DATA DP1812 4 4 BLU DJ1812 J181_D2 1 4 DATA
3 +2.6VDC BLU 5 3 BLU 2 3 VCC
2 CRUM CLOCK BLU 6 2 BLU 3 2 CLOCK
1 DC COM BLU 7 1 BLU 4 1 GND

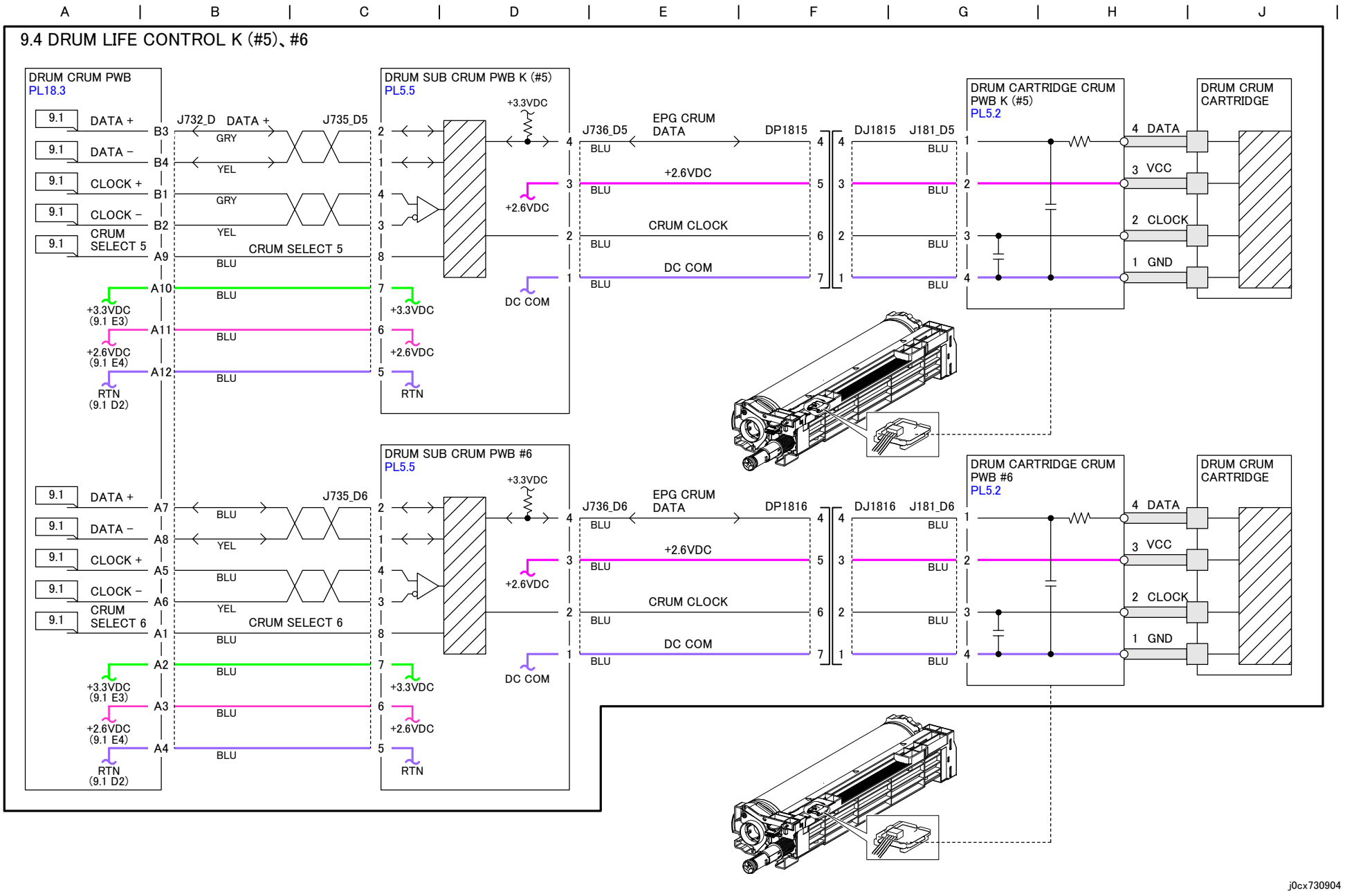


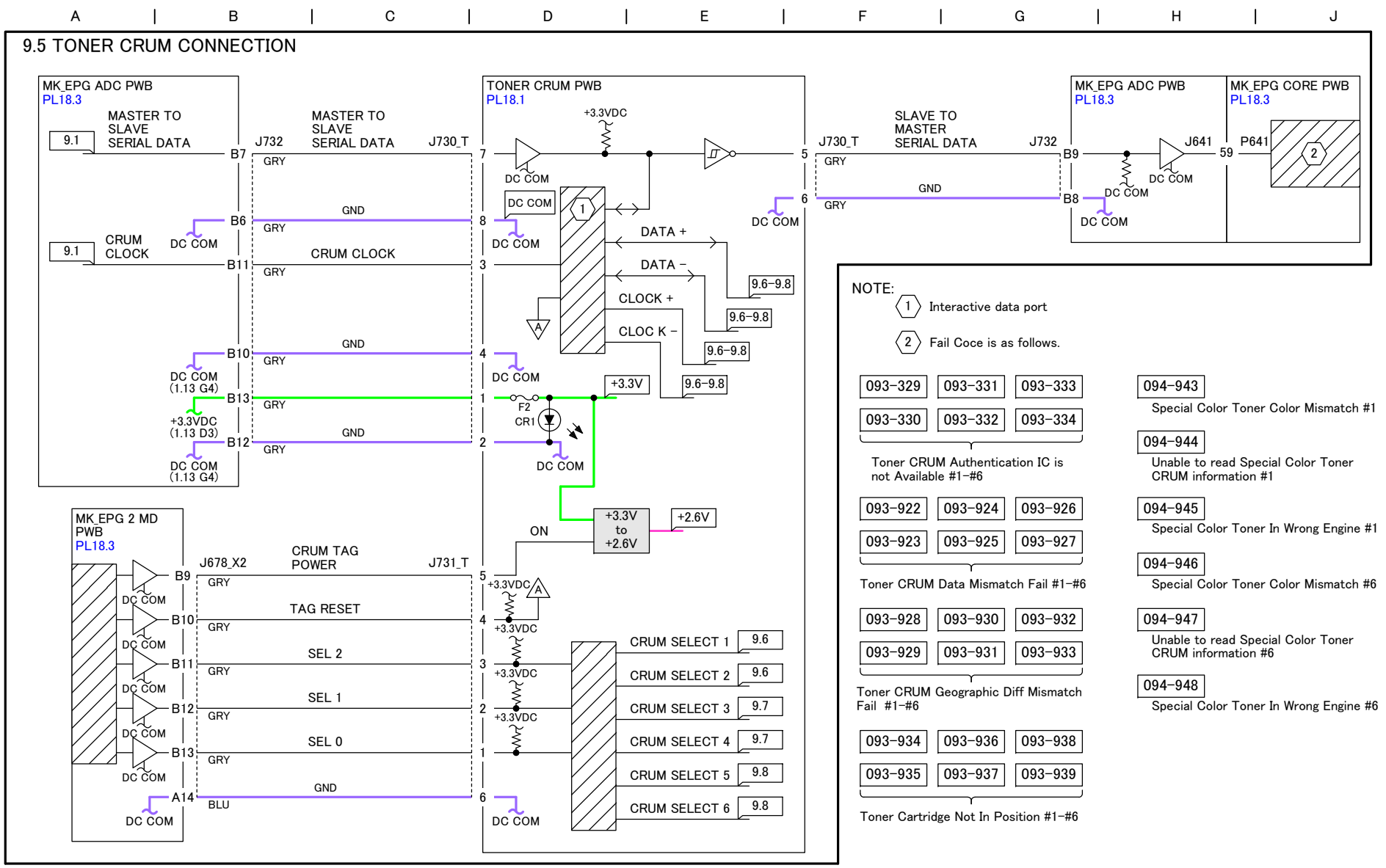


j0cx730902


9.3 DRUM LIFE CONTROL M (#3)、C (#4)
DRUM CRUM PWB
PL18.3
DRUM SUB CRUM PWB M (#3)
PL5.5
DRUM SUB CRUM PWB C (#4)
PL5.5
DRUM CARTRIDGE CRUM PWB M (#3)
PL5.2
DRUM CARTRIDGE CRUM PWB C (#4)
PL5.2
DRUM CRUM CARTRIDGE
DATA +
DATA –
CLOCK +
CLOCK –
CRUM SELECT 3
CRUM SELECT 4
J733_D
J735_D3
J732_D
J735_D4
J736_D3
J736_D4
EPG CRUM DATA
DP1813
DP1814
DJ1813
DJ1814
J181_D3
J181_D4
+3.3VDC
+2.6VDC
CRUM CLOCK
DC COM
RTN
GRY
YEL
BLU
4 DATA
3 VCC
2 CLOCK
1 GND
j0cx730903

9.4 DRUM LIFE CONTROL K (#5)、#6




9.5 TONER CRUM CONNECTION
MK_EPG ADC PWB
PL18.3
MASTER TO SLAVE SERIAL DATA
9.1
B7
J732
GRY
J730_T
7
TONER CRUM PWB
PL18.1
+3.3VDC
DC COM
5
J730_T
SLAVE TO MASTER SERIAL DATA
J732
B9
J641
59
P641
MK_EPG ADC PWB
PL18.3
MK_EPG CORE PWB
PL18.3
GND
B6
8
B8
6
CRUM CLOCK
9.1
B11
3
DATA +
DATA –
CLOCK +
CLOC K –
9.6–9.8
B10
4
B13
1
+3.3V
F2
CR1
DC COM (1.13 G4)
+3.3VDC (1.13 D3)
B12
2
MK_EPG 2 MD PWB
PL18.3
J678_X2
CRUM TAG POWER
J731_T
B9
B10
B11
B12
B13
A14
TAG RESET
SEL 2
SEL 1
SEL 0
BLU
ON
+3.3V to +2.6V
+2.6V
CRUM SELECT 1
CRUM SELECT 2
CRUM SELECT 3
CRUM SELECT 4
CRUM SELECT 5
CRUM SELECT 6
9.6
9.7
9.8
NOTE:
1 Interactive data port
2 Fail Coce is as follows.
093-329
093-331
093-333
093-330
093-332
093-334
Toner CRUM Authentication IC is not Available #1–#6
093-922
093-924
093-926
093-923
093-925
093-927
Toner CRUM Data Mismatch Fail #1–#6
093-928
093-930
093-932
093-929
093-931
093-933
Toner CRUM Geographic Diff Mismatch Fail #1–#6
093-934
093-936
093-938
093-935
093-937
093-939
Toner Cartridge Not In Position #1–#6
094-943
Special Color Toner Color Mismatch #1
094-944
Unable to read Special Color Toner CRUM information #1
094-945
Special Color Toner In Wrong Engine #1
094-946
Special Color Toner Color Mismatch #6
094-947
Unable to read Special Color Toner CRUM information #6
094-948
Special Color Toner In Wrong Engine #6

j0cx730905

9.6 TONER LIFE CONTROL #1、Y (#2)

TONER CRUM PWB
PL18.6

TONER SUB CRUM PWB #1
PL18.17

TONER SUB CRUM PWB Y (#2)
PL18.17

TONER CARTRIDGE
CRUM PWB #1
PL5.11

TONER CARTRIDGE
CRUM PWB Y (#2)
PL5.11

TONER CARTRIDGE

9.5 DATA + — A7 — J733_T — BLU — J735_T1 — 2
9.5 DATA − — A8 — YEL — 1
9.5 CLOCK + — A5 — BLU — 4
9.5 CLOCK − — A6 — YEL — 3
9.5 CRUM SELECT 1 — A1 — CRUM SELECT 1 — BLU — 8
A2 — BLU — 7
+3.3VDC (9.5 D3)
A3 — BLU — 6
+2.6VDC (9.5 E4)
A4 — BLU — 5
RTN (9.5 D2)

+3.3VDC — 4
+2.6VDC — 3
DC COM — 1
+3.3VDC — 7
+2.6VDC — 6
RTN — 5

J736_T1 — BLU — EPG CRUM DATA — DJ8471S — 4 5
+2.6VDC — BLU — 3 5 4
CRUM CLOCK — BLU — 2 6 3
DC COM — BLU — 1 7 2

DP8471S — J1791
BLU — 1 2 3 4

4 DATA
3 VCC
2 CLOCK
1 GND

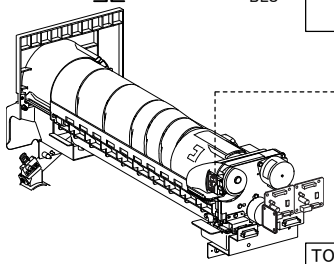
9.5 DATA + — B3 — GRY — J735_T2 — 2
9.5 DATA − — B4 — YEL — 1
9.5 CLOCK + — B1 — GRY — 4
9.5 CLOCK − — B2 — YEL — 3
9.5 CRUM SELECT 2 — A9 — CRUM SELECT 2 — BLU — 8
A10 — BLU — 7
+3.3VDC (9.5 D3)
A11 — BLU — 6
+2.6VDC (9.5 E4)
A12 — BLU — 5
RTN (9.5 D2)

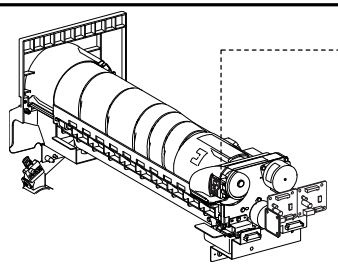
+3.3VDC — 4
+2.6VDC — 3
DC COM — 1
+3.3VDC — 7
+2.6VDC — 6
RTN — 5

J736_T2 — BLU — EPG CRUM DATA — DJ8472S — 4 5
+2.6VDC — BLU — 3 5 4
CRUM CLOCK — BLU — 2 6 3
DC COM — BLU — 1 7 2

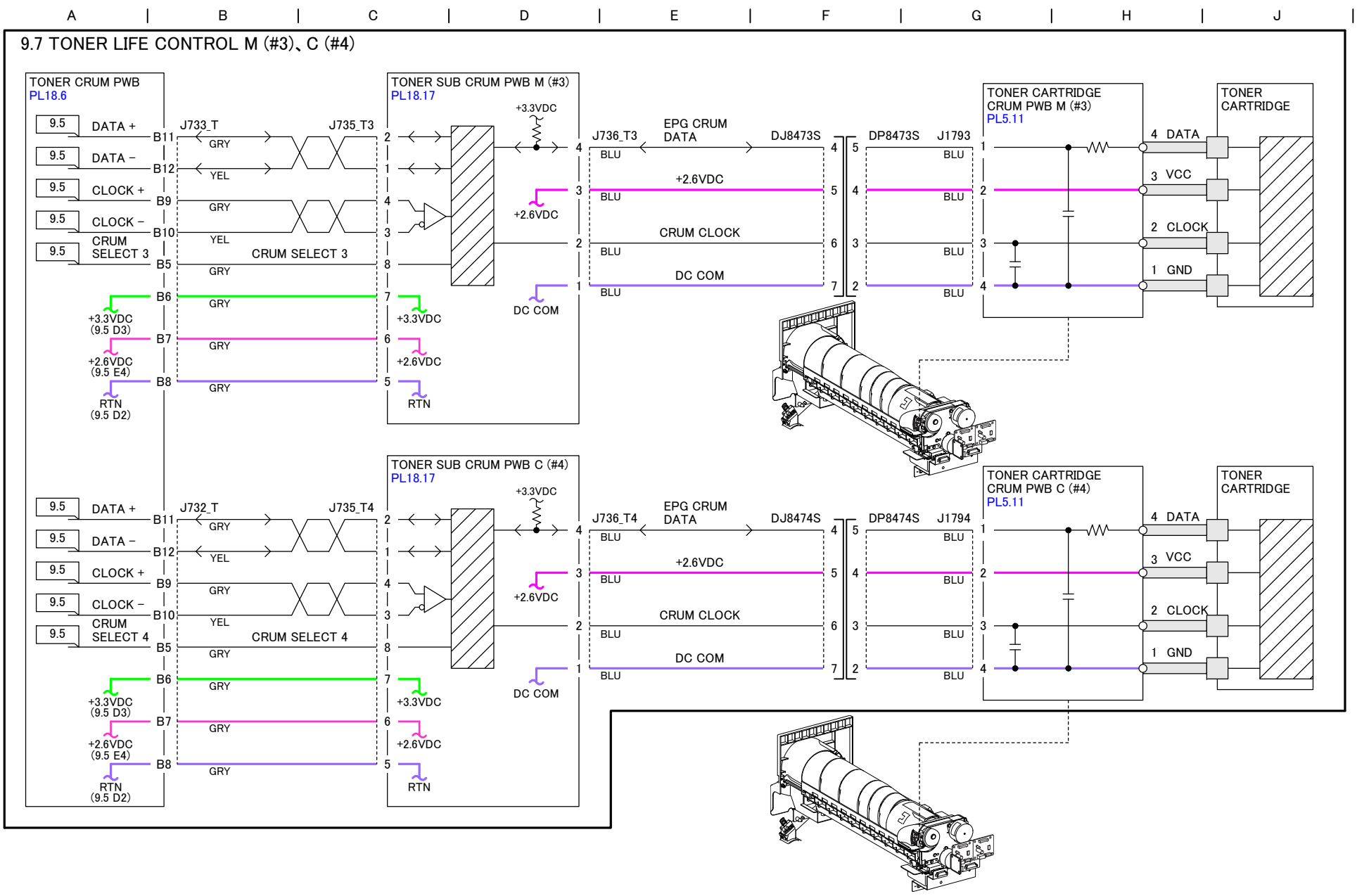
DP8472S — J179
BLU — 1 2 3 4

4 DATA
3 VCC
2 CLOCK
1 GND

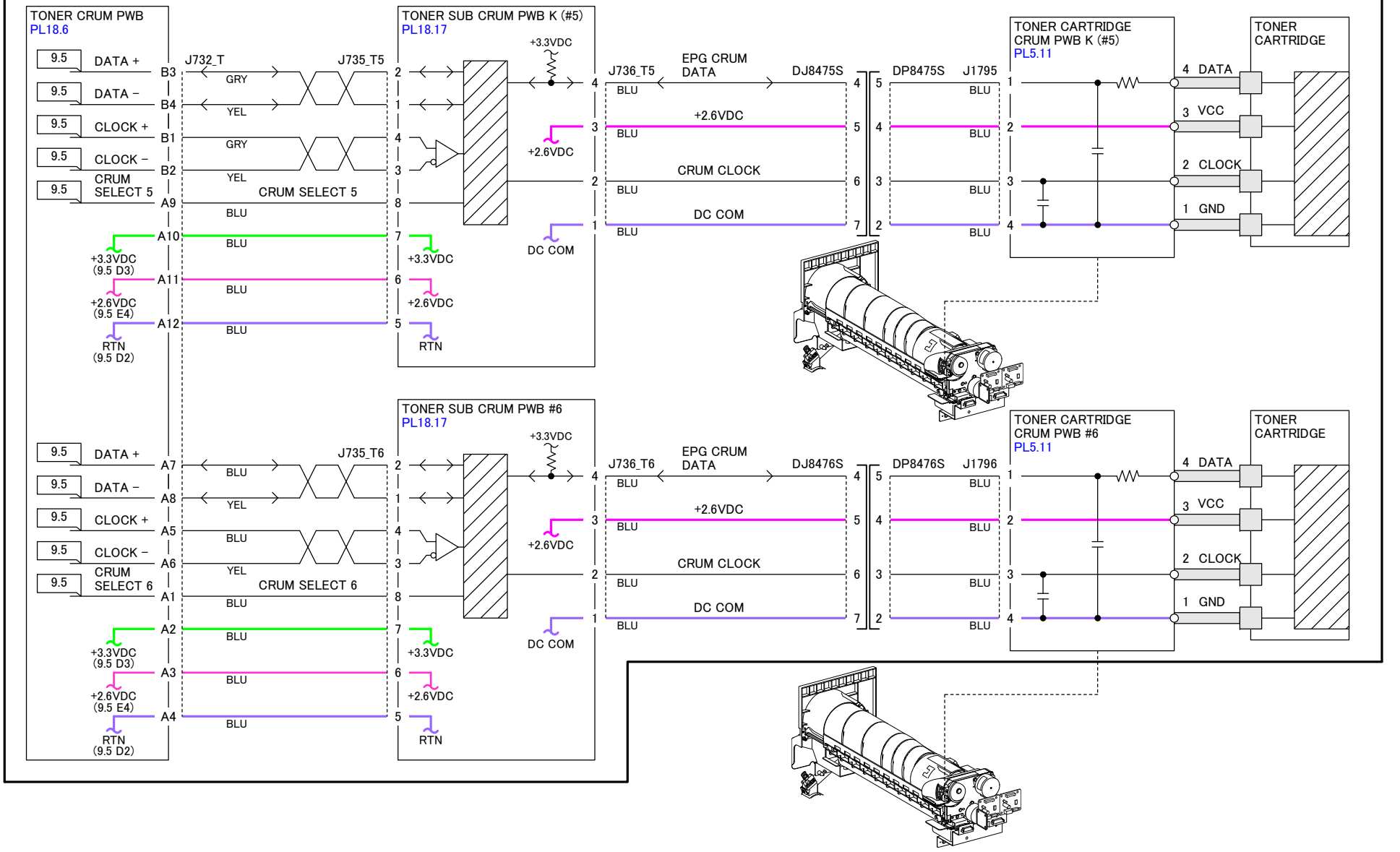


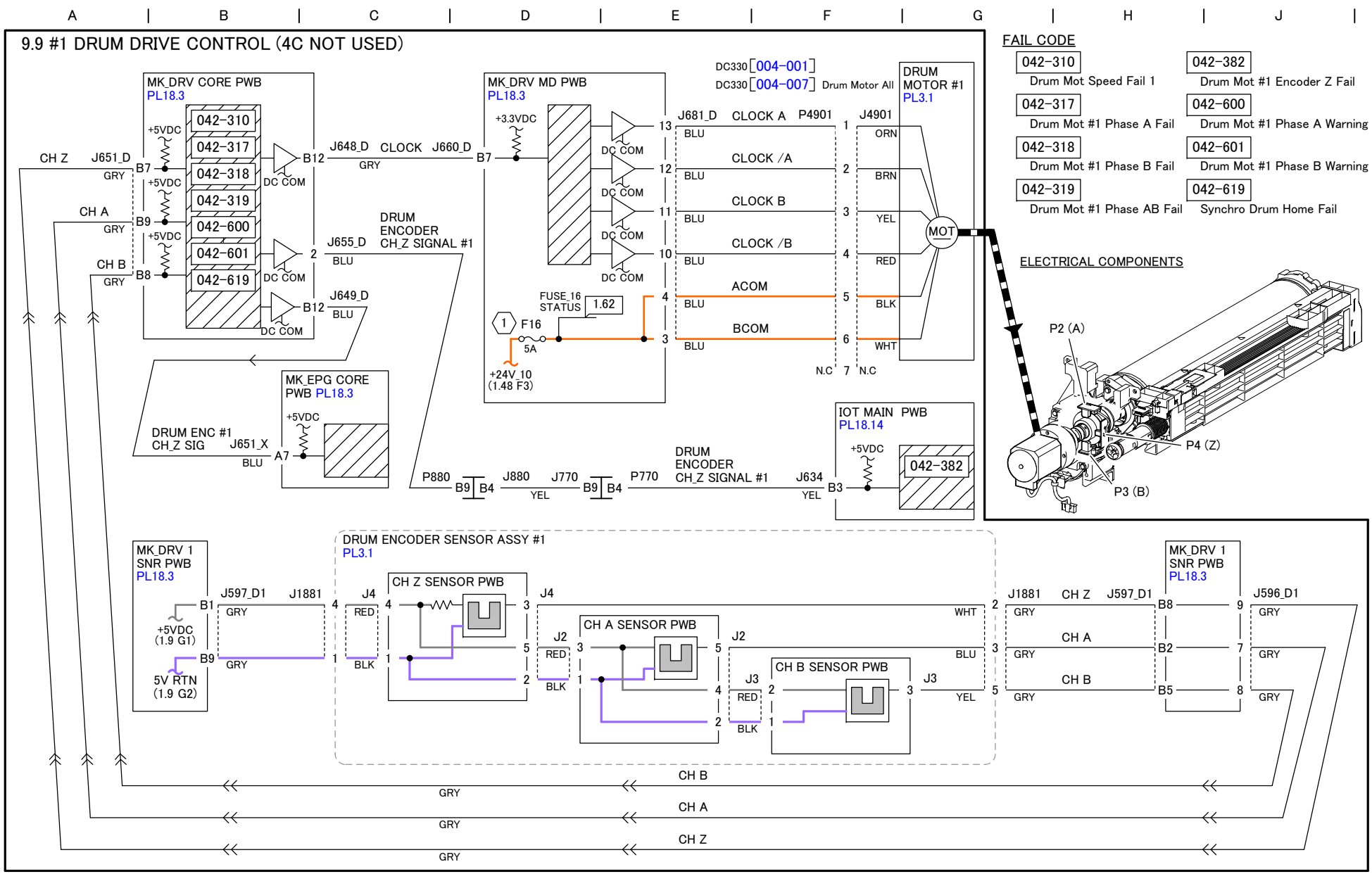


j0cx730906


9.7 TONER LIFE CONTROL M (#3)、C (#4)
TONER CRUM PWB
PL18.6
TONER SUB CRUM PWB M (#3)
PL18.17
TONER SUB CRUM PWB C (#4)
PL18.17
TONER CARTRIDGE CRUM PWB M (#3)
PL5.11
TONER CARTRIDGE CRUM PWB C (#4)
PL5.11
TONER CARTRIDGE
DATA +
DATA −
CLOCK +
CLOCK −
CRUM SELECT 3
CRUM SELECT 4
+3.3VDC (9.5 D3)
+2.6VDC (9.5 E4)
RTN (9.5 D2)
J733_T
J735_T3
J732_T
J735_T4
J736_T3
J736_T4
EPG CRUM DATA
DJ8473S
DJ8474S
DP8473S
DP8473S
J1793
J1794
+2.6VDC
CRUM CLOCK
DC COM
GRY
YEL
BLU
4 DATA
3 VCC
2 CLOCK
1 GND
j0cx730907

9.8 TONER LIFE CONTROL K (#5)、#6





NOTE:

1 Chip Fuse

j0cx730909

9.10 Y (#2) DRUM DRIVE CONTROL

MK_DRV CORE PWB PL18.3
042-311
042-320
042-321
042-322
042-602
042-603
042-619
042-619
+5VDC
DC COM
CH Z J651_D GRY B4
CH A GRY B6
CH B GRY B5
B11 J648_D BLK CLOCK J660_D A9
3 J655_D BLU DRUM ENCODER CH_Z SIGNAL #2
B11 J649_D BLU

MK_DRV MD PWB PL18.3
+3.3VDC
DC COM
9 8 7 6 18 17
FUSE_9 STATUS 1.62
1 F9 5A
+24V_3 (1.30 F2)

DC330[004-002]
DC330[004-007] Drum Motor All

J682_D CLOCK A P4902 J4902
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
BLU
1 ORN
2 BRN
3 YEL
4 RED
5 BLK
6 WHT
N.C 7 N.C

DRUM MOTOR Y (#2) PL3.1
MOT

MK_EPG CORE PWB PL18.3
+5VDC
DRUM ENC #2 CH_Z SIG J651_X BLU A8

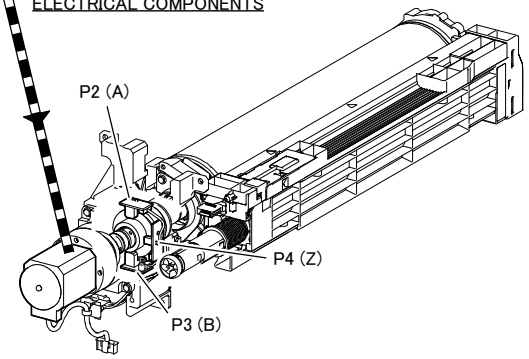
P880 B7 B6 J880 YEL J770 B7 B6 P770
DRUM ENCODER CH_Z SIGNAL #2 J634 YEL B1

IOT MAIN PWB PL18.14
+5VDC
042-383

FAIL CODE

042-311 Drum Mot Speed Fail 2	042-383 Drum Mot #2 Encoder Z Fail
042-320 Drum Mot #2 Phase A Fail	042-602 Drum Mot #2 Phase A Warning
042-321 Drum Mot #2 Phase B Fail	042-603 Drum Mot #2 Phase B Warning
042-322 Drum Mot #2 Phase AB Fail	042-619 Synchro Drum Home Fail

ELECTRICAL COMPONENTS



MK_DRV 1 SNR PWB PL18.3
B10 J597_D1 GRY J1882
+5VDC (1.9 G1)
B18 GRY
5V RTN (1.9 G2)

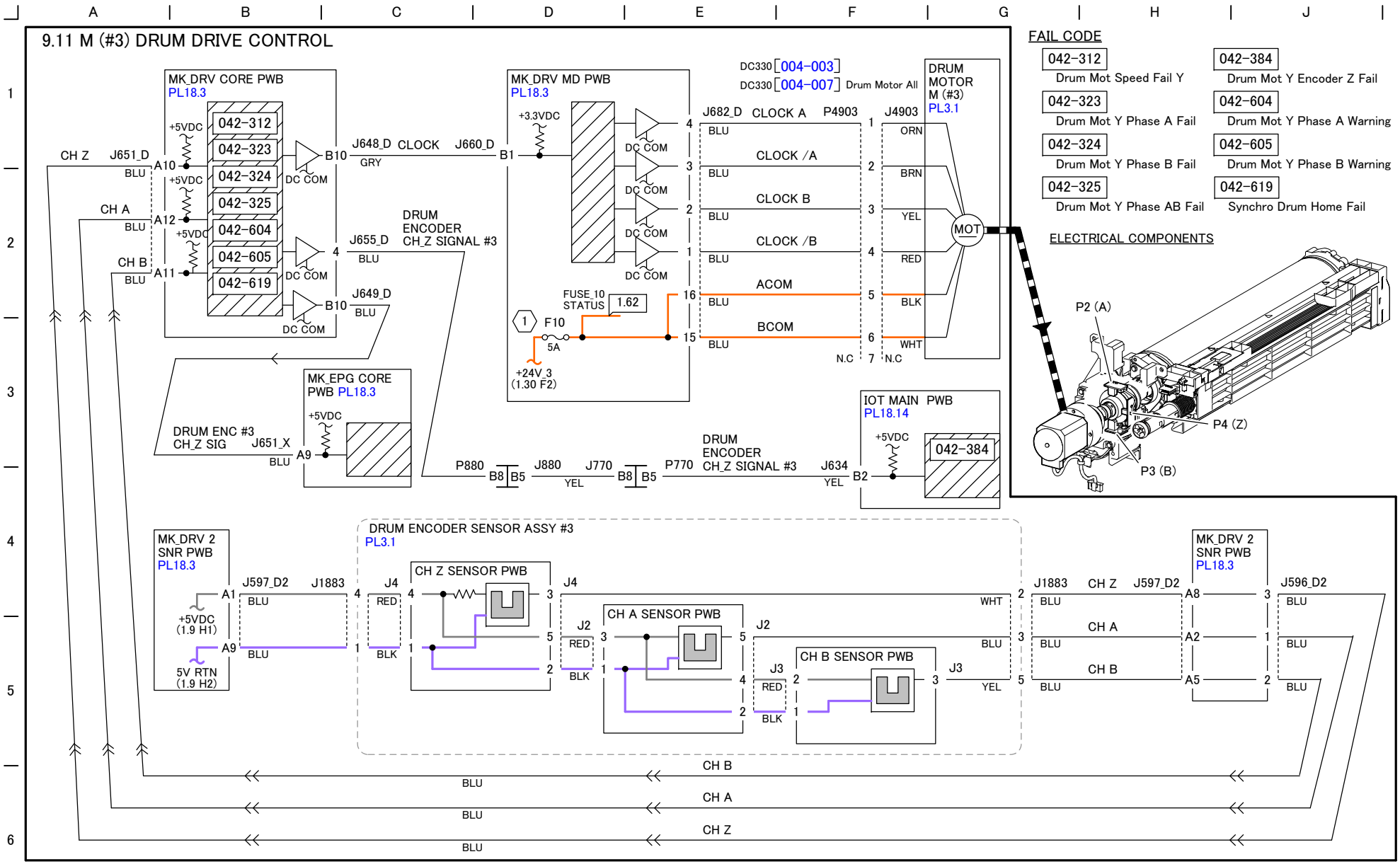
DRUM ENCODER SENSOR ASSY Y (#2) PL3.1
CH Z SENSOR PWB
J4 RED BLK
CH A SENSOR PWB
J2 RED BLK
CH B SENSOR PWB
J3 RED BLK
J4 WHT
J2 BLU
J3 YEL

J1882 CH Z J597_D1 GRY
CH A GRY
CH B GRY
MK_DRV 1 SNR PWB PL18.3
B17 B11 B14
J596_D1 GRY

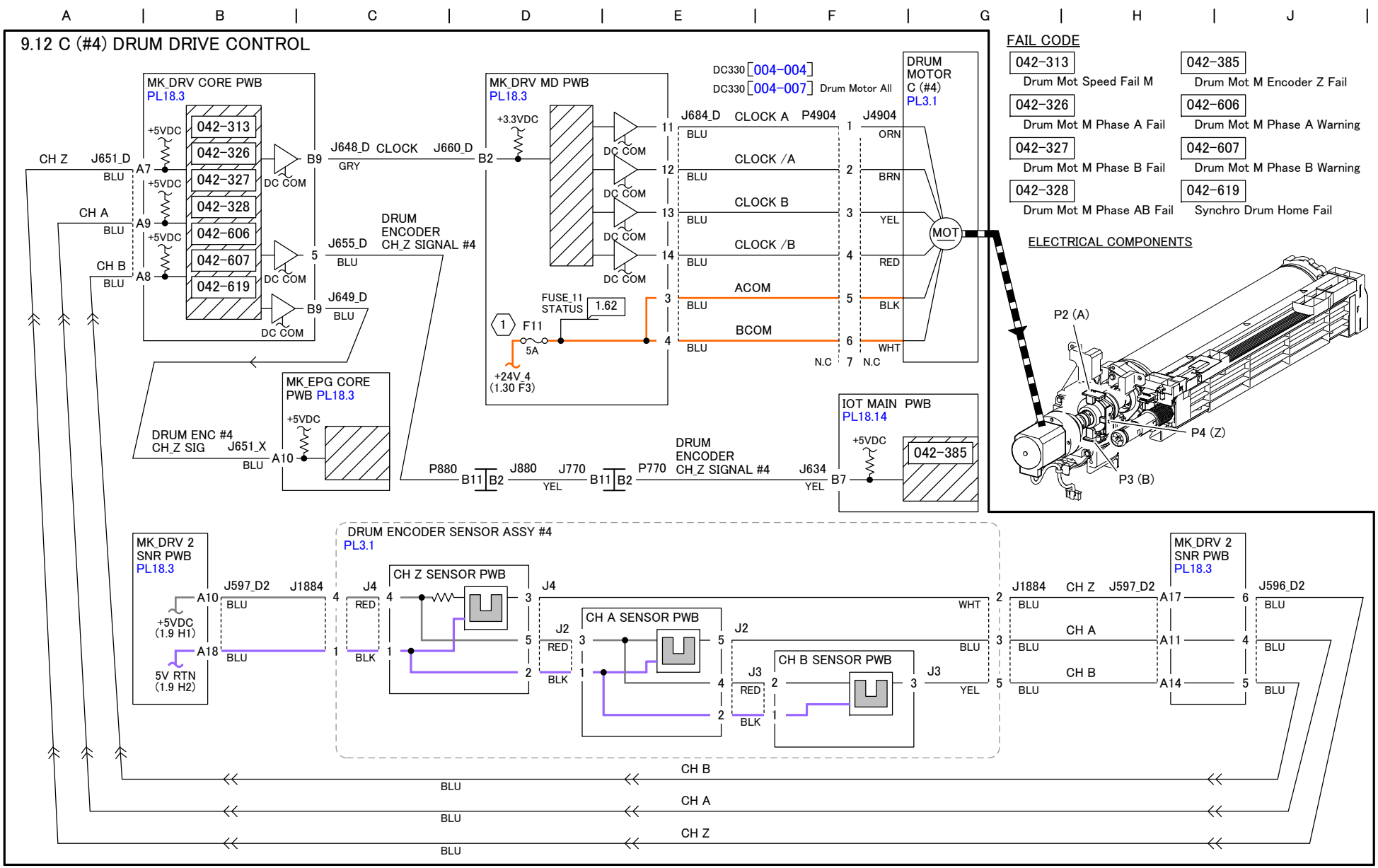
CH B GRY
CH A GRY
CH Z GRY

NOTE: (1) Chip Fuse

j0cx730910


9.11 M (#3) DRUM DRIVE CONTROL
MK_DRV CORE PWB
PL18.3
042-312
042-323
042-324
042-325
042-604
042-605
042-619
CH Z
J651_D
BLU
CH A
CH B
A10
A12
A11
+5VDC
DC COM
B10
J648_D
GRY
CLOCK
J660_D
B1
J655_D
J649_D
DRUM ENCODER CH_Z SIGNAL #3
MK_DRV MD PWB
PL18.3
+3.3VDC
FUSE_10 STATUS
1.62
F10
5A
+24V_3
(1.30 F2)
DC330[004-003]
DC330[004-007] Drum Motor All
J682_D
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
P4903
J4903
ORN
BRN
YEL
RED
BLK
WHT
N.C
DRUM MOTOR M (#3)
PL3.1
MOT
MK_EPG CORE PWB PL18.3
DRUM ENC #3 CH_Z SIG
J651_X
A9
P880
J880
J770
P770
J634
IOT MAIN PWB
PL18.14
042-384
DRUM ENCODER SENSOR ASSY #3
PL3.1
CH Z SENSOR PWB
CH A SENSOR PWB
CH B SENSOR PWB
J4
J2
J3
MK_DRV 2 SNR PWB
PL18.3
J597_D2
J1883
+5VDC (1.9 H1)
5V RTN (1.9 H2)
J596_D2
CH B
CH A
CH Z
FAIL CODE
042-312
Drum Mot Speed Fail Y
042-323
Drum Mot Y Phase A Fail
042-324
Drum Mot Y Phase B Fail
042-325
Drum Mot Y Phase AB Fail
042-384
Drum Mot Y Encoder Z Fail
042-604
Drum Mot Y Phase A Warning
042-605
Drum Mot Y Phase B Warning
042-619
Synchro Drum Home Fail
ELECTRICAL COMPONENTS
P2 (A)
P4 (Z)
P3 (B)
NOTE:
1 Chip Fuse
j0cx730911

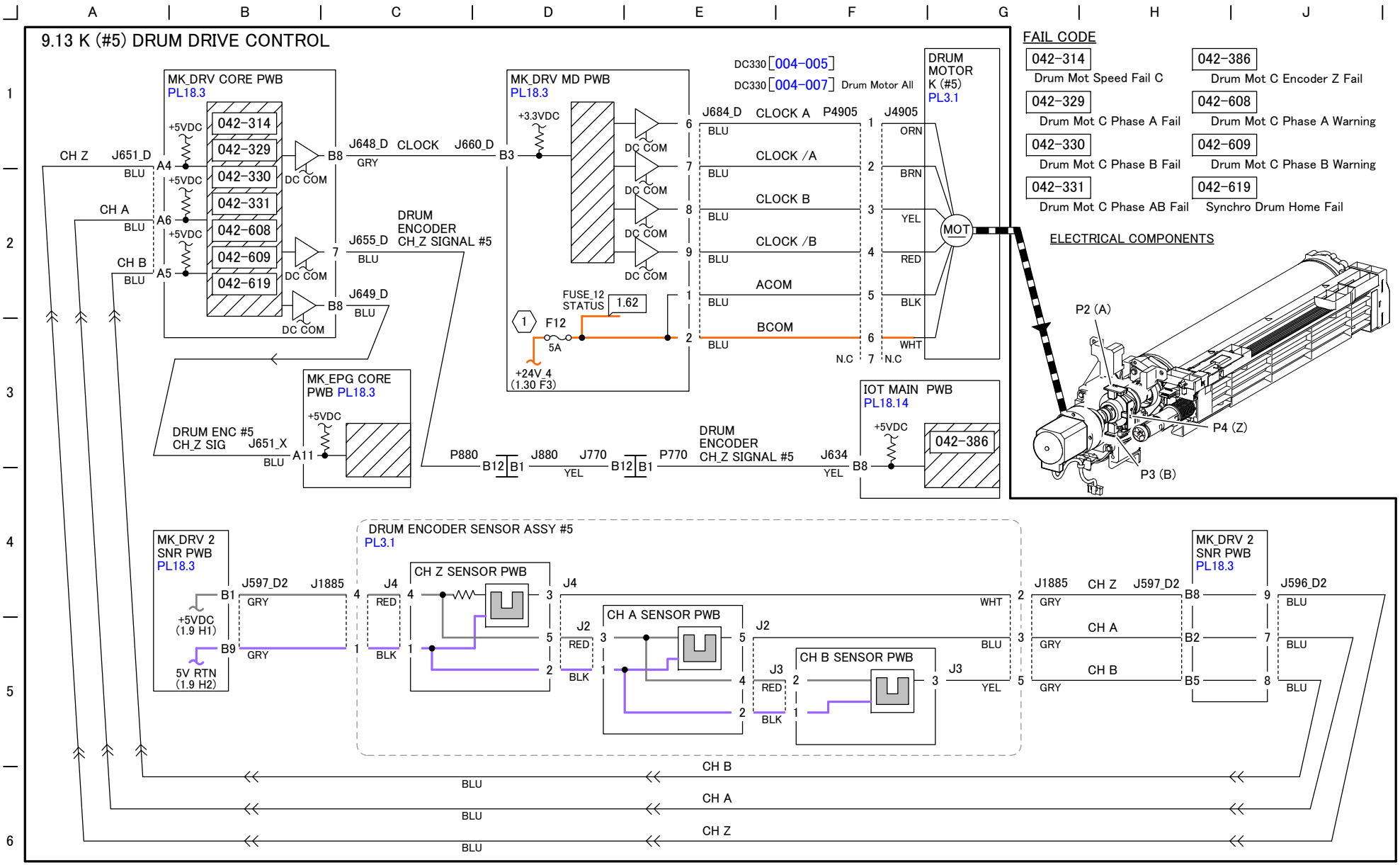
9.12 C (#4) DRUM DRIVE CONTROL



NOTE:

(1) Chip Fuse

j0cx730912



NOTE:

(1) Chip Fuse

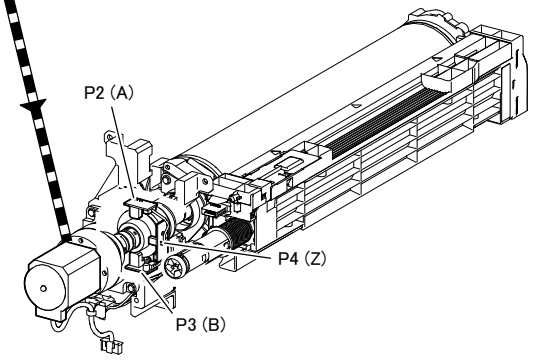
j0cx730913

9.14 #6 DRUM DRIVE CONTROL (4C NOT USED)

FAIL CODE

042-315 Drum Mot Speed Fail K	042-387 Drum Mot K Encoder Z Fail
042-332 Drum Mot K Phase A Fail	042-610 Drum Mot K Phase A Warning
042-333 Drum Mot K Phase B Fail	042-611 Drum Mot K Phase B Warning
042-334 Drum Mot K Phase AB Fail	042-619 Synchro Drum Home Fail

ELECTRICAL COMPONENTS

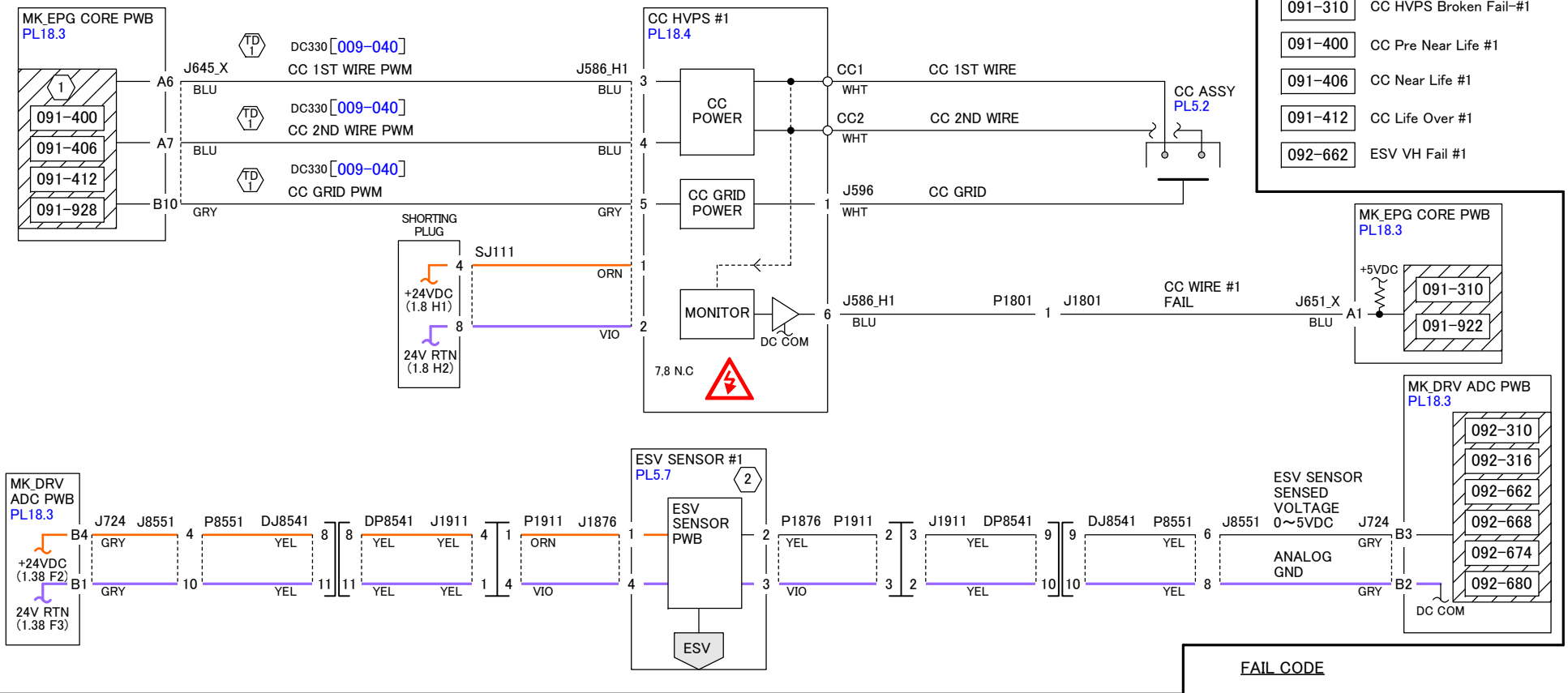


NOTE:

(1) Chip Fuse

j0cx730914

9.15 CHARGING AND EXPOSURE #1 (4C NOT USED)



FAIL CODE

091-310	CC HVPS Broken Fail-#1
091-400	CC Pre Near Life #1
091-406	CC Near Life #1
091-412	CC Life Over #1
092-662	ESV VH Fail #1

NOTE:

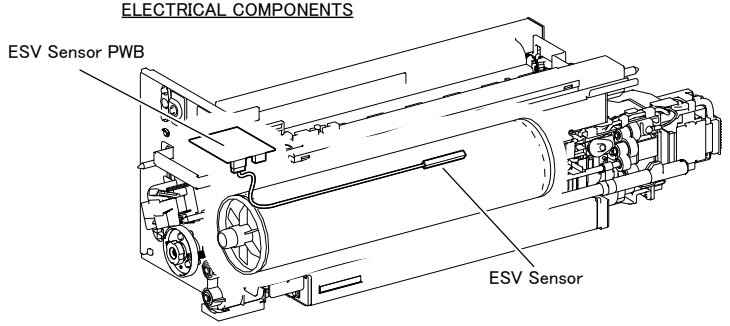
(1) CC life management is performed during CC cumulative discharge time. However, counter (no. of prints) is also managed by HFSI.

(2) Take note not to let toner adhere to ESV Sensor connector. (It may cause poor contact) Also, for ESV Sensor PWB and Prove, do not replace with other ESV Sensor for use as output is adjusted by factory default.

TD1 When Diag is On, the voltage between each test point and GND is as follows.

Test Point	Voltage
J645_X-A6	約+2.65VDC
J645_X-A7	約+2.65VDC
J645_X-B10	約+2.48VDC

ELECTRICAL COMPONENTS

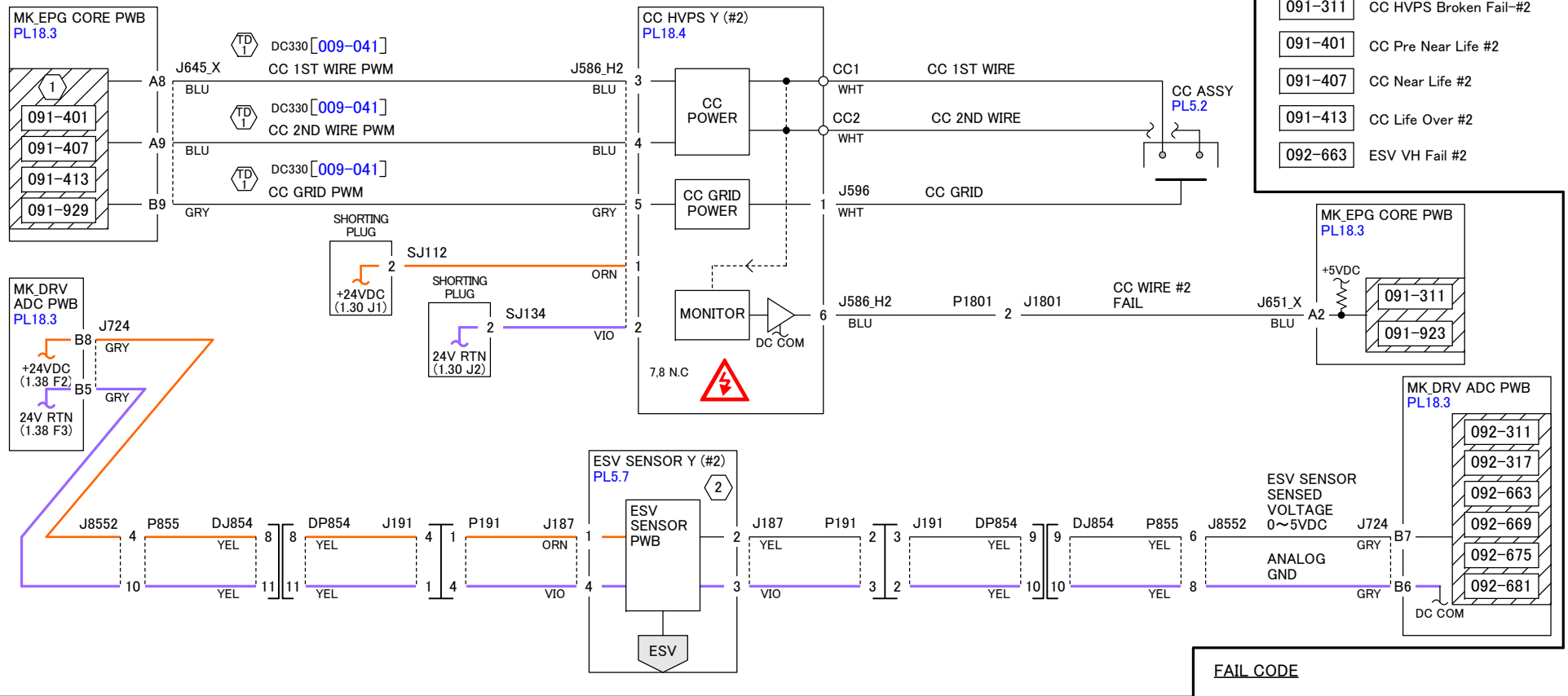


FAIL CODE

091-922	CC Wire Cut Fail #1
091-928	CC Life End #1
092-310	VH Charge Check Fail #1
092-316	ESV Sensor Fail - #1
092-668	ESV Vcont VH4 Fail #1
092-674	ESV Vcunt VH5 Fail #1
092-680	ESV Vcunt VH6 Fail #1

j0cx730915

9.16 CHARGING AND EXPOSURE Y (#2)



FAIL CODE

091-311	CC HVPS Broken Fail-#2
091-401	CC Pre Near Life #2
091-407	CC Near Life #2
091-413	CC Life Over #2
092-663	ESV VH Fail #2

FAIL CODE

091-923	CC Wire Cut Fail #2
091-929	CC Life End #2
092-311	VH Charge Check Fail #2
092-317	ESV Sensor Fail – #2
092-669	ESV Vcont VH4 Fail #2
092-675	ESV Vcunt VH5 Fail #2
092-681	ESV Vcunt VH6 Fail #2

NOTE:

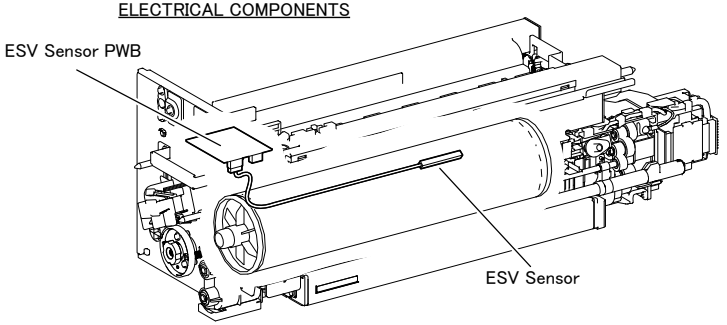
(1) CC life is managed by CC Total Discharge Time.
It is also managed by HFSI Counter (print qty).

(2) Take care not to have ESV Sensor Connector stained with toner.
(It can cause poor contact.)
Outputs from ESV Sensor PWB and Prove are adjusted at factory,
so don't take the ESV Sensor for another one.

(TD 1) The table shows voltage between Test Point and GND with diag ON.

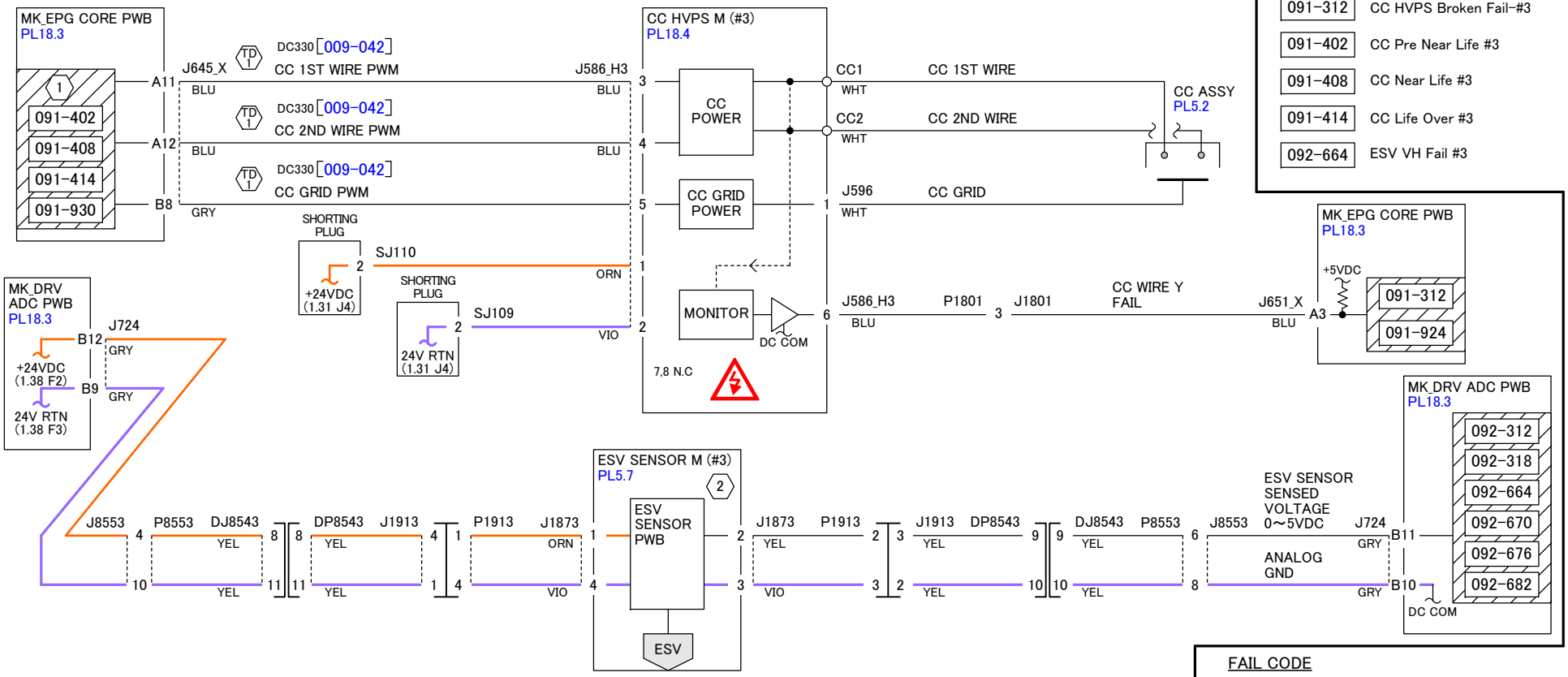
Test Point	Voltage
J645_X-A8	approx. +2.65VDC
J645_X-A9	approx. +2.65VDC
J645_X-B9	approx. +2.48VDC

ELECTRICAL COMPONENTS



j0cx730916

9.17 CHARGING AND EXPOSURE M (#3)



FAIL CODE

091-312	CC HVPS Broken Fail-#3
091-402	CC Pre Near Life #3
091-408	CC Near Life #3
091-414	CC Life Over #3
092-664	ESV VH Fail #3

FAIL CODE

091-924	CC Wire Cut Fail #3
091-930	CC Life End #3
092-312	VH Charge Check Fail #3
092-318	ESV Sensor Fail #3
092-670	ESV Vcont VH4 Fail #3
092-676	ESV Vcunt VH5 Fail #3
092-682	ESV Vcunt VH6 Fail #3

NOTE:

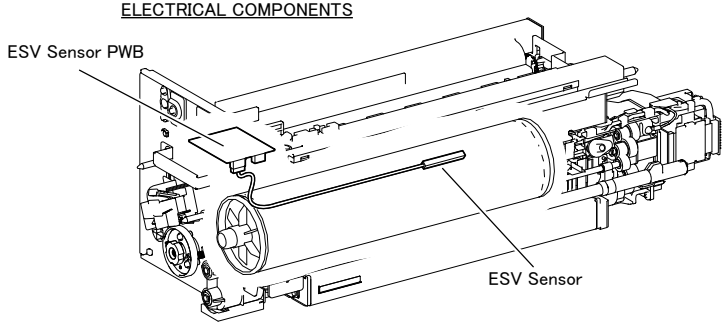
(1) CC life is managed by CC Total Discharge Time.
It is also managed by HFSI Counter (print qty).

(2) Take care not to have ESV Sensor Connector stained with toner.
(It can cause poor contact.)
Outputs from ESV Sensor PWB and Prove are adjusted at factory,
so don't take the ESV Sensor for another one.

(TD 1) The table shows voltage between Test Point and GND with diag ON.

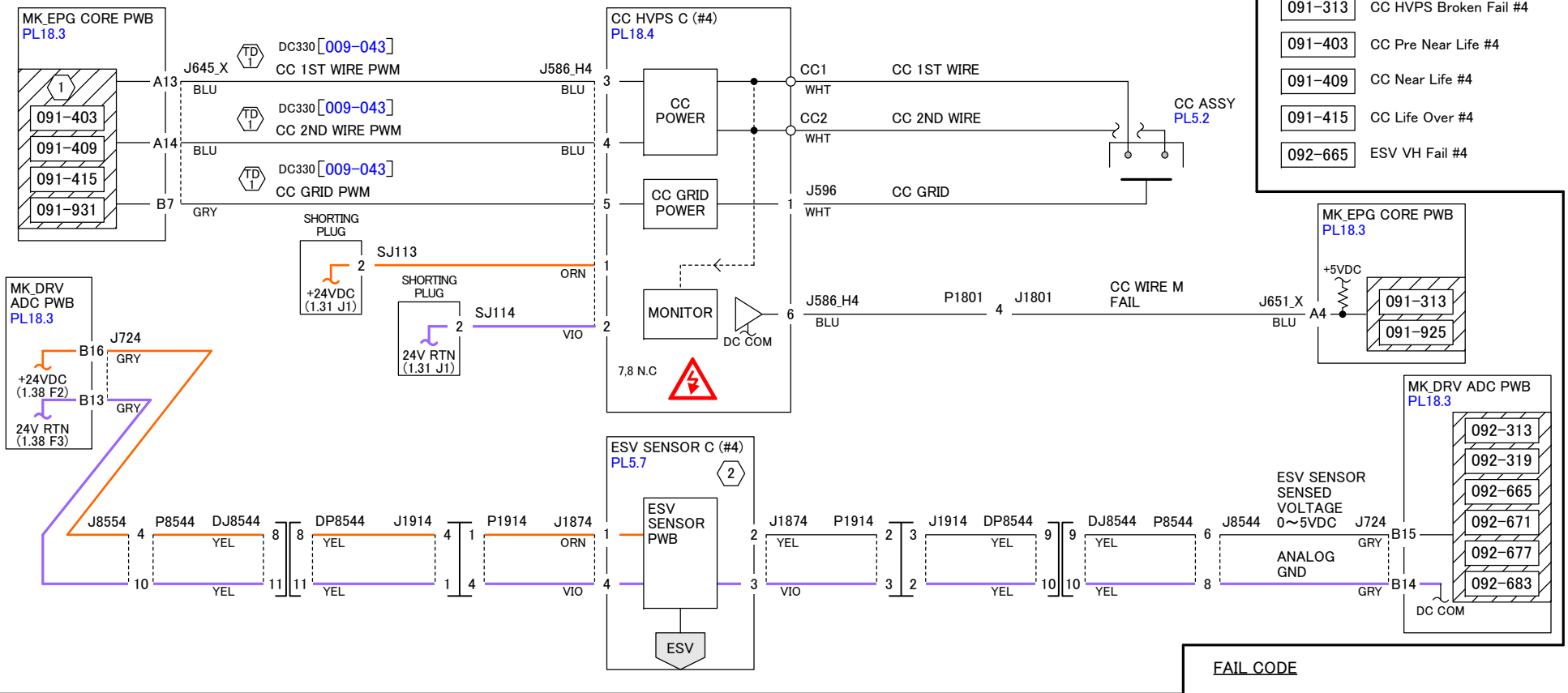
Test Point	Voltage
J645_X-A11	approx. +2.65VDC
J645_X-A12	approx. +2.65VDC
J645_X-B8	approx. +2.48VDC

ELECTRICAL COMPONENTS



j0cx730917

9.18 CHARGING AND EXPOSURE C (#4)



FAIL CODE

091-313	CC HVPS Broken Fail #4
091-403	CC Pre Near Life #4
091-409	CC Near Life #4
091-415	CC Life Over #4
092-665	ESV VH Fail #4

NOTE:

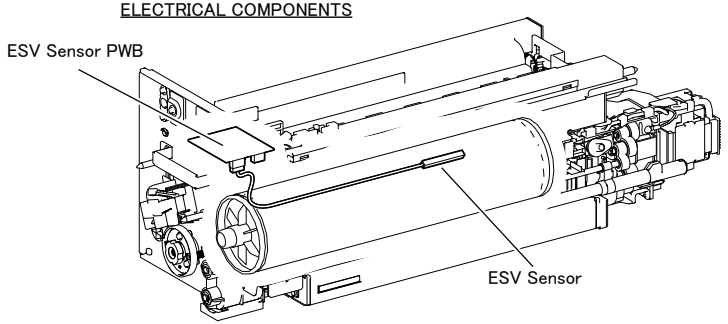
(1) CC life is managed by CC Total Discharge Time.
It is also managed by HFSI Counter (print qty).

(2) Take care not to have ESV Sensor Connector stained with toner.
(It can cause poor contact.)
Outputs from ESV Sensor PWB and Prove are adjusted at factory,
so don't take the ESV Sensor for another one.

(TD 1) The table shows voltage between Test Point and GND with diag ON.

Test Point	Voltage
J645_X-A13	approx. +2.65VDC
J645_X-A14	approx. +2.65VDC
J645_X-B7	approx. +2.48VDC

ELECTRICAL COMPONENTS

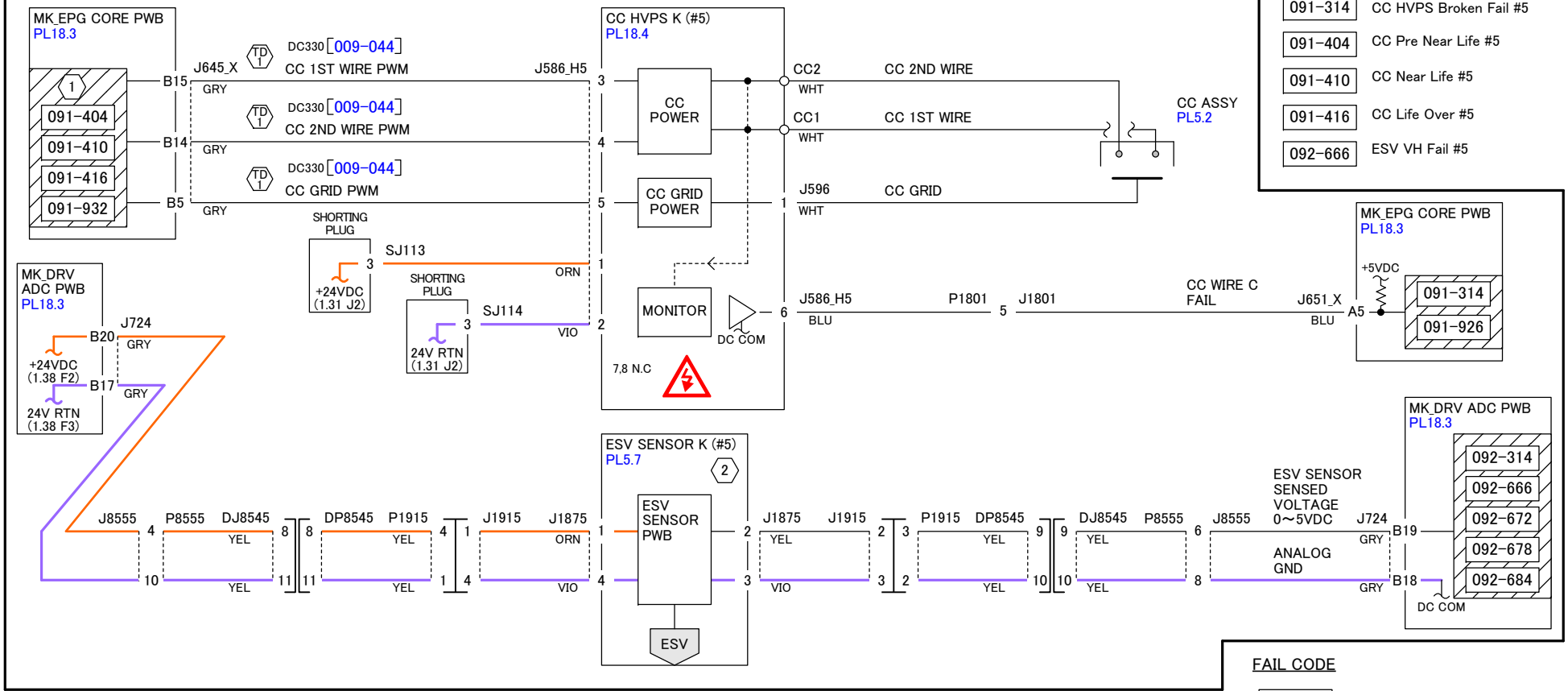


FAIL CODE

091-925	CC Wire Cut Fail #4
091-931	CC Life End #4
092-313	VH Charge Check Fail #4
092-319	ESV Sensor Fail - #4
092-671	ESV Vcont VH4 Fail #4
092-677	ESV Vcunt VH5 Fail #4
092-683	ESV Vcunt VH6 Fail #4

j0cx730918

9.19 CHARGING AND EXPOSURE K (#5)



FAIL CODE

091-314	CC HVPS Broken Fail #5
091-404	CC Pre Near Life #5
091-410	CC Near Life #5
091-416	CC Life Over #5
092-666	ESV VH Fail #5

FAIL CODE

091-926	CC Wire Cut Fail #5
091-932	CC Life End #5
092-314	VH Charge Check Fail #5
092-320	ESV Sensor Fail #5
092-672	ESV Vcont VH4 Fail #5
092-678	ESV Vcunt VH5 Fail #5
092-684	ESV Vcunt VH6 Fail #5

NOTE:

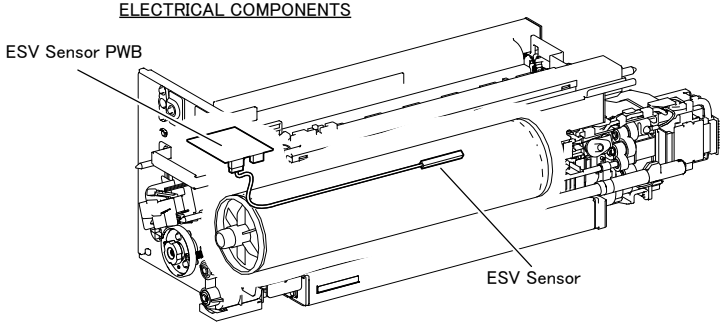
(1) CC life is managed by CC Total Discharge Time.
It is also managed by HFSI Counter (print qty).

(2) Take care not to have ESV Sensor Connector stained with toner.
(It can cause poor contact.)
Outputs from ESV Sensor PWB and Prove are adjusted at factory,
so don't take the ESV Sensor for another one.

(TD 1) The table shows voltage between Test Point and GND with diag ON.

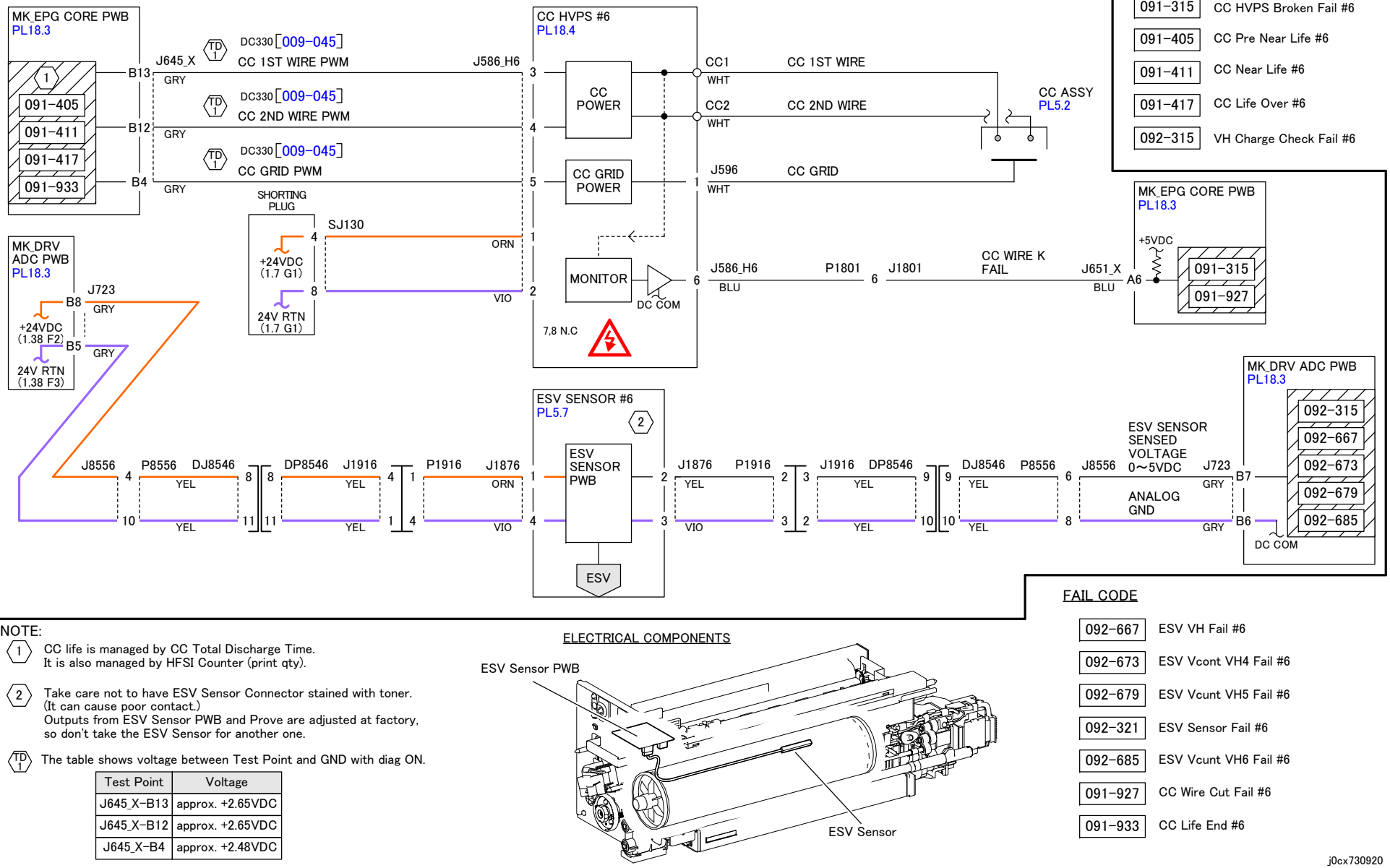
Test Point	Voltage
J645_X-B15	approx. +2.65VDC
J645_X-B14	approx. +2.65VDC
J645_X-B5	approx. +2.48VDC

ELECTRICAL COMPONENTS



j0cx730919

9.20 CHARGING AND EXPOSURE #6 (4C NOT USED)



FAIL CODE

091-315	CC HVPS Broken Fail #6
091-405	CC Pre Near Life #6
091-411	CC Near Life #6
091-417	CC Life Over #6
092-315	VH Charge Check Fail #6

FAIL CODE

092-667	ESV VH Fail #6
092-673	ESV Vcont VH4 Fail #6
092-679	ESV Vcunt VH5 Fail #6
092-321	ESV Sensor Fail #6
092-685	ESV Vcunt VH6 Fail #6
091-927	CC Wire Cut Fail #6
091-933	CC Life End #6

NOTE:

(1) CC life is managed by CC Total Discharge Time.
It is also managed by HFSI Counter (print qty).

(2) Take care not to have ESV Sensor Connector stained with toner. (It can cause poor contact.)
Outputs from ESV Sensor PWB and Prove are adjusted at factory, so don't take the ESV Sensor for another one.

TD 1 The table shows voltage between Test Point and GND with diag ON.

Test Point	Voltage
J645_X-B13	approx. +2.65VDC
J645_X-B12	approx. +2.65VDC
J645_X-B4	approx. +2.48VDC

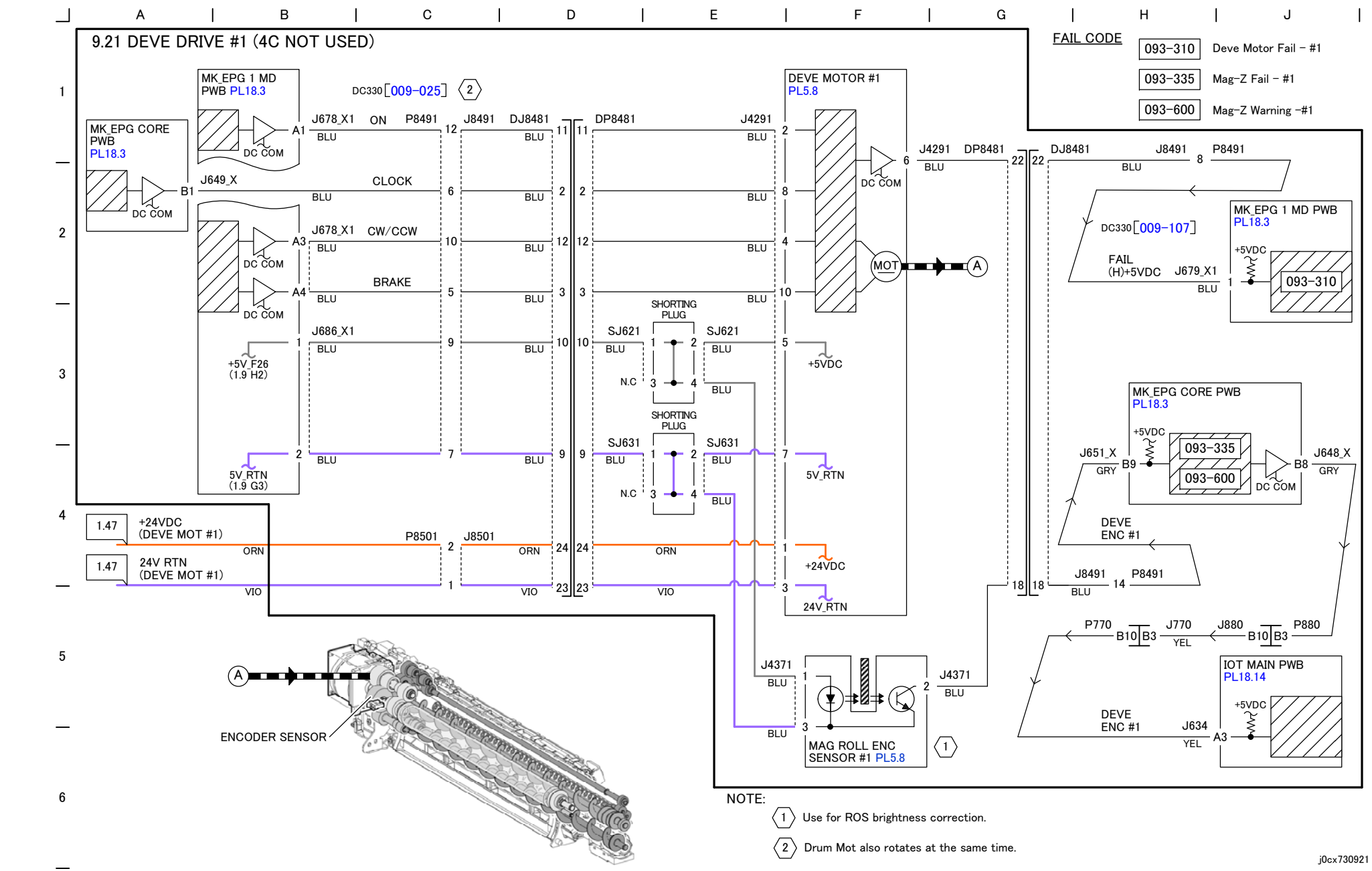
ELECTRICAL COMPONENTS

j0cx730920

9.21 DEVE DRIVE #1 (4C NOT USED)

FAIL CODE

093-310	Deve Motor Fail – #1
093-335	Mag-Z Fail – #1
093-600	Mag-Z Warning –#1



NOTE:

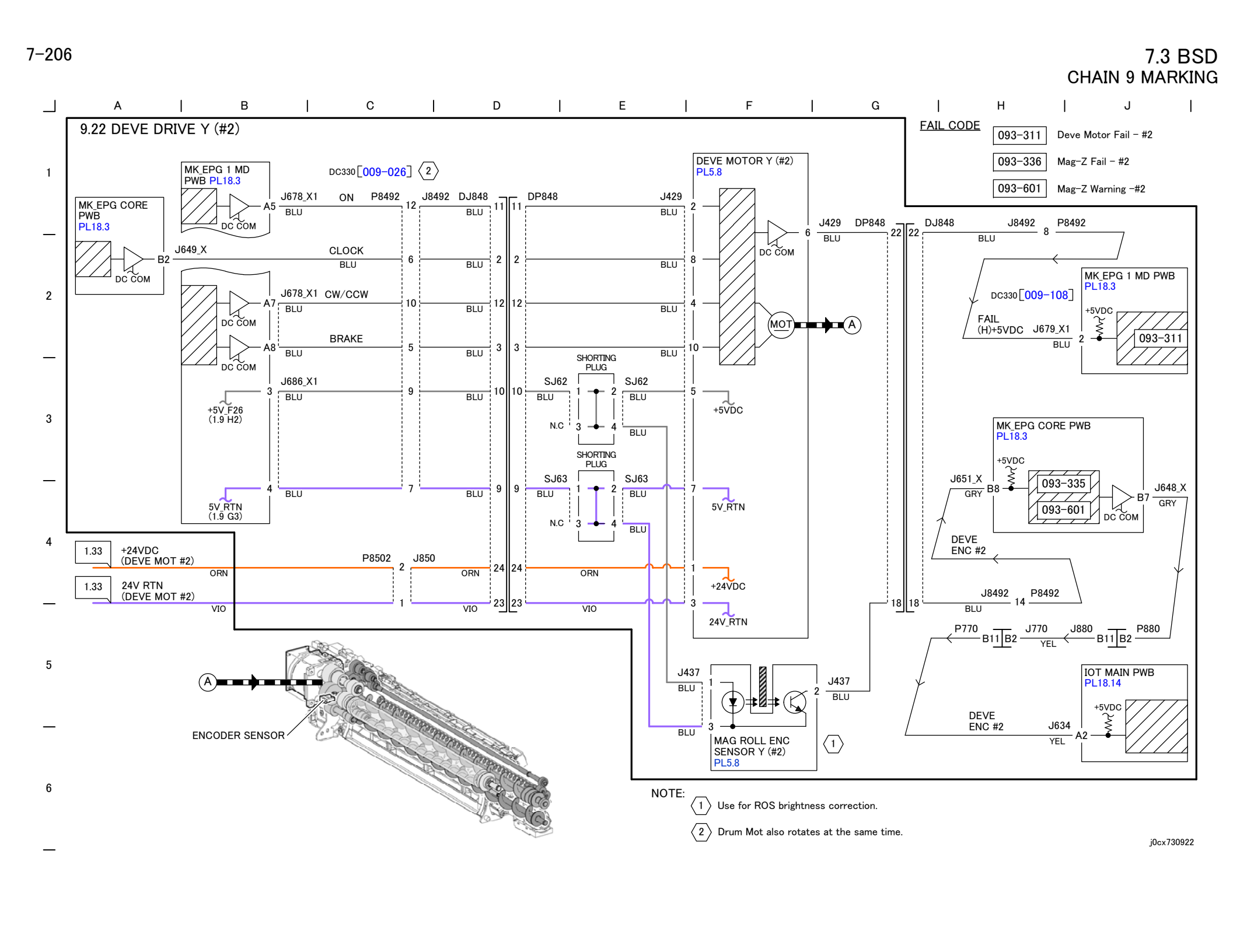
1. Use for ROS brightness correction.
2. Drum Mot also rotates at the same time.

j0cx730921

9.22 DEVE DRIVE Y (#2)

FAIL CODE

093-311	Deve Motor Fail – #2
093-336	Mag-Z Fail – #2
093-601	Mag-Z Warning –#2



NOTE:

1. Use for ROS brightness correction.
2. Drum Mot also rotates at the same time.

j0cx730922

9.23 DEVE DRIVE M (#3)

FAIL CODE

093-312	Deve Motor Fail – #3
093-337	Mag-Z Fail – #3
093-602	Mag-Z Warning –#3

MK_EPG CORE PWB PL18.3
MK_EPG 1 MD PWB PL18.3
DC330 [009-027] (2)
DEVE MOTOR M (#3) PL5.8
J649_X
J678_X1 ON
J678_X1 CW/CCW
J686_X1
CLOCK
BRAKE
+5V_F26 (1.9 H2)
5V_RTN (1.9 G3)
SHORTING PLUG
SJ623
SJ633
N.C
+5VDC
5V_RTN
+24VDC
24V_RTN
1.33 +24VDC (DEVE MOT #3)
1.33 24V RTN (DEVE MOT #3)
P8503
J8503
J4293
DP8483
J8493 DJ8483
DJ8483
P8493
J4373
MAG ROLL ENC SENSOR M (#3) PL5.8
DC330 [009-109]
FAIL (H)+5VDC
J679_X1
093-312
MK_EPG CORE PWB PL18.3
093-337
093-602
J651_X
J648_X
DEVE ENC #3
J8493
P8493
P770
J770
J880
P880
IOT MAIN PWB PL18.14
J634
ENCODER SENSOR

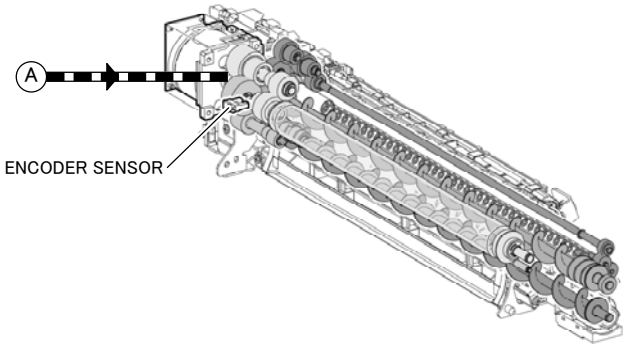
NOTE:
(1) Use for ROS brightness correction.
(2) Drum Mot also rotates at the same time.

j0cx730923

9.24 DEVE DRIVE C (#4)

FAIL CODE

093-313	Deve Motor Fail – #4
093-338	Mag-Z Fail – #4
093-603	Mag-Z Warning –#4



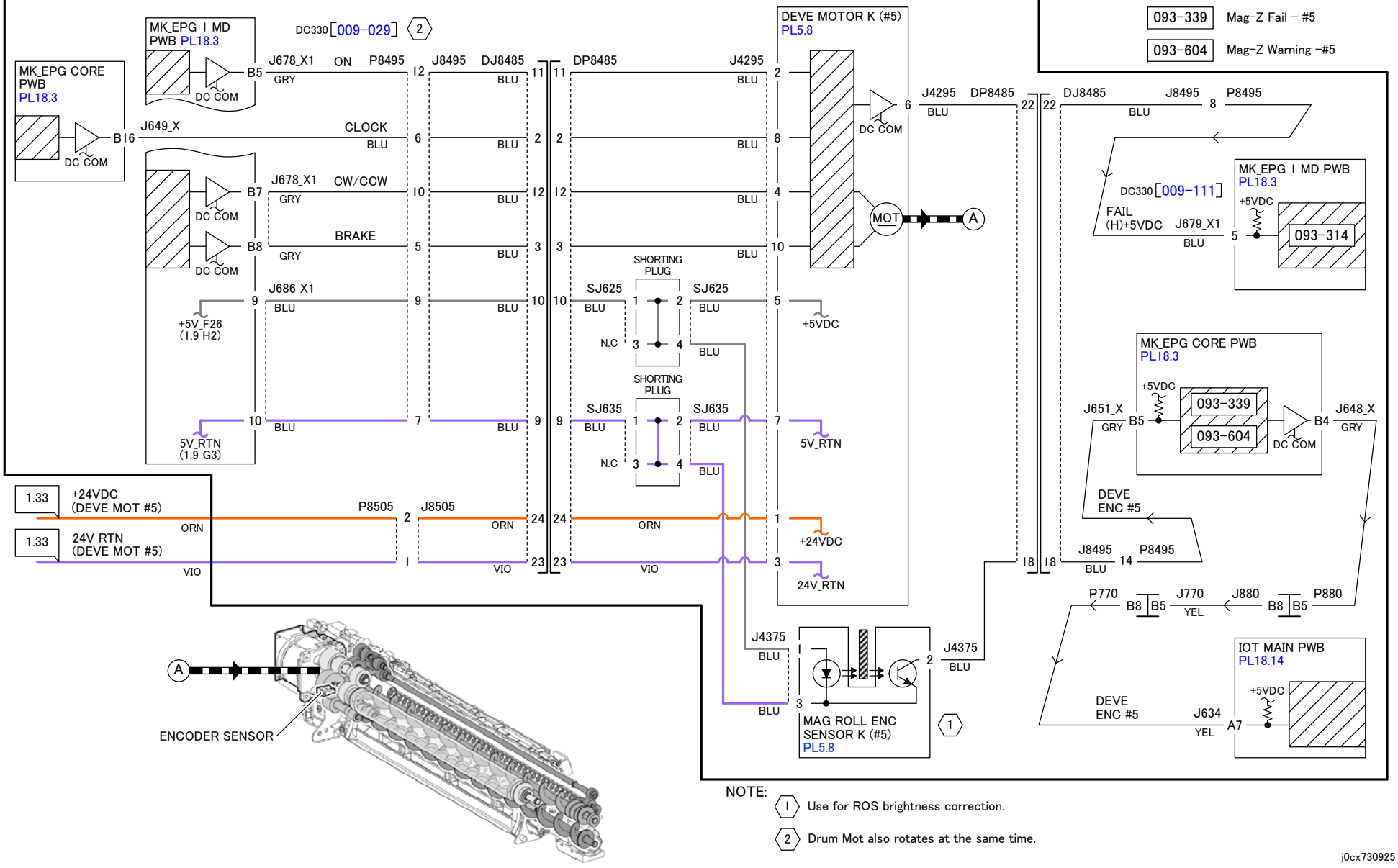
NOTE:
1. Use for ROS brightness correction.
2. Drum Mot also rotates at the same time.

j0cx730924

9.25 DEVE DRIVE K (#5)

FAIL CODE

093-314	Deve Motor Fail – #5
093-339	Mag-Z Fail – #5
093-604	Mag-Z Warning –#5



NOTE:

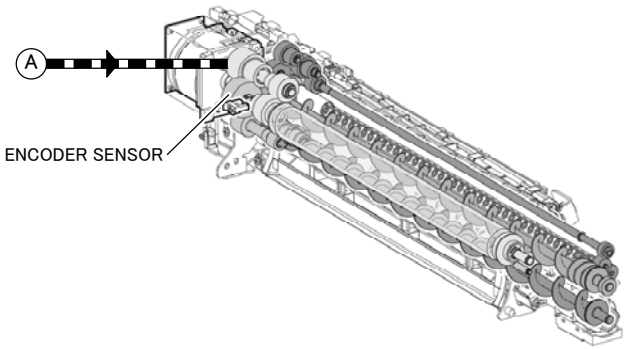
1. Use for ROS brightness correction.
2. Drum Mot also rotates at the same time.

j0cx730925

9.26 DEVE DRIVE #6 (4C NOT USED)

FAIL CODE

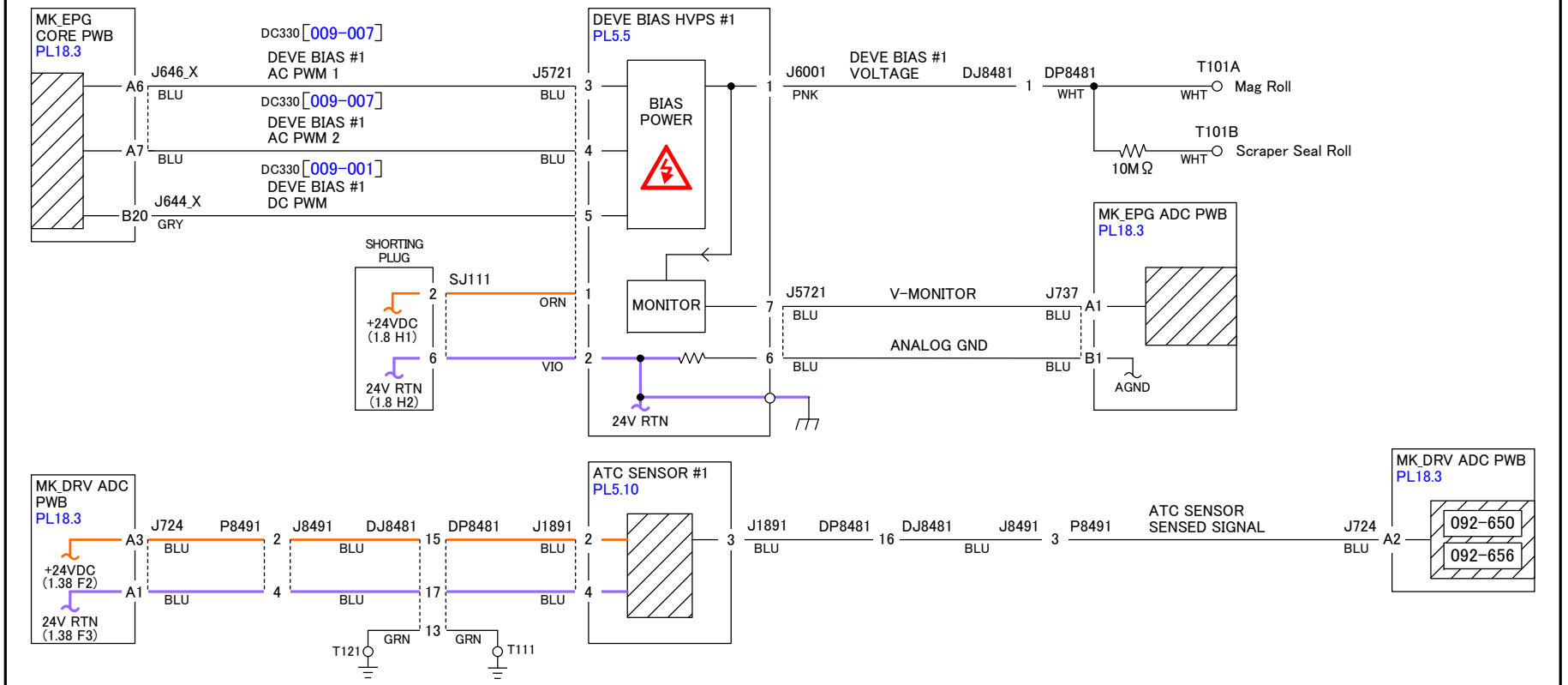
093-315	Deve Motor Fail – #6
093-340	Mag-Z Fail – #6
093-605	Mag-Z Warning –#6



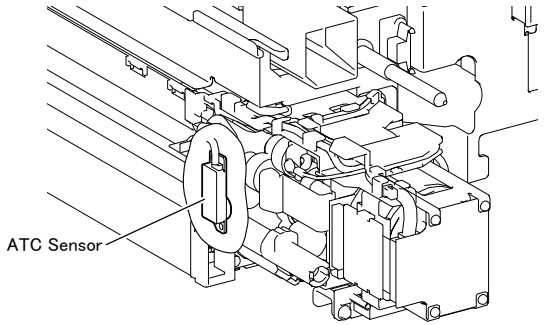
NOTE:
1. Use for ROS brightness correction.
2. Drum Mot also rotates at the same time.

j0cx730926

9.27 DEVELOPMENT #1 (4C NOT USED)



ELECTRICAL COMPONENTS

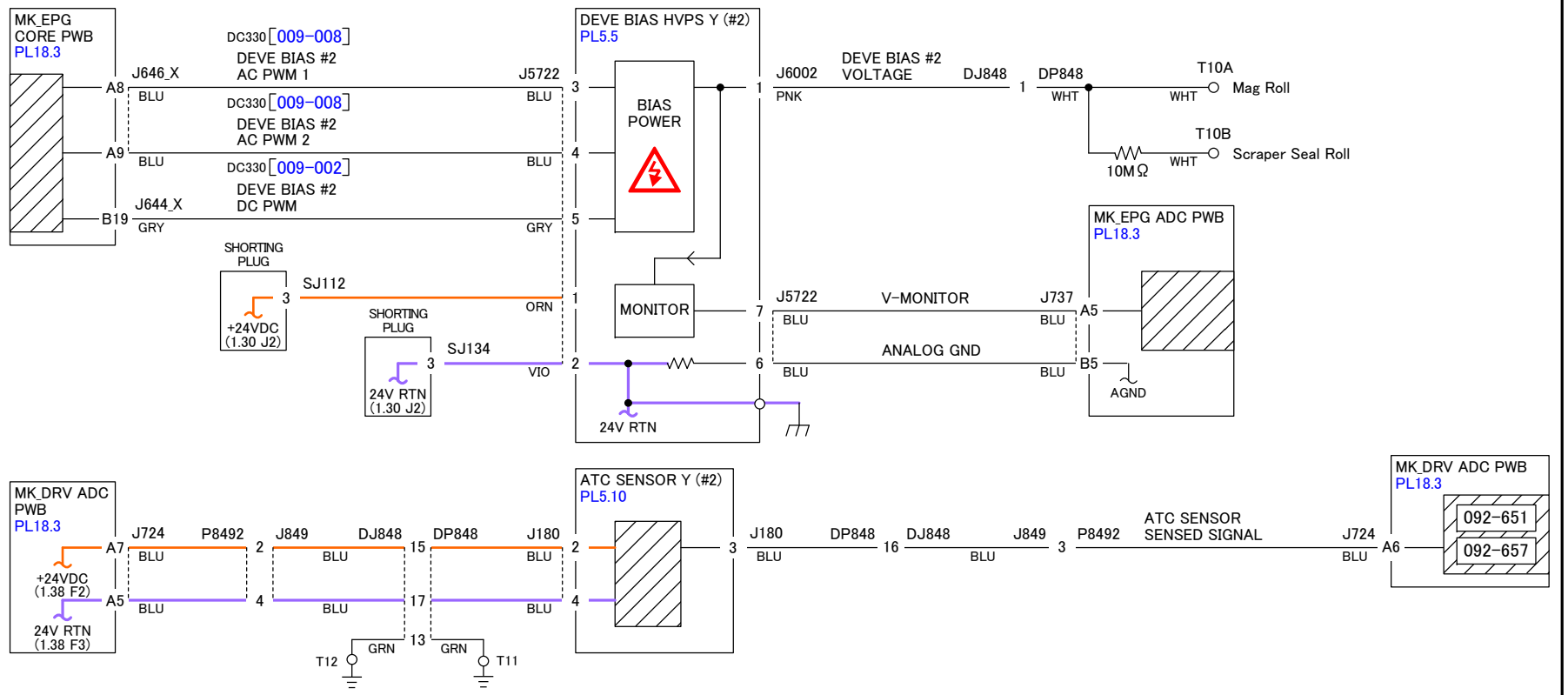


FAIL CODE

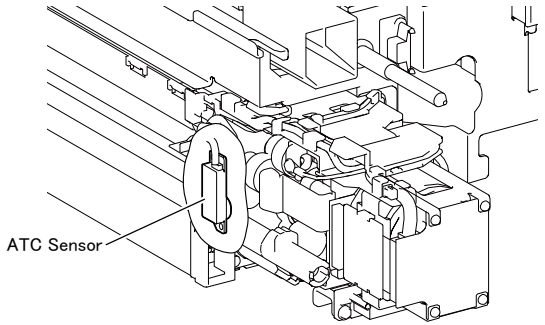
092-650	ATC Average Fail 1
092-656	ATC Amplitude Fail 1

j0cx730927

9.28 DEVELOPMENT Y (#2)



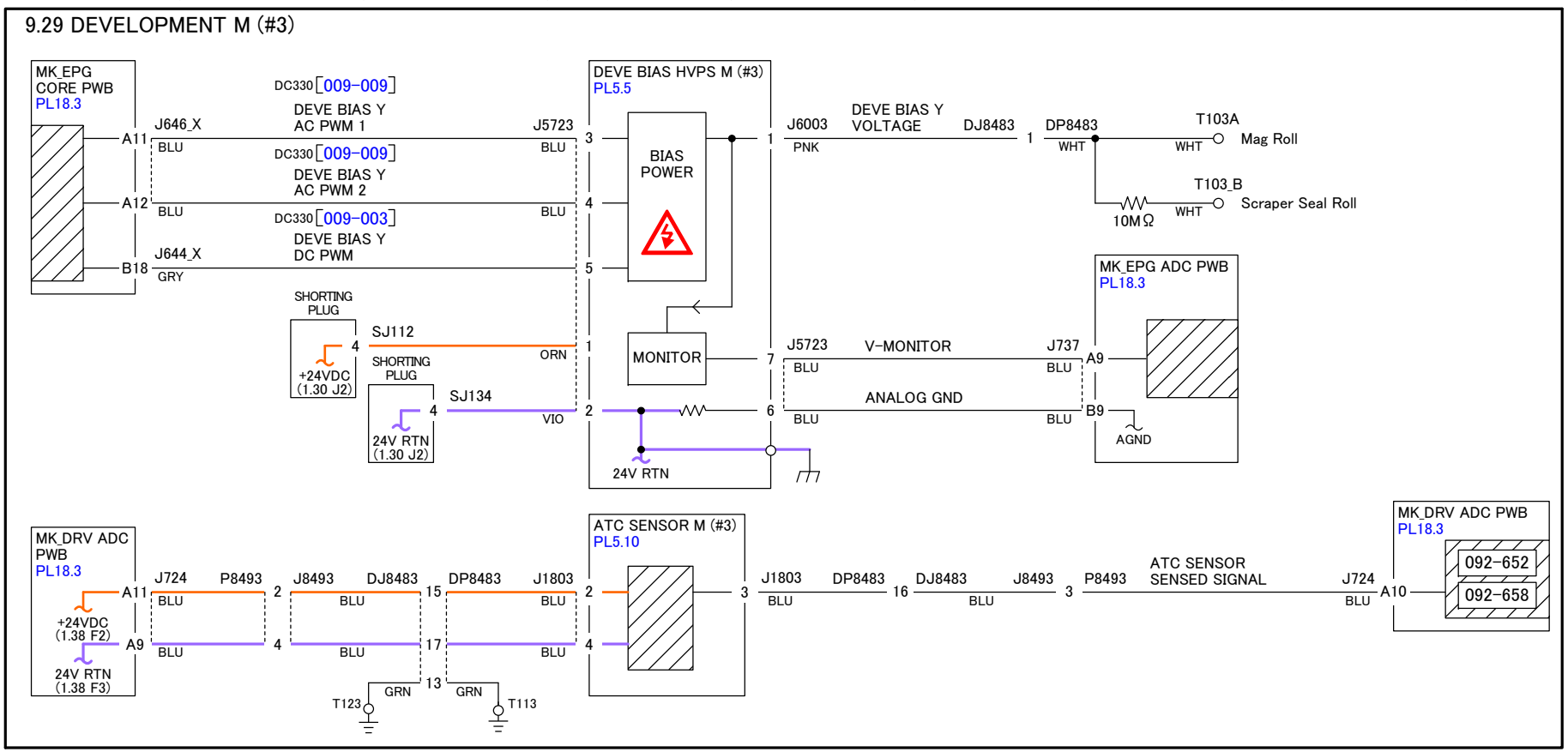
ELECTRICAL COMPONENTS



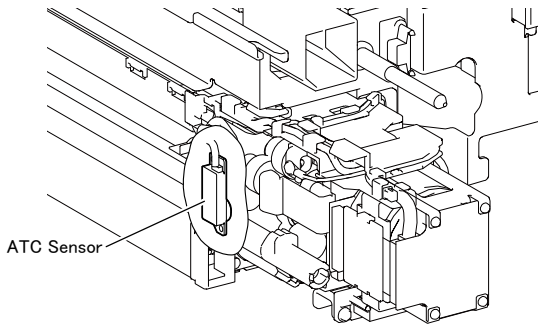
FAIL CODE

092-651	ATC Average Fail 2
092-657	ATC Amplitude Fail 2

j0cx730928



ELECTRICAL COMPONENTS

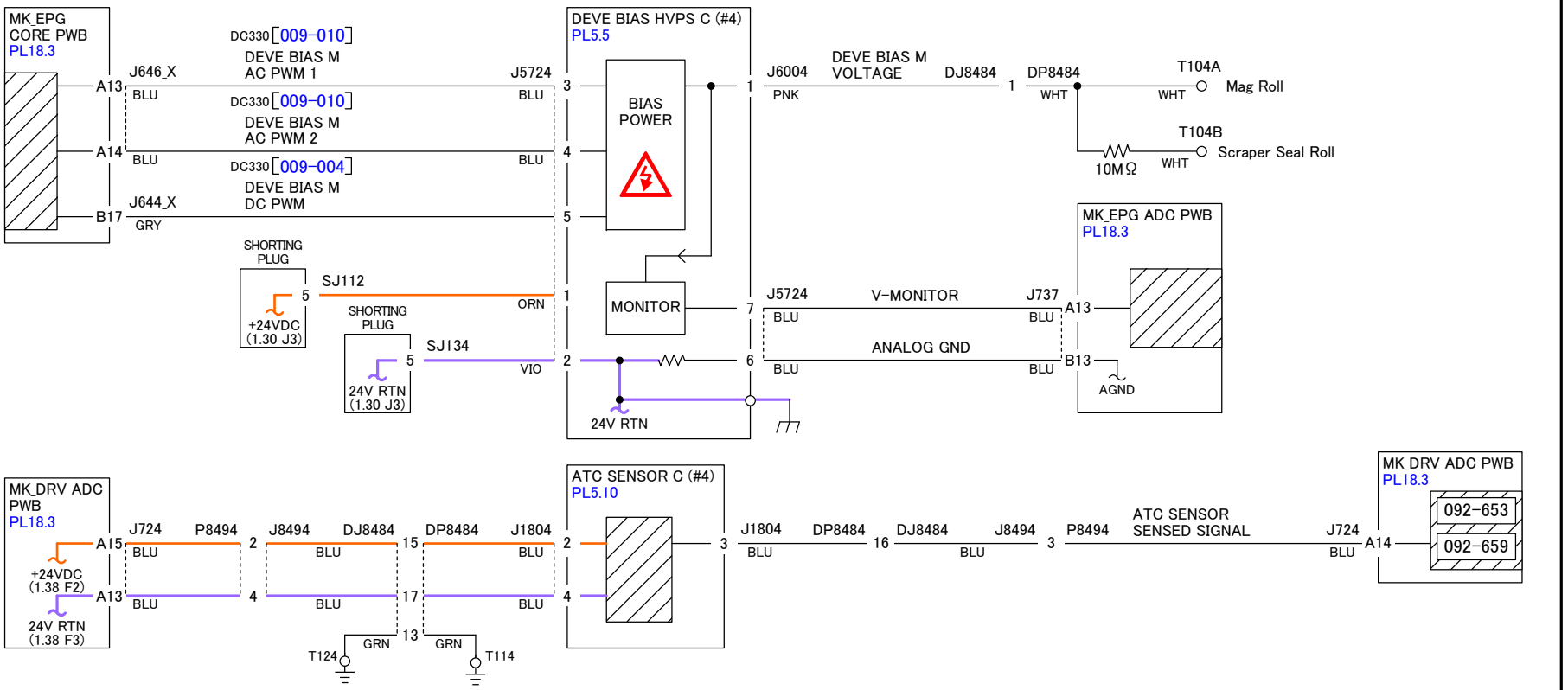


FAIL CODE

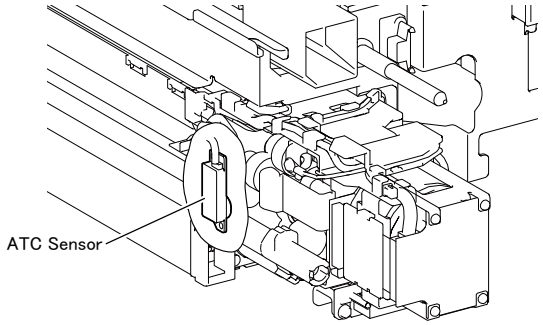
092-652	ATC Average Fail 3
092-658	ATC Amplitude Fail 3

j0cx730929

9.30 DEVELOPMENT C (#4)



ELECTRICAL COMPONENTS

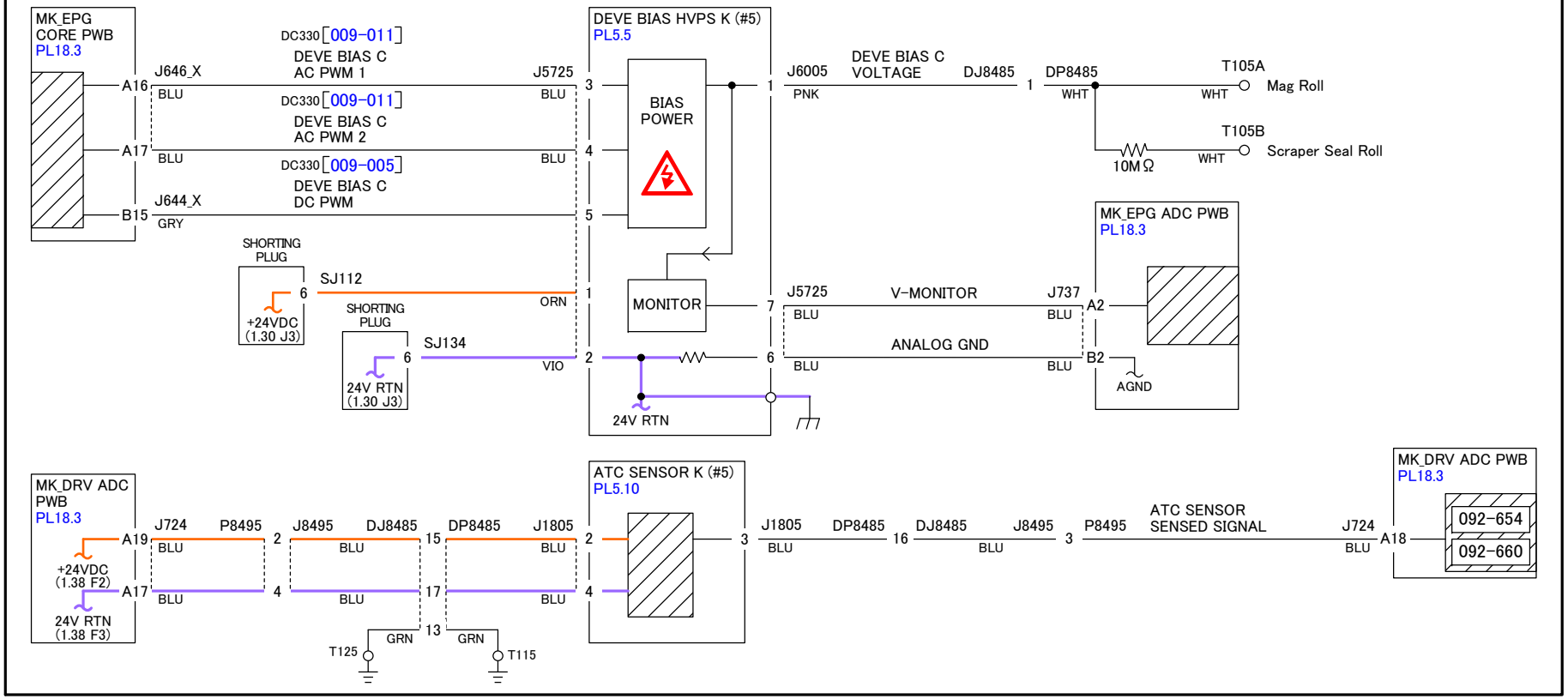


FAIL CODE

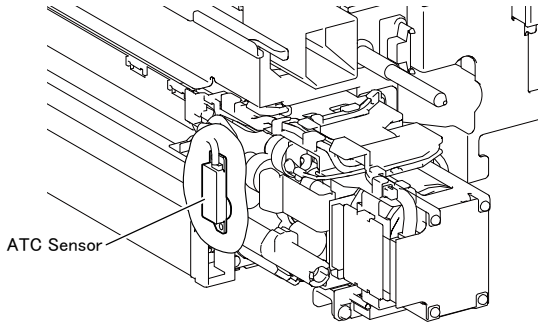
092-653	ATC Average Fail 4
092-659	ATC Amplitude Fail 4

j0cx730930

9.31 DEVELOPMENT K (#5)



ELECTRICAL COMPONENTS

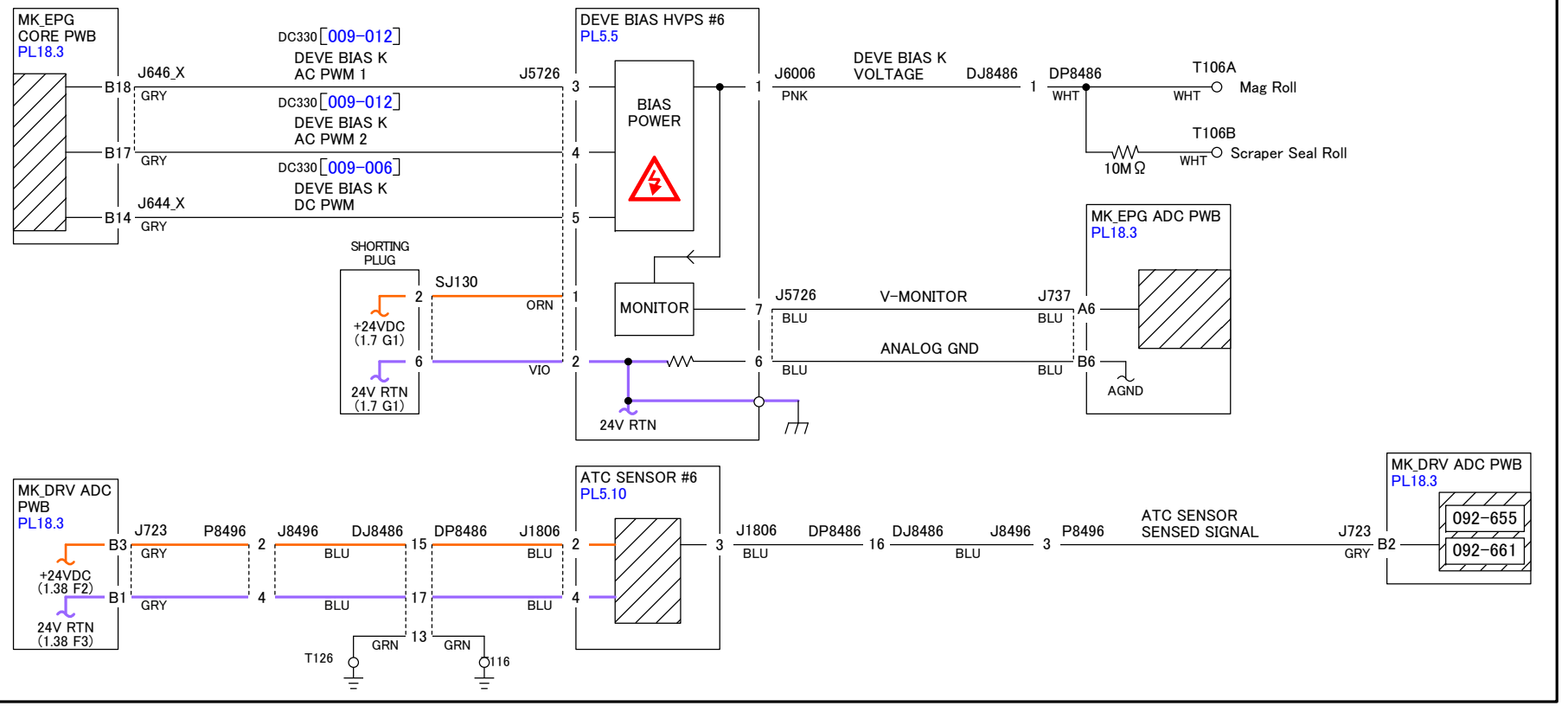


FAIL CODE

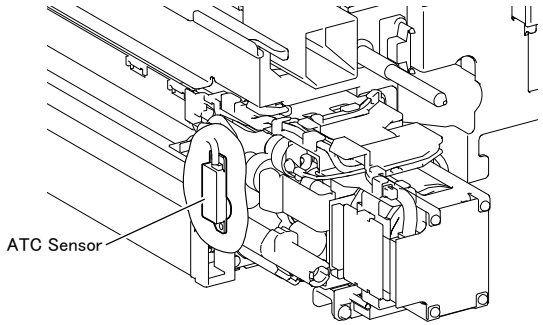
092-654	ATC Average Fail 5
092-660	ATC Amplitude Fail 5

j0cx730931

9.32 DEVELOPMENT #6 (4C NOT USED)



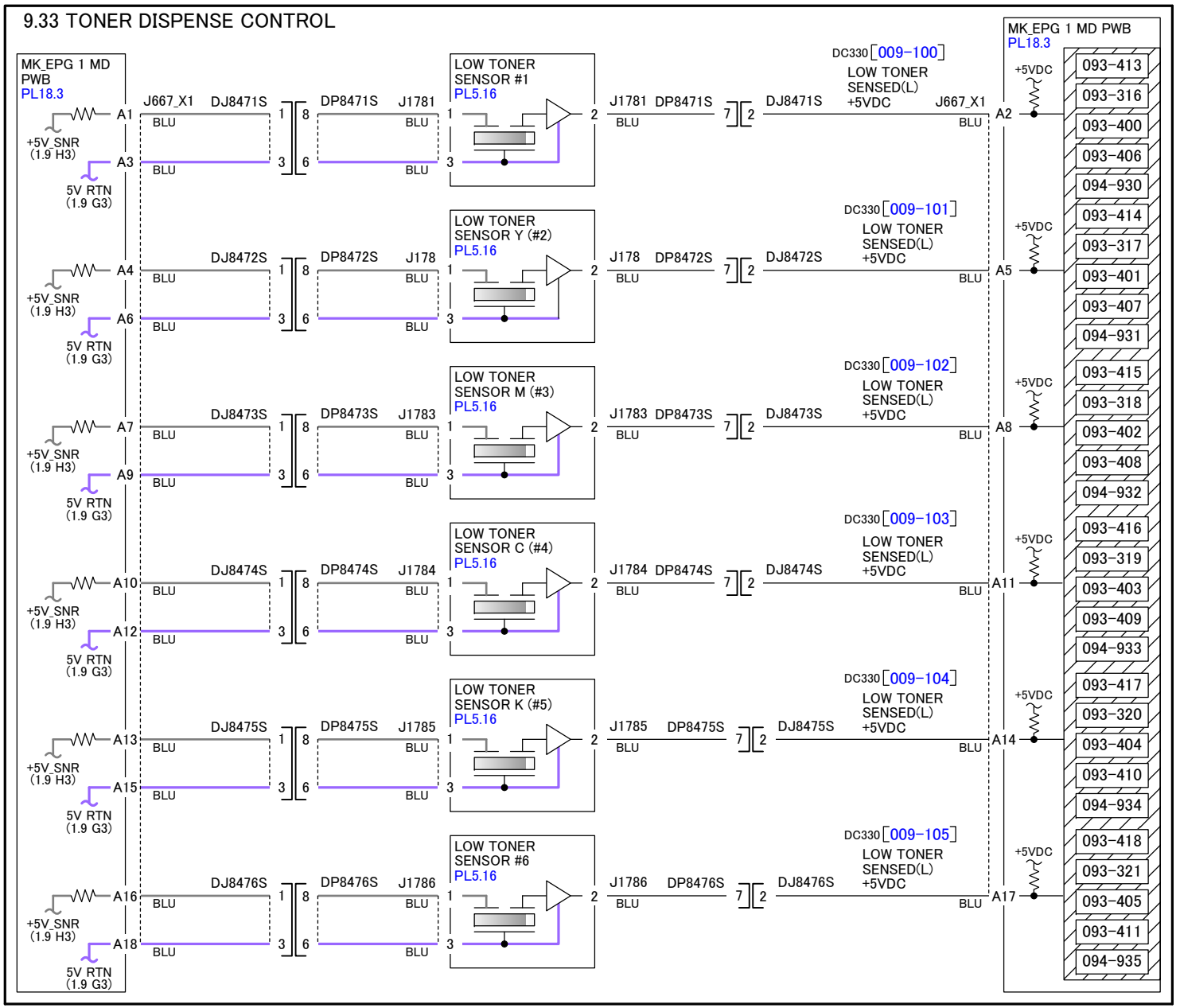
ELECTRICAL COMPONENTS



FAIL CODE

092-655	ATC Average Fail 6
092-661	ATC Amplitude Fail 6

j0cx730932

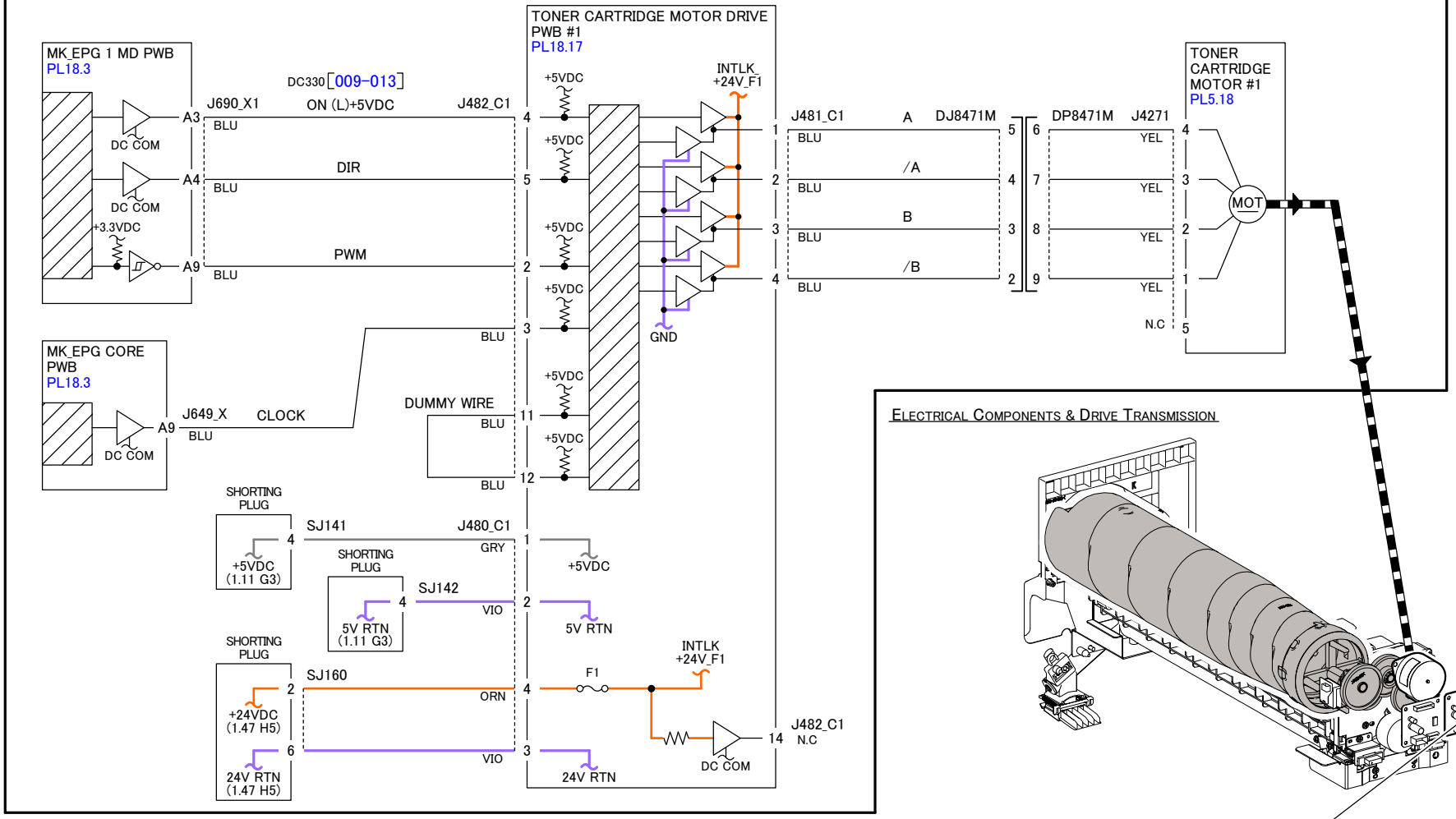


FAIL CODE

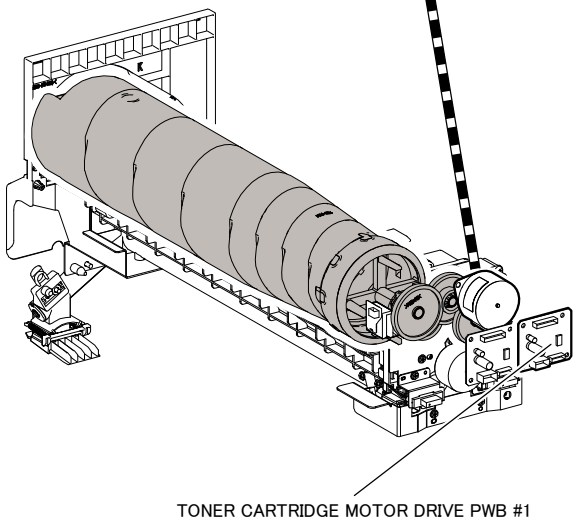
093-316 Dispense Broken – #1	093-415 Dispense Near Broken-#3
093-317 Dispense Broken – #2	093-416 Dispense Near Broken-#4
093-318 Dispense Broken – #3	093-417 Dispense Near Broken-#5
093-319 Dispense Broken – #4	093-418 Dispense Near Broken-#6
093-320 Dispense Broken – #5	094-930 Toner Empty #1
093-321 Dispense Broken – #6	094-931 Toner Empty #2
093-400 Toner Pre Near Empty #1	094-932 Toner Empty #3
093-401 Toner Pre Near Empty #2	094-933 Toner Empty #4
093-402 Toner Pre Near Empty #3	094-934 Toner Empty #5
093-403 Toner Pre Near Empty #4	094-935 Toner Empty #6
093-404 Toner Pre Near Empty #5	
093-405 Toner Pre Near Empty #6	
093-406 Toner Near Empty #1	
093-407 Toner Near Empty #2	
093-408 Toner Near Empty #3	
093-409 Toner Near Empty #4	
093-410 Toner Near Empty #5	
093-411 Toner Near Empty #6	
093-413 Dispense Near Broken-#1	
093-414 Dispense Near Broken-#2	

j0cx730933

9.34 TONER CARTRIDGE DRIVE #1 (4C NOT USED)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730934

9.35 TONER CARTRIDGE DRIVE Y (#2)

MK_EPG 1 MD PWB
PL18.3

DC330 [009-014]

J690_X1 — ON (L)+5VDC — J482_C2

B1 GRY — DC COM — 4 +5VDC
B2 GRY — DIR — DC COM — 5 +5VDC
B8 GRY — PWM — +3.3VDC — 2 +5VDC
3 +5VDC
11 +5VDC
12 +5VDC

TONER CARTRIDGE MOTOR DRIVE PWB Y (#2)
PL18.17

INTLK +24V_F1
GND

J481_C2 — A — DJ847M — DP847M — J427

1 YEL — A — 5 6 — 4 YEL
2 YEL — /A — 4 7 — 3 YEL
3 YEL — B — 3 8 — 2 YEL
4 YEL — /B — 2 9 — 1 YEL
N.C — 5

TONER CARTRIDGE MOTOR Y (#2)
PL5.18
MOT

MK_EPG CORE PWB
PL18.3

A10 — DC COM — J649_X — CLOCK — BLU — 3 BLU

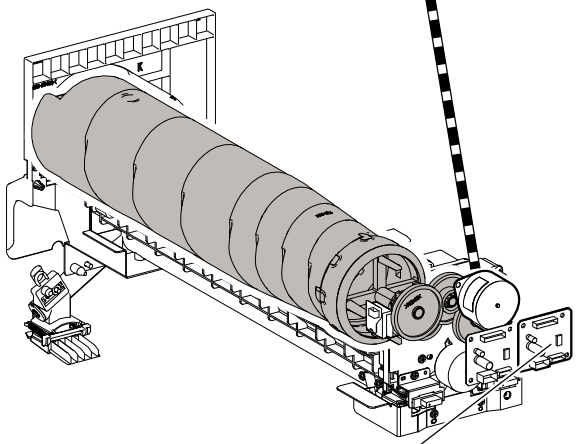
DUMMY WIRE — GRY — 11

SHORTING PLUG — 6 — +5VDC (1.11 G3)
SJ141 — J480_C2 — GRY — 1 — +5VDC

SHORTING PLUG — 6 — 5V RTN (1.11 G3)
SJ142 — VIO — 2 — 5V RTN

SHORTING PLUG — 2 — +24VDC (1.7 J2)
SJ162 — ORN — 4 — F1 — INTLK +24V_F1
7 — 24V RTN (1.7 J2)
VIO — 3 — 24V RTN
DC COM — 14 — J482_C2 N.C

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



TONER CARTRIDGE MOTOR DRIVE PWB #2

j0cx730935

9.36 TONER CARTRIDGE DRIVE M (#3)

MK_EPG 1 MD PWB
PL18.3

DC330 [009-015]

J690_X1 ON (L)+5VDC J482_C3

B5 GRY DC COM
B6 GRY DIR DC COM
+3.3VDC
B10 GRY PWM

MK_EPG CORE PWB
PL18.3

A11 DC COM
J649_X CLOCK BLU

DUMMY WIRE GRY GRY

SHORTING PLUG
3 +5VDC (1.11 J2)
SJ117 J480_C3 GRY +5VDC

SHORTING PLUG
3 5V RTN (1.11 J2)
SJ118 VIO 5V RTN

SHORTING PLUG
3 +24VDC (1.7 J2)
8 24V RTN (1.7 J3)
SJ162 ORN VIO

TONER CARTRIDGE MOTOR DRIVE PWB M (#3)
PL18.17

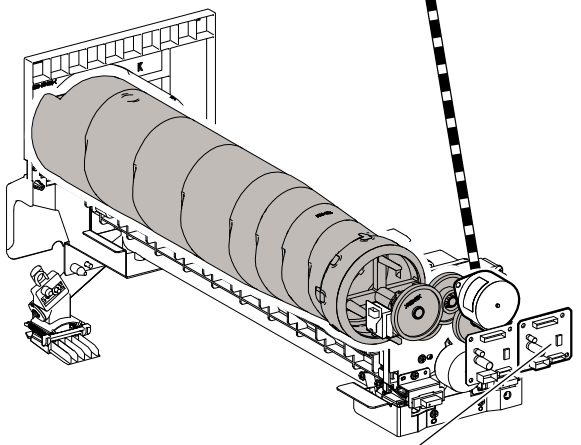
+5VDC ×7
INTLK +24V_F1
GND
F1
INTLK +24V_F1
DC COM
24V RTN
J482_C3 14 N.C

J481_C3 A DJ8473M
1 BLU
2 BLU /A
3 BLU B
4 BLU /B

DP8473M J4273
5 6 YEL
4 7 YEL
3 8 YEL
2 9 YEL
N.C 5

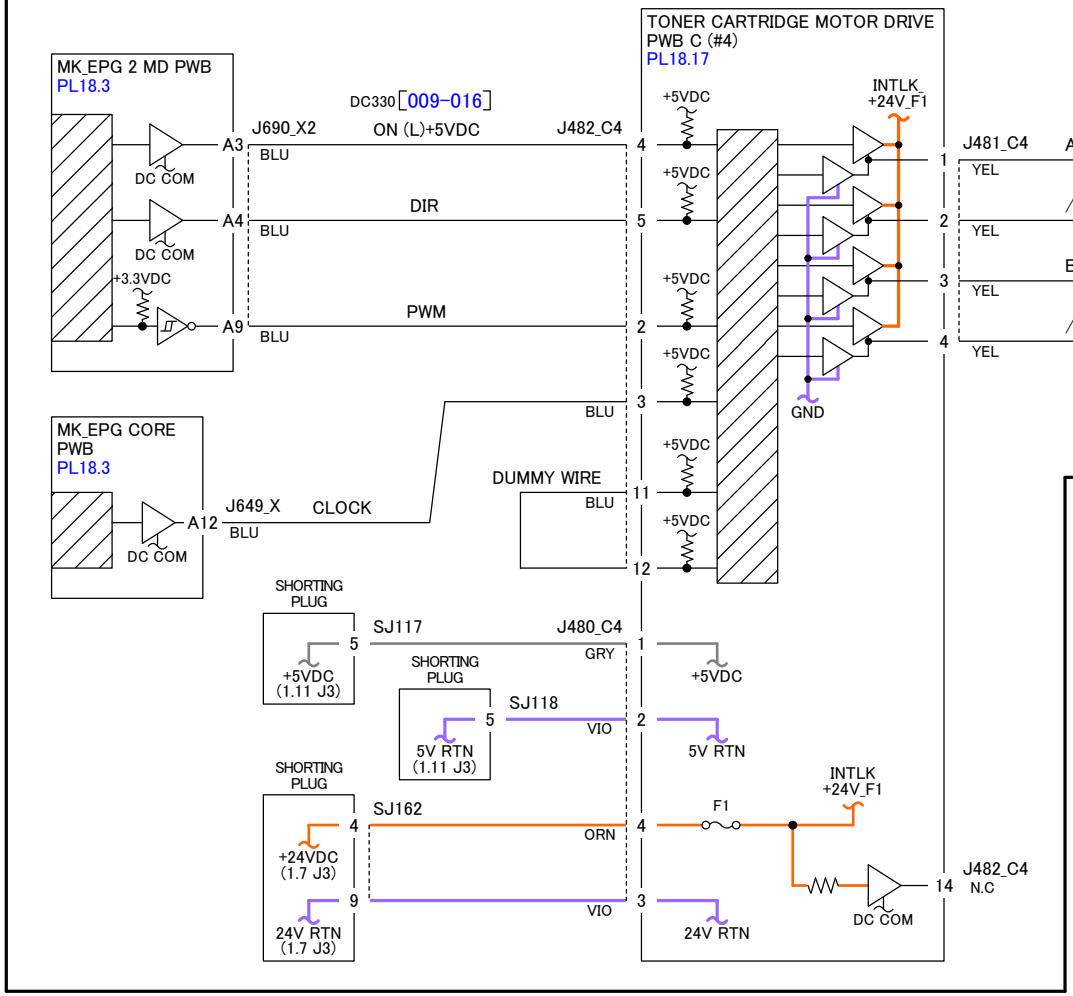
TONER CARTRIDGE MOTOR M (#3)
PL5.18
MOT

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

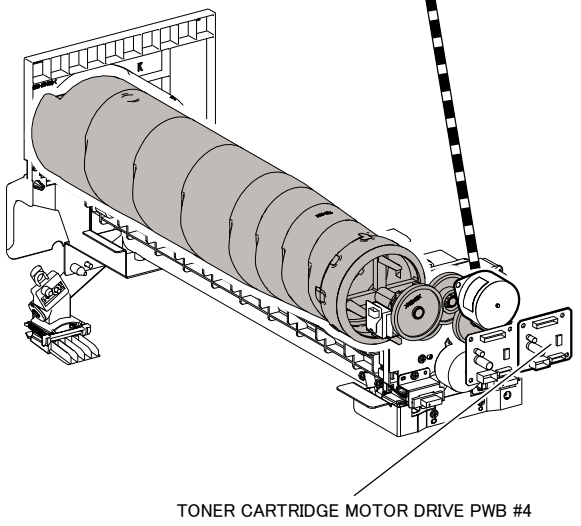


TONER CARTRIDGE MOTOR DRIVE PWB #3

9.37 TONER CARTRIDGE DRIVE C (#4)



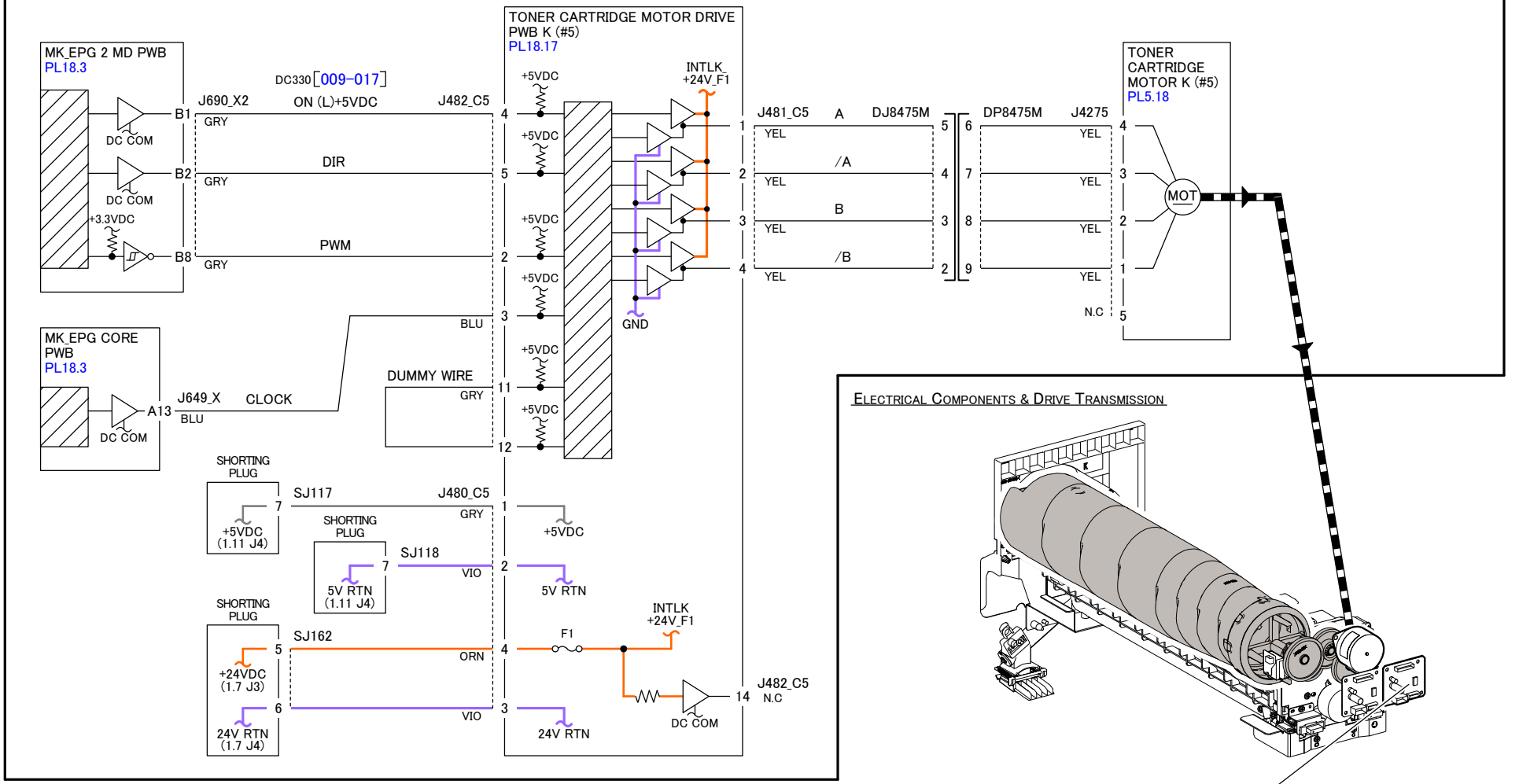
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



TONER CARTRIDGE MOTOR DRIVE PWB #4

j0cx730937

9.38 TONER CARTRIDGE DRIVE K (#5)

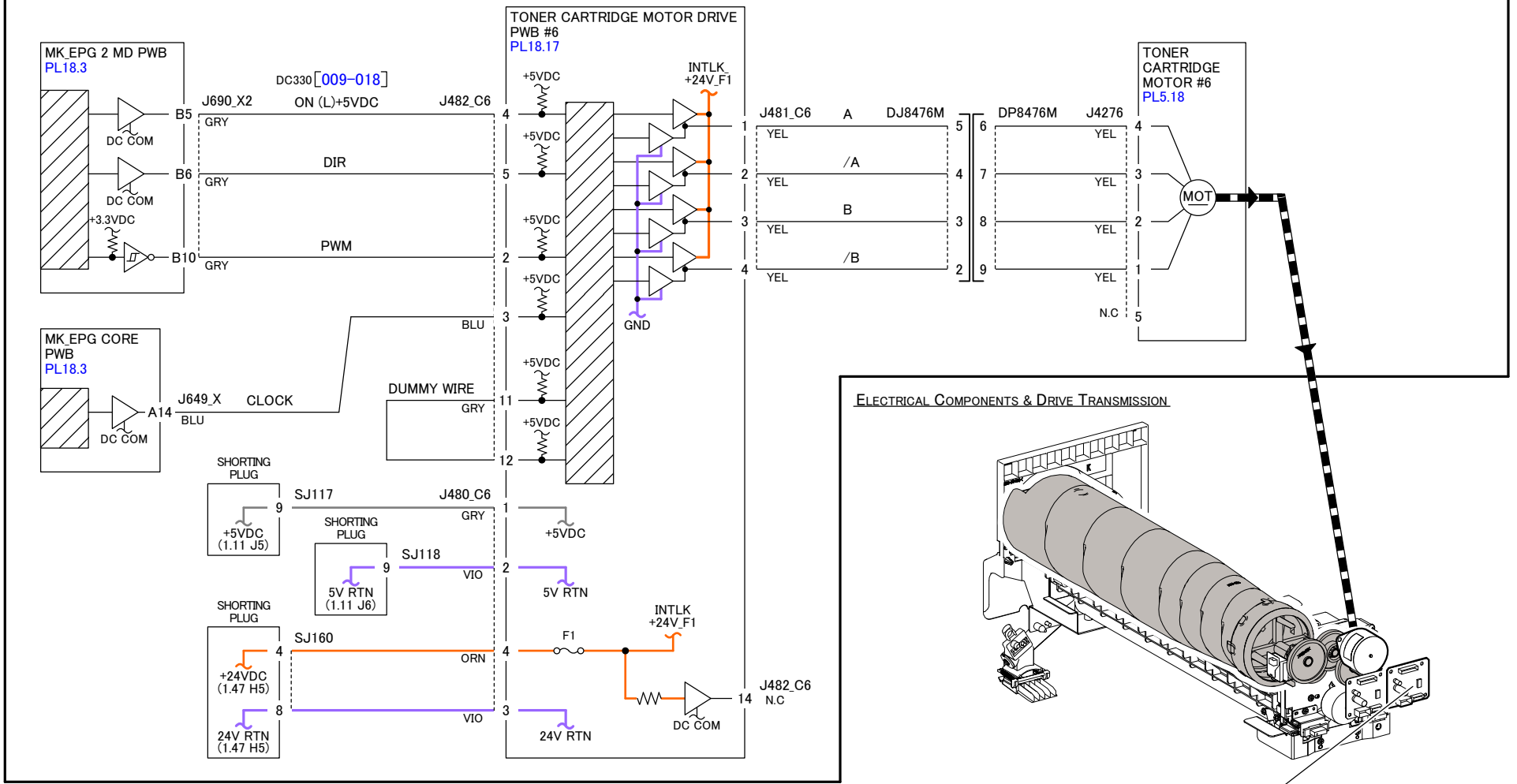


ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

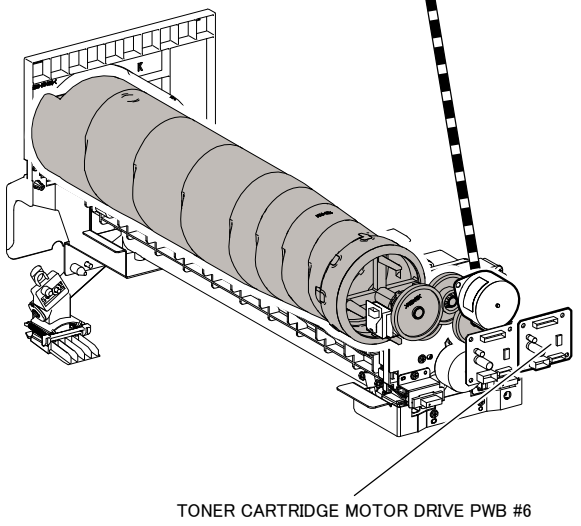
TONER CARTRIDGE MOTOR DRIVE PWB #5

j0cx730938

9.39 TONER CARTRIDGE DRIVE #6 (4C NOT USED)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730939

9.40 TONER DISPENSE DRIVE #1 (4C NOT USED)

MK_EPG 1 MD PWB
PL18.3

DC330 [009-019]

J690_X1 — A1 BLU — DC COM
A2 BLU — DC COM
+3.3VDC — A8 BLU

ON
DIR
PWM

TONER DISPENSE MOTOR DRIVE PWB #1
PL18.17

J482_D1
4 +5VDC
5 +5VDC
2 +5VDC
3 +5VDC
11 +5VDC
12 +5VDC

INTLK +24V_F1
GND

J481_D1 A — DJ8471M — DP8471M — J4281
4 YEL — 6 — 5 YEL — 1 YEL
3 /A YEL — 7 — 4 YEL — 2 YEL
1 B YEL — 9 — 2 YEL — 4 YEL
2 /B YEL — 8 — 3 YEL — 3 YEL

TONER DISPENSE MOTOR #1
PL5.18
MOT

MK_EPG CORE PWB
PL18.3

J649_X — B10 GRY — DC COM
CLOCK GRY

DUMMY WIRE BLU

SHORTING PLUG
3 — +5VDC (1.11 G2)

SJ141 — J480_D1
3 — 1 GRY — +5VDC

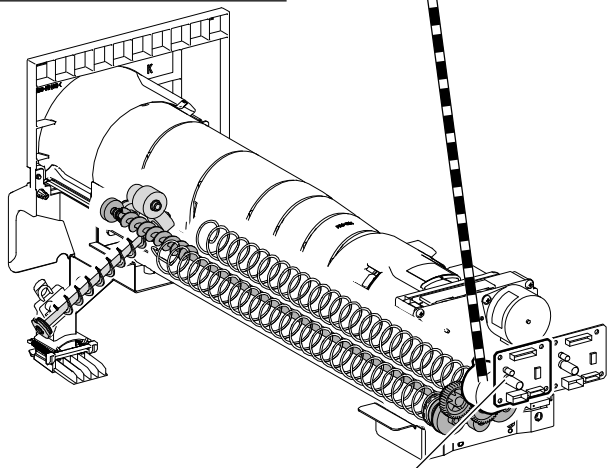
SHORTING PLUG
3 — 5V RTN (1.11 G3)
J142 VIO — 2 — 5V RTN

1.47 +24VDC (TNR DSP MOT #1) ORN — ORN 4 — F1 — INTLK +24V_F1

1.47 24V RTN (TNR DSP MOT #1) VIO — VIO 3 — 24V RTN

J482_D1 14 N.C — DC COM

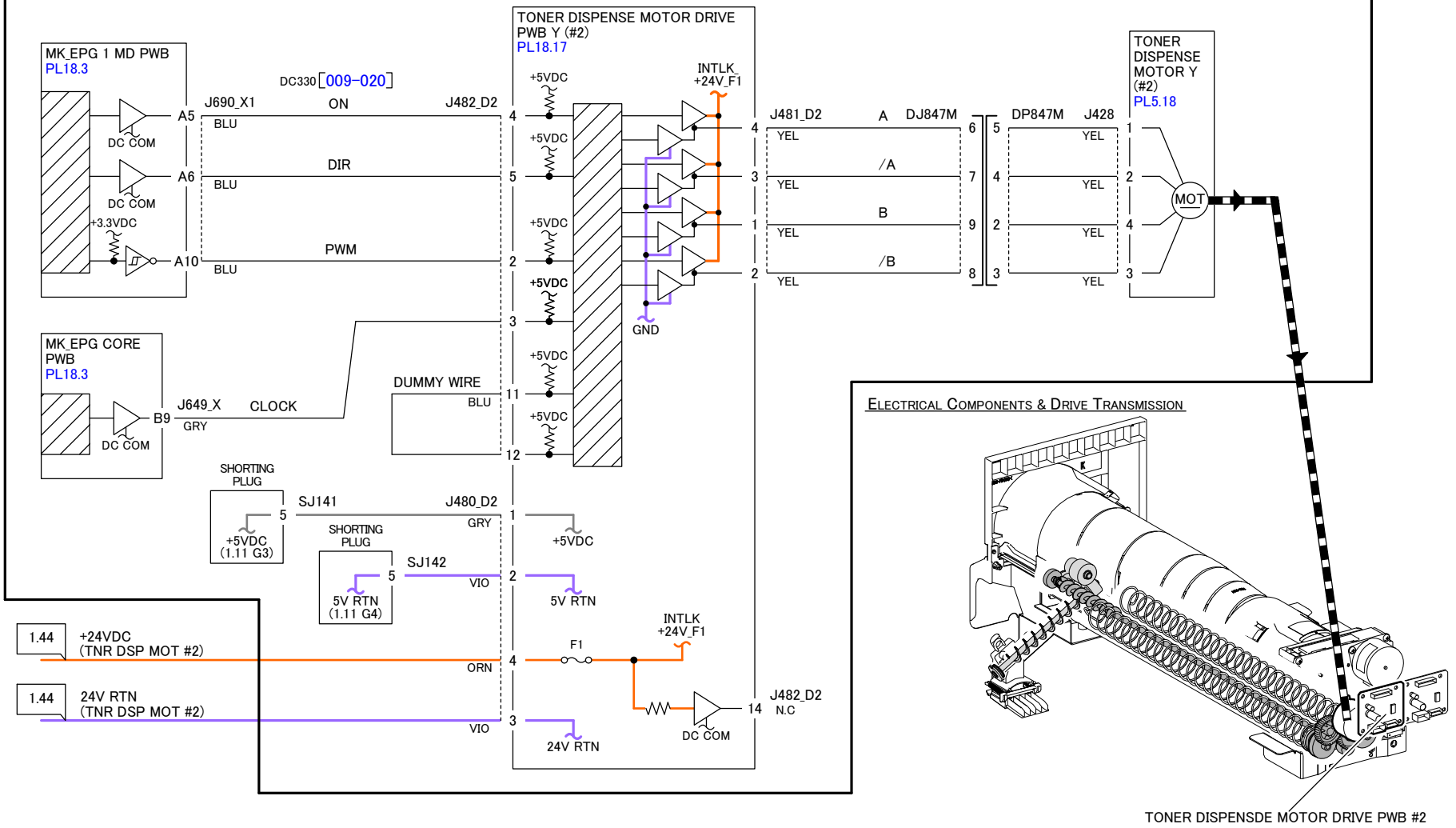
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



TONER DISPENSDE MOTOR DRIVE PWB #1

j0cx730940

9.41 TONER DISPENSE DRIVE Y (#2)

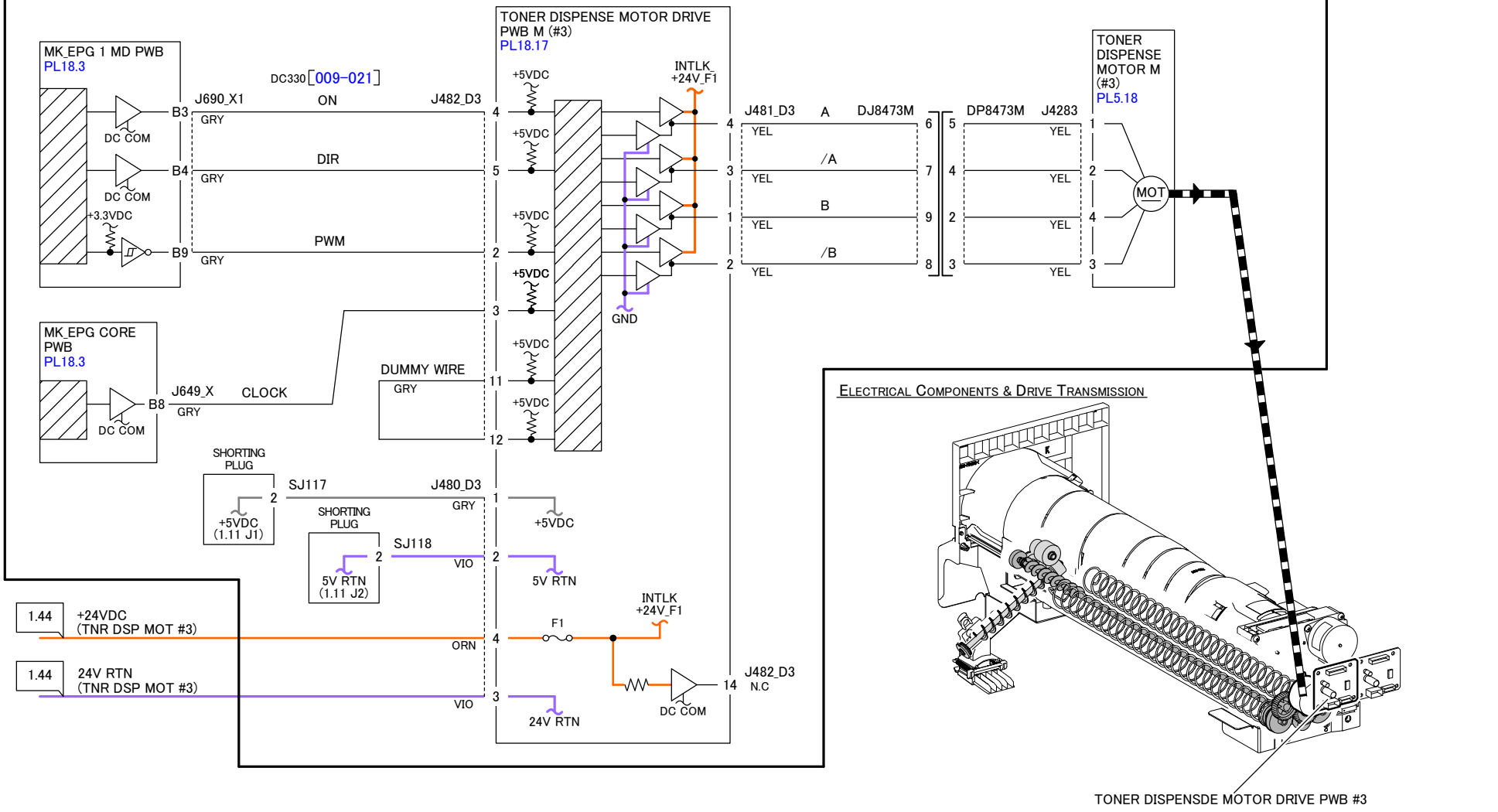


ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

TONER DISPENSDE MOTOR DRIVE PWB #2

j0cx730941

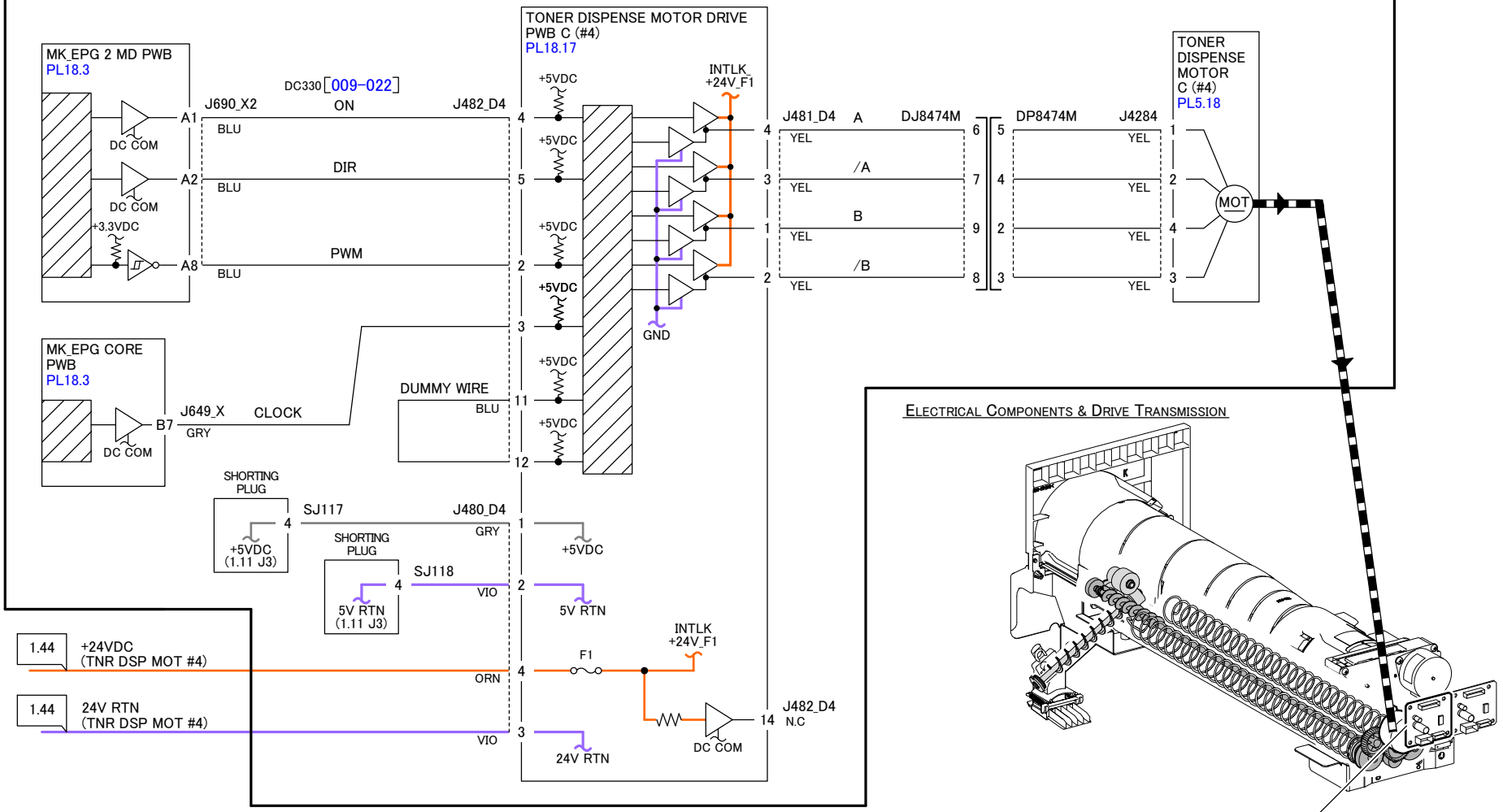
9.42 TONER DISPENSE DRIVE M (#3)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

j0cx730942

9.43 TONER DISPENSE DRIVE C (#4)



j0cx730943

9.44 TONER DISPENSE DRIVE K (#5)

MK_EPG 2 MD PWB
PL18.3

DC330 [009-023]

J690_X2 — A5 — DC COM — ON — BLU — J482_D5 4
A6 — DC COM — DIR — BLU — 5
+3.3VDC — A10 — PWM — BLU — 2

MK_EPG CORE PWB
PL18.3

B6 — DC COM — J649_X — CLOCK — GRY — DUMMY WIRE — BLU — 11

SHORTING PLUG — 6 — +5VDC (1.11 J4) — SJ117 — J480_D5 — GRY — 1 — +5VDC

SHORTING PLUG — 6 — 5V RTN (1.11 J4) — SJ118 — VIO — 2 — 5V RTN

1.44 +24VDC (TNR DSP MOT #5) — ORN — 4 — F1 — INTLK +24V_F1

1.44 24V RTN (TNR DSP MOT #5) — VIO — 3 — 24V RTN

12

TONER DISPENSE MOTOR DRIVE PWB K (#5)
PL18.17

+5VDC ×6
INTLK +24V_F1
GND

J481_D5 — A — DJ8475M — 6 5 / 4 7 / 2 9 / 3 8 — DP8475M — J4285 — 1 YEL / 2 YEL / 4 YEL / 3 YEL

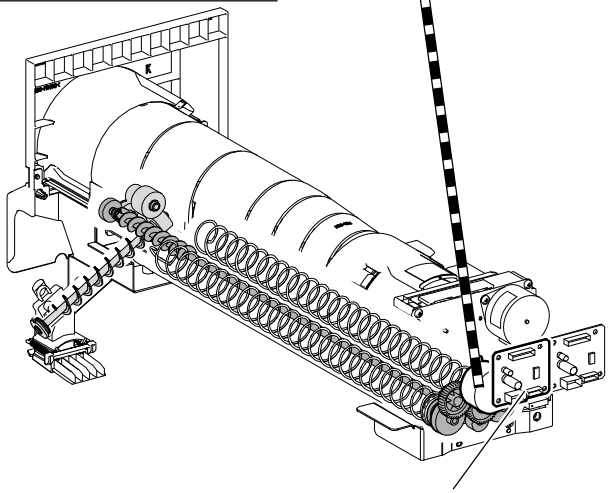
/A — B — /B

TONER DISPENSE MOTOR K (#5)
PL5.18

MOT

J482_D5 — 14 — N.C — DC COM

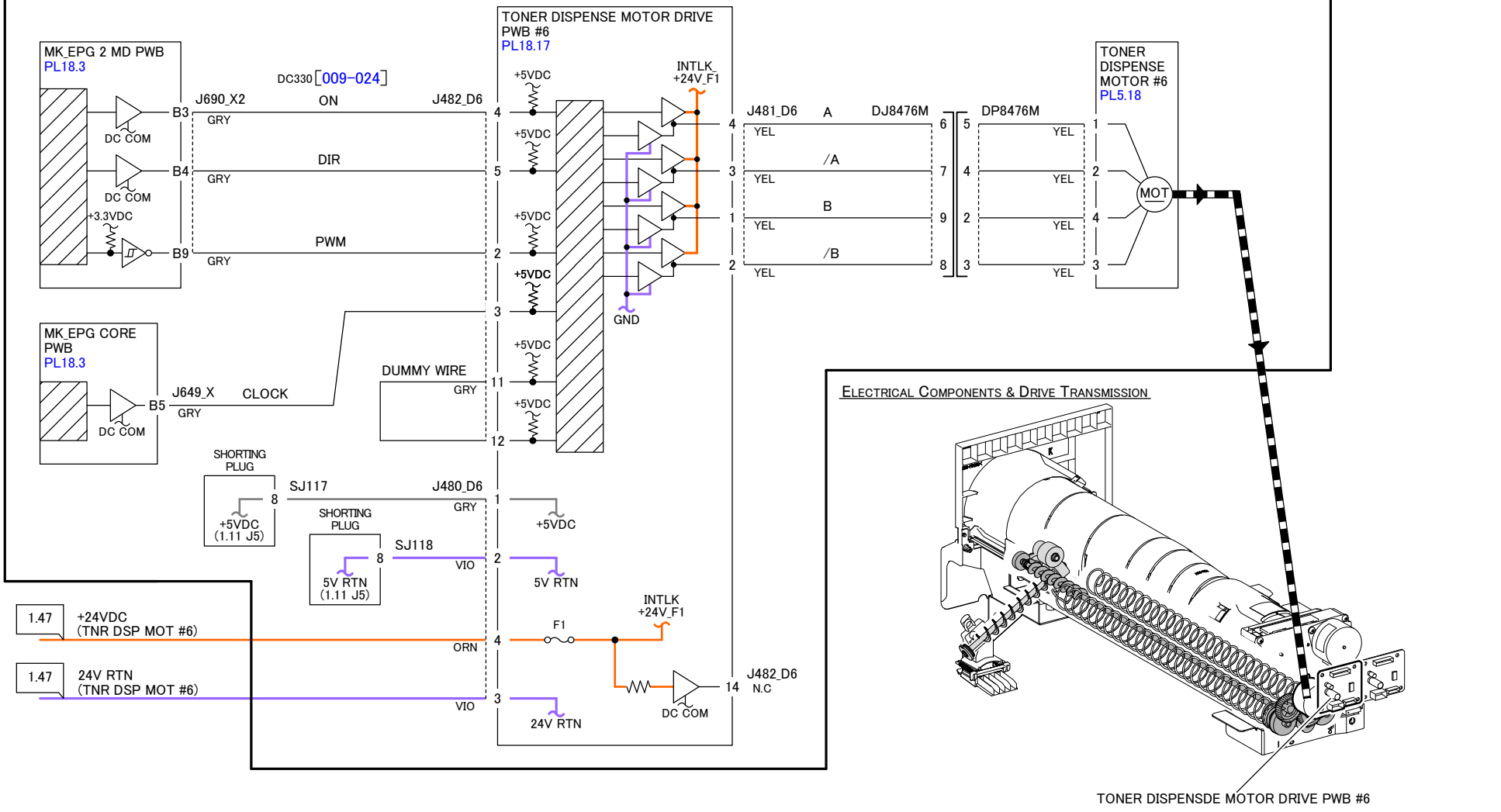
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



TONER DISPENSDE MOTOR DRIVE PWB #5

j0cx730944

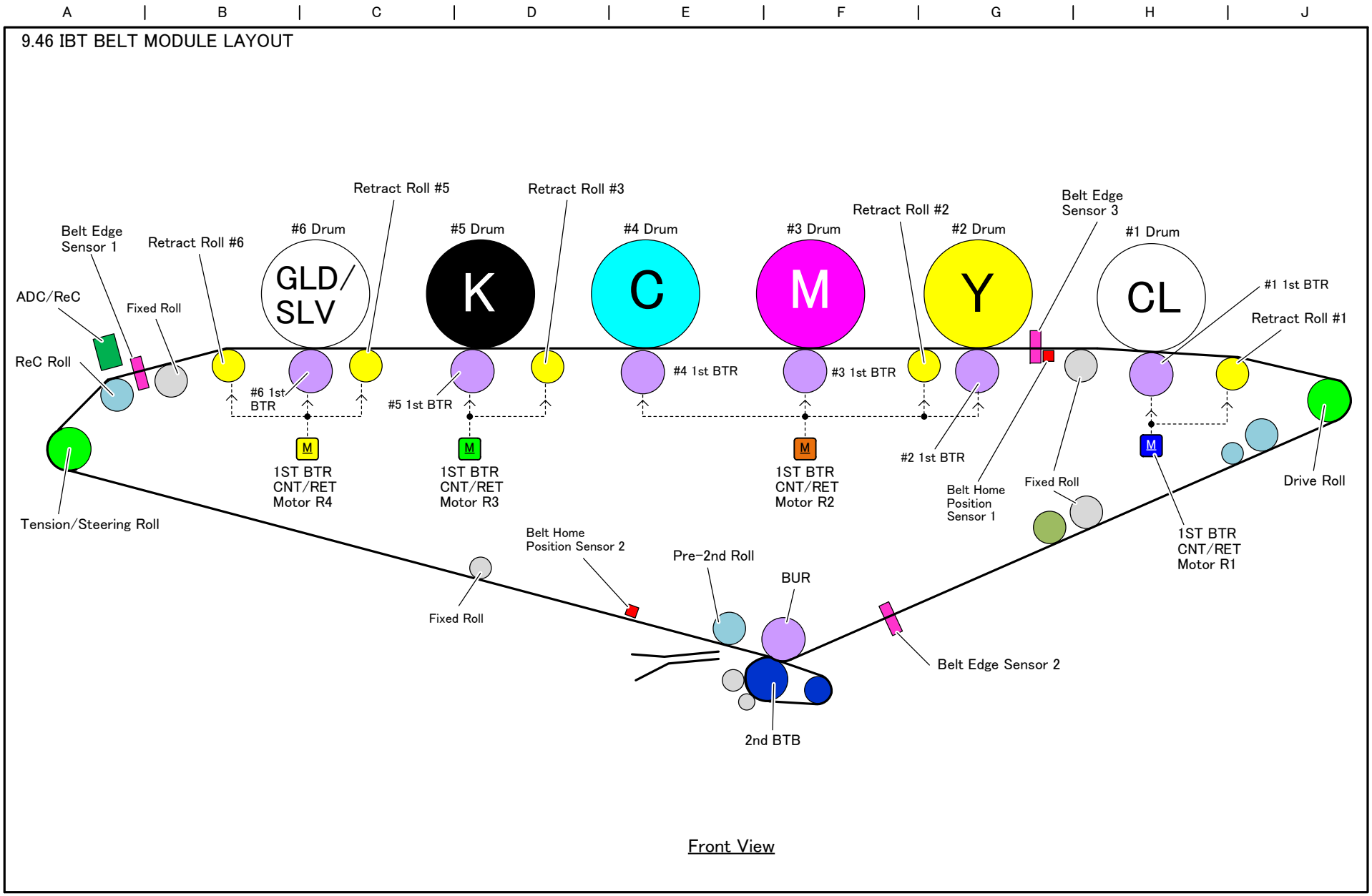
9.45 TONER DISPENSE DRIVE #6 (4C NOT USED)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

j0cx730945

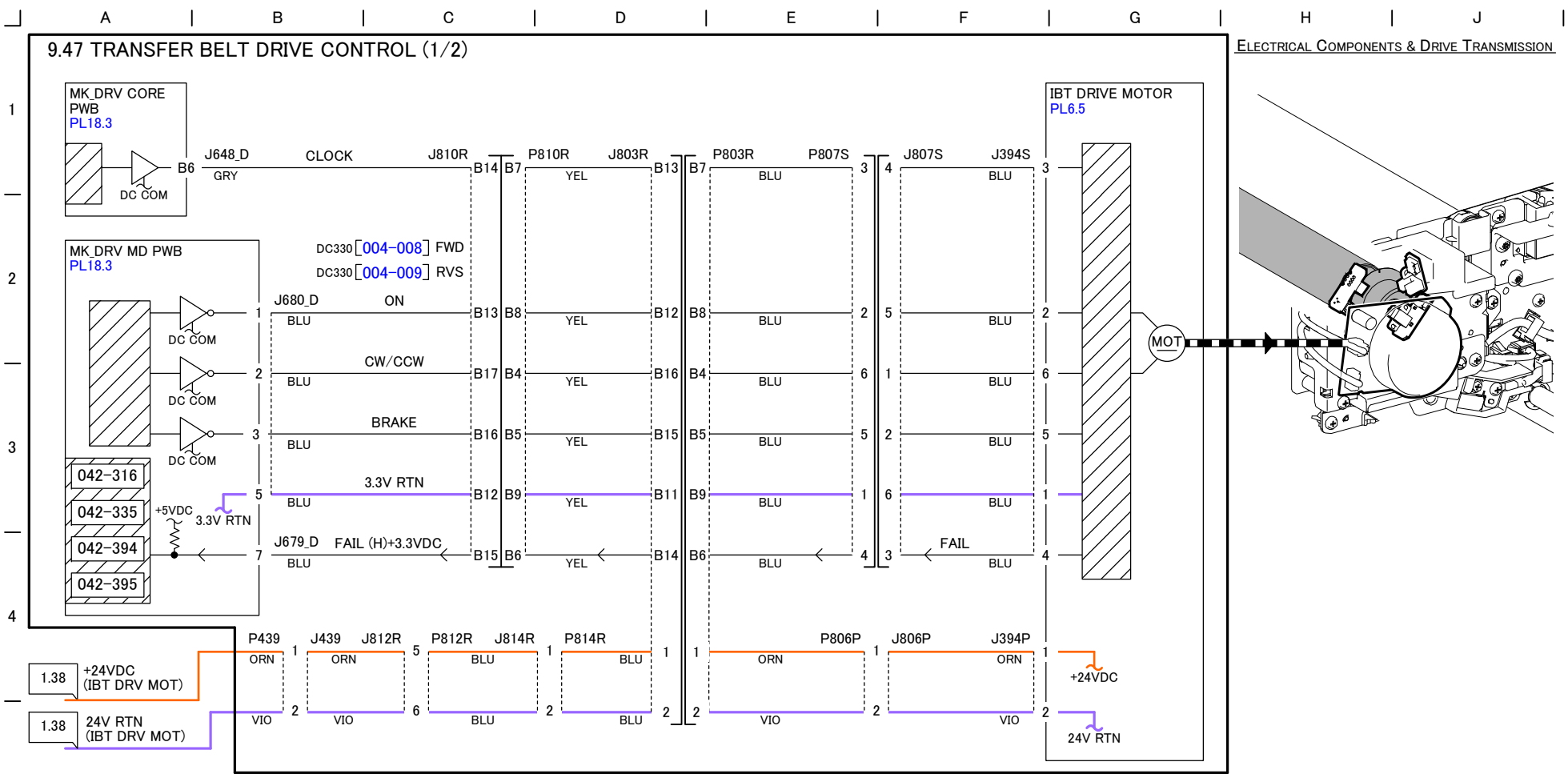
9.46 IBT BELT MODULE LAYOUT



Front View

j0cx730946

9.47 TRANSFER BELT DRIVE CONTROL (1/2)

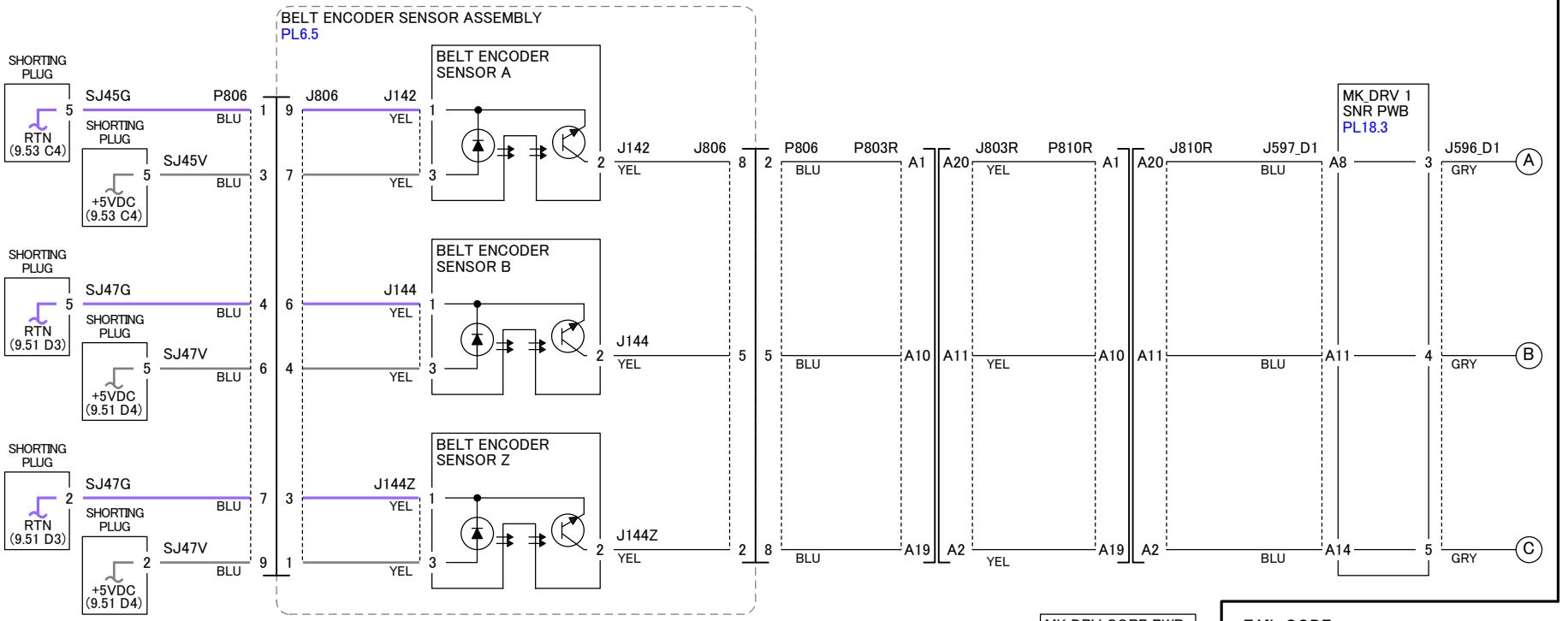


FAIL CODE

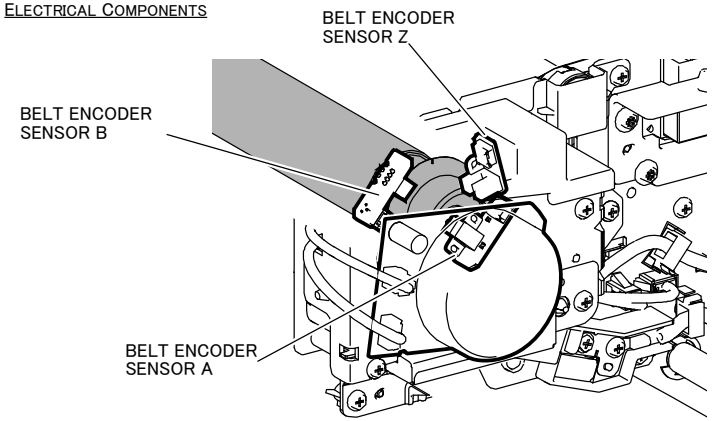
042-316	IBT Motor Fail
042-335	IBT Drive Motor Phase_A_Fail
042-394	IBT Drive Motor Phase_B_Fail
042-395	IBT Drive Motor Phase_AB_Fail

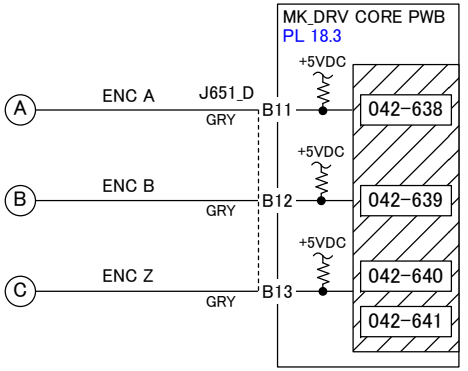
j0cx730947

9.48 TRANSFER BELT DRIVE CONTROL (2/2)



ELECTRICAL COMPONENTS

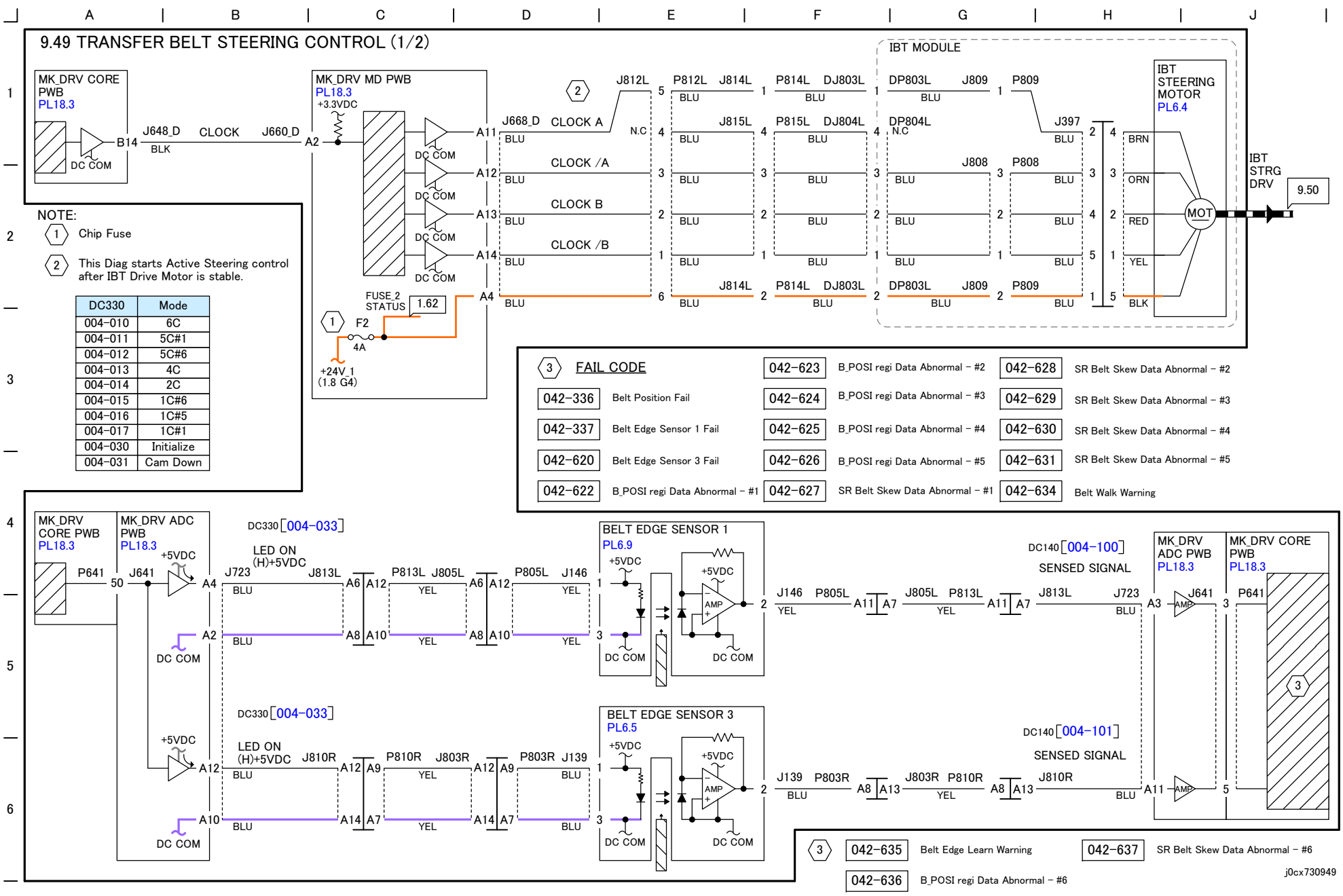




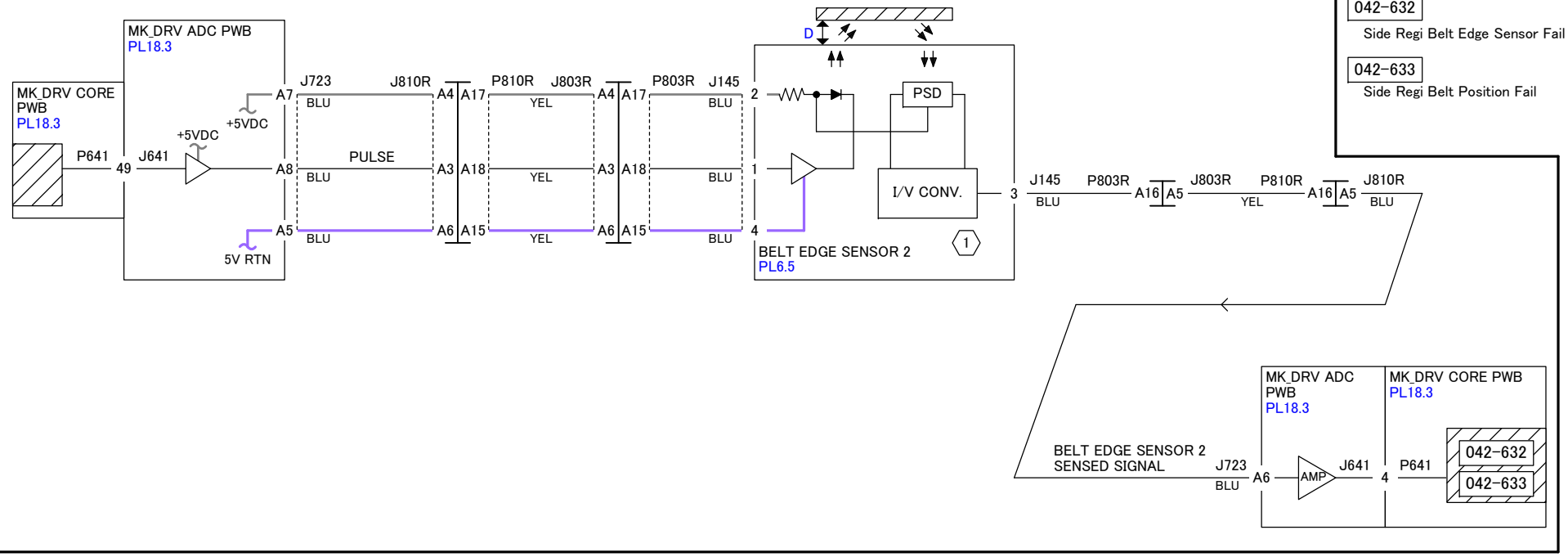
FAIL CODE

042-638	IBT Drive Motor Phase_A_Warning
042-639	IBT Drive Motor Phase_B_Warning
042-640	IBT Drive Motor Encoder_Z_Fail
042-641	Belt FF Learn Fail

j0cx730948


9.49 TRANSFER BELT STEERING CONTROL (1/2)
MK_DRV CORE PWB PL18.3
B14
DC COM
J648_D
BLK
CLOCK
J660_D
A2
MK_DRV MD PWB PL18.3
+3.3VDC
DC COM
A11
A12
A13
A14
A4
J668_D
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
BLU
N.C
J812L
P812L J814L
P814L DJ803L
J815L
P815L DJ804L
J814L
P814L DJ803L
IBT MODULE
DP803L J809
P809
DP804L
J808
P808
J397
IBT STEERING MOTOR PL6.4
BRN
ORN
RED
YEL
BLK
MOT
IBT STRG DRV
9.50
FUSE_2 STATUS
1.62
F2
4A
+24V_1 (1.8 G4)
NOTE:
1 Chip Fuse
2 This Diag starts Active Steering control after IBT Drive Motor is stable.
DC330 Mode
004-010 6C
004-011 5C#1
004-012 5C#6
004-013 4C
004-014 2C
004-015 1C#6
004-016 1C#5
004-017 1C#1
004-030 Initialize
004-031 Cam Down
3 FAIL CODE
042-336 Belt Position Fail
042-337 Belt Edge Sensor 1 Fail
042-620 Belt Edge Sensor 3 Fail
042-622 B_POSI regi Data Abnormal – #1
042-623 B_POSI regi Data Abnormal – #2
042-624 B_POSI regi Data Abnormal – #3
042-625 B_POSI regi Data Abnormal – #4
042-626 B_POSI regi Data Abnormal – #5
042-627 SR Belt Skew Data Abnormal – #1
042-628 SR Belt Skew Data Abnormal – #2
042-629 SR Belt Skew Data Abnormal – #3
042-630 SR Belt Skew Data Abnormal – #4
042-631 SR Belt Skew Data Abnormal – #5
042-634 Belt Walk Warning
MK_DRV CORE PWB PL18.3
MK_DRV ADC PWB PL18.3
P641
J641
50
+5VDC
A4
A2
DC330 [004-033]
LED ON (H)+5VDC
J723
J813L
P813L J805L
P805L J146
BLU
YEL
A6 A12
A8 A10
BELT EDGE SENSOR 1 PL6.9
AMP
DC140 [004-100]
SENSED SIGNAL
J146 P805L
J805L P813L
J813L J723
A11 A7
A3
J641
P641
MK_DRV ADC PWB PL18.3
MK_DRV CORE PWB PL18.3
A12
A10
DC330 [004-033]
LED ON (H)+5VDC
J810R
P810R J803R
P803R J139
A12 A9
A14 A7
BELT EDGE SENSOR 3 PL6.5
DC140 [004-101]
SENSED SIGNAL
J139 P803R
J803R P810R
J810R
A8 A13
A11
3 042-635 Belt Edge Learn Warning
042-636 B_POSI regi Data Abnormal – #6
042-637 SR Belt Skew Data Abnormal – #6
j0cx730949

9.50 TRANSFER BELT STEERING CONTROL (2/2)



FAIL CODE

042-632
Side Regi Belt Edge Sensor Fail

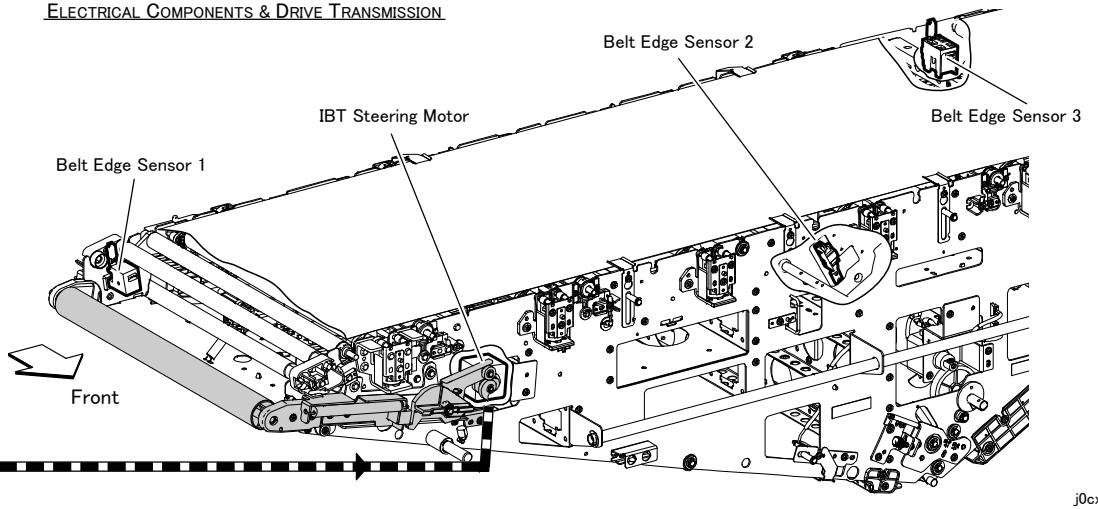
042-633
Side Regi Belt Position Fail

NOTE:

(1) This sensor is not used for Transport Belt Steering control.
This is for alignment control (Regicon).

* Micro Displacement Sensor
Output voltage is obtained according to distance (D)
by adding pulse signal to J145-1 pin.

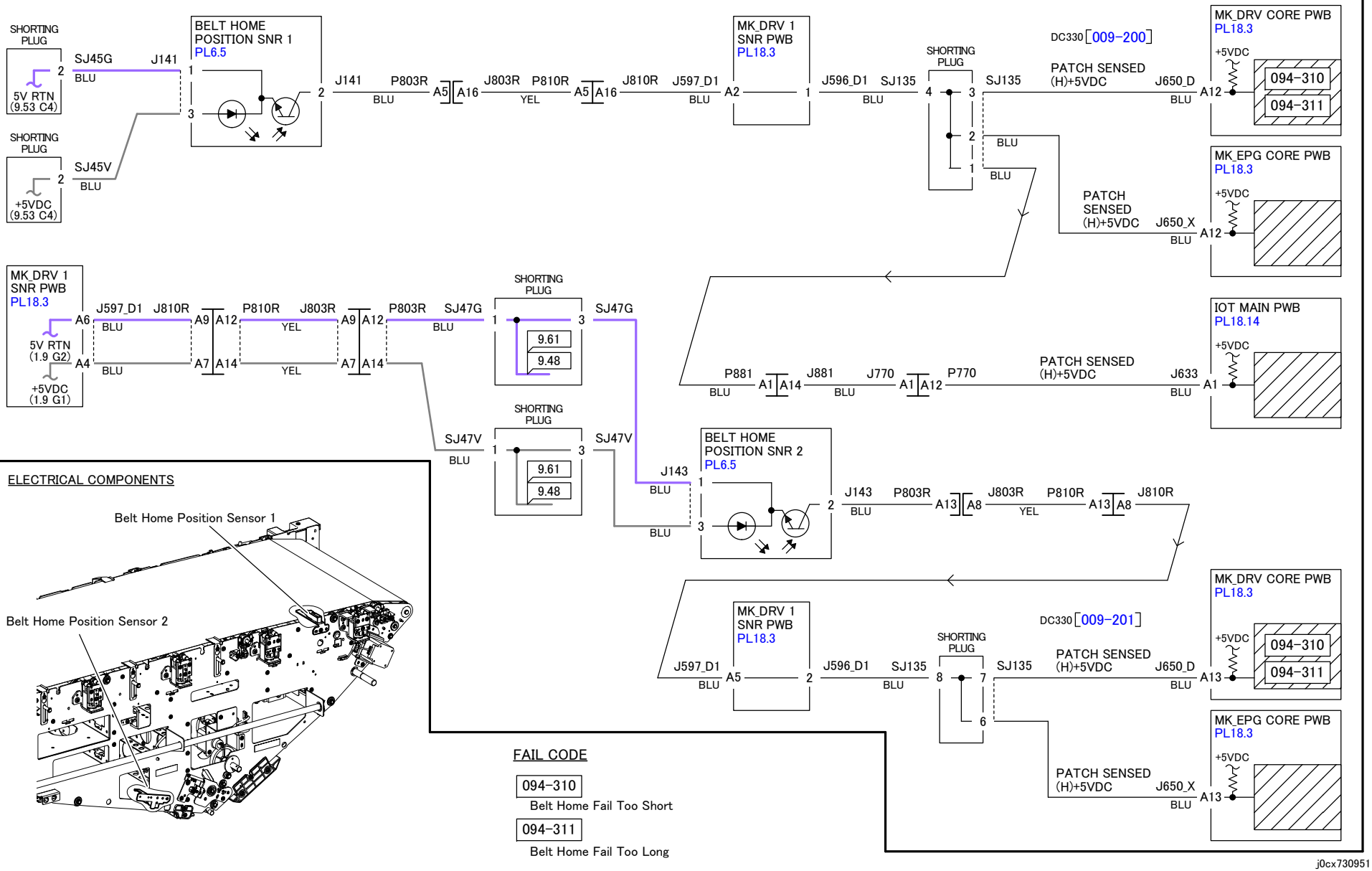
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



9.49 IBT STRG DRIVE

j0cx730950

9.51 TRANSFER BELT HOME POSITION SENSING



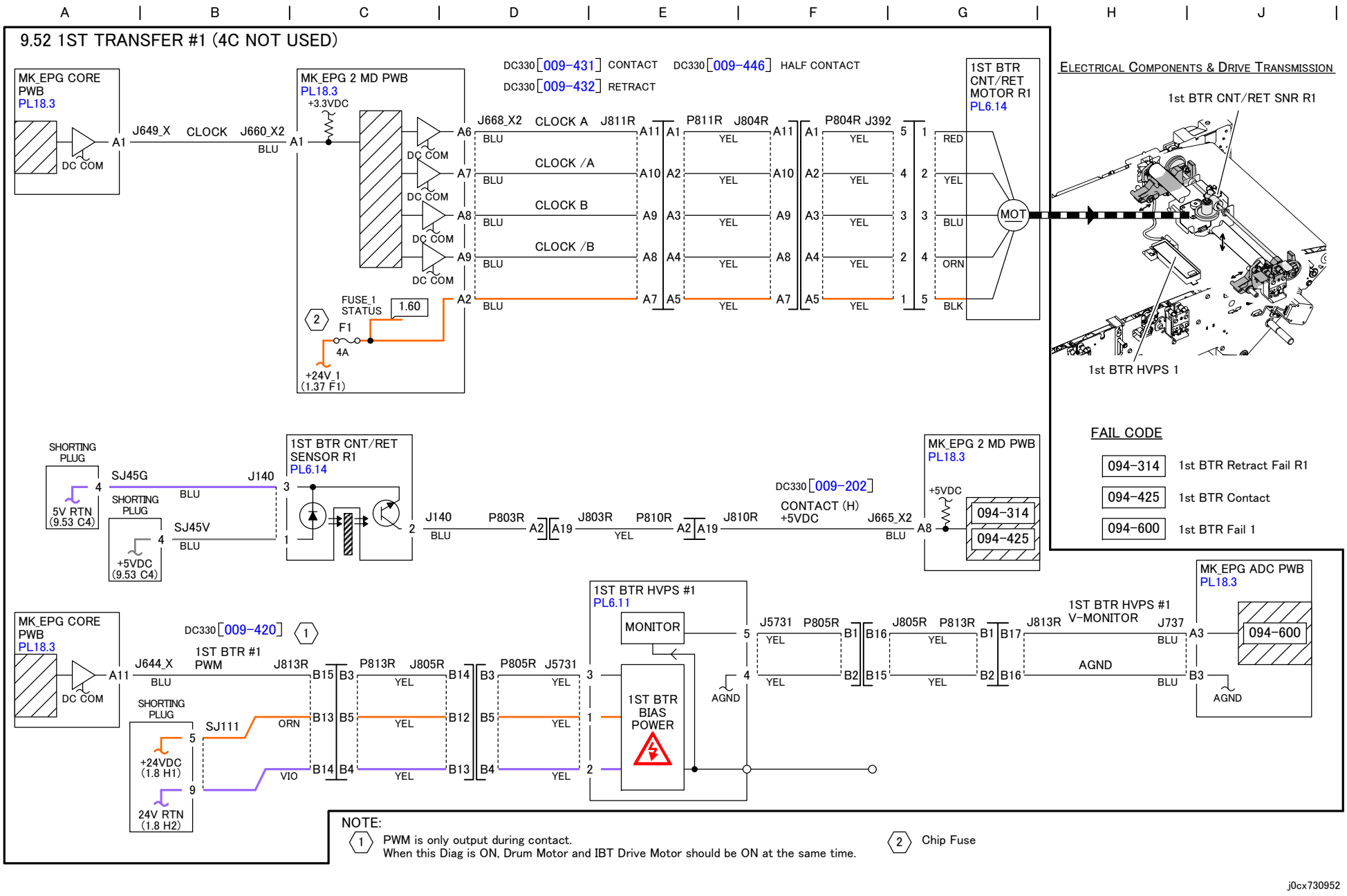
ELECTRICAL COMPONENTS

FAIL CODE

094-310	Belt Home Fail Too Short
094-311	Belt Home Fail Too Long

j0cx730951

9.52 1ST TRANSFER #1 (4C NOT USED)



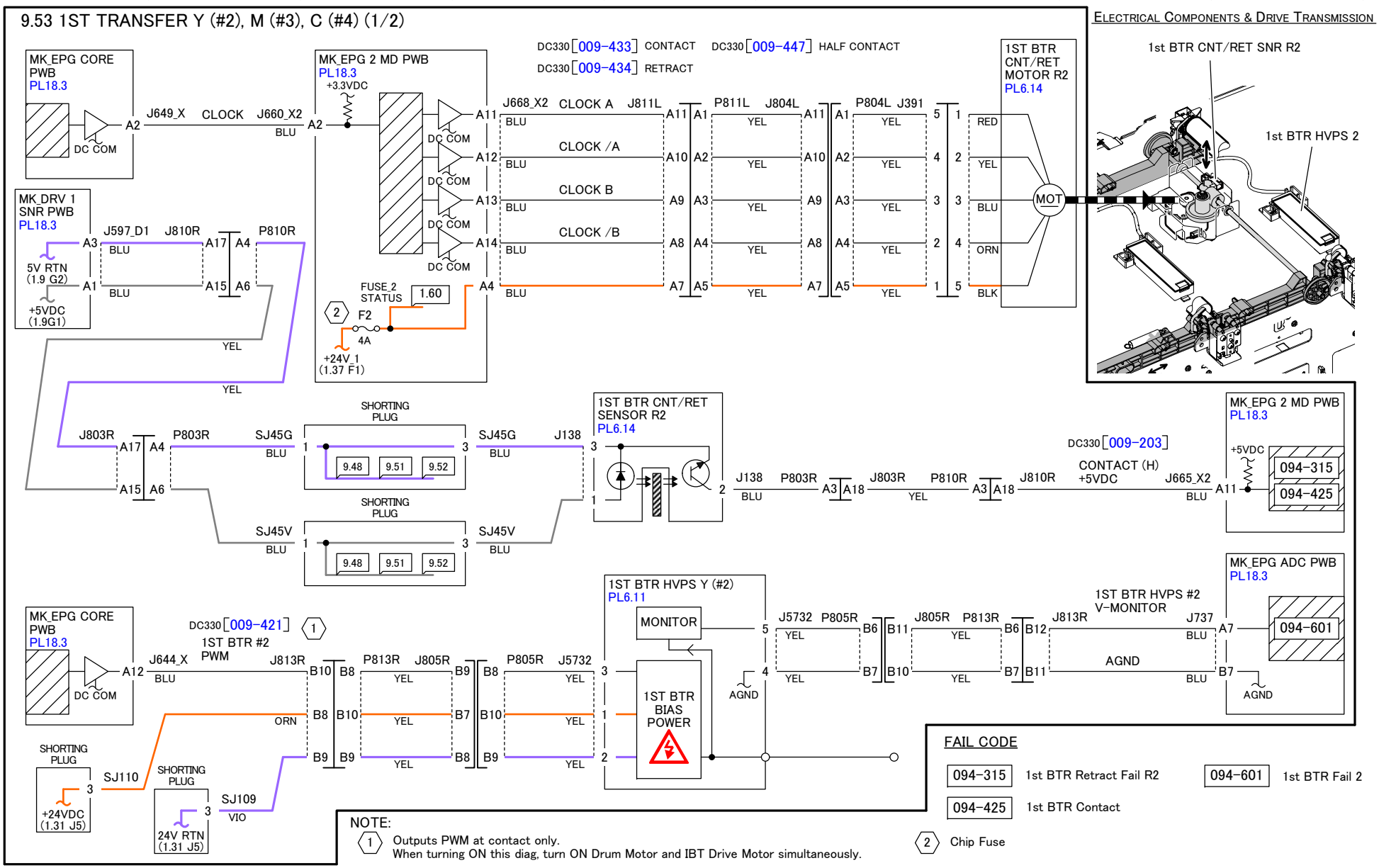
NOTE:

(1) PWM is only output during contact.
When this Diag is ON, Drum Motor and IBT Drive Motor should be ON at the same time.

(2) Chip Fuse

j0cx730952

9.53 1ST TRANSFER Y (#2), M (#3), C (#4) (1/2)



FAIL CODE

094-315	1st BTR Retract Fail R2	094-601	1st BTR Fail 2
094-425	1st BTR Contact		

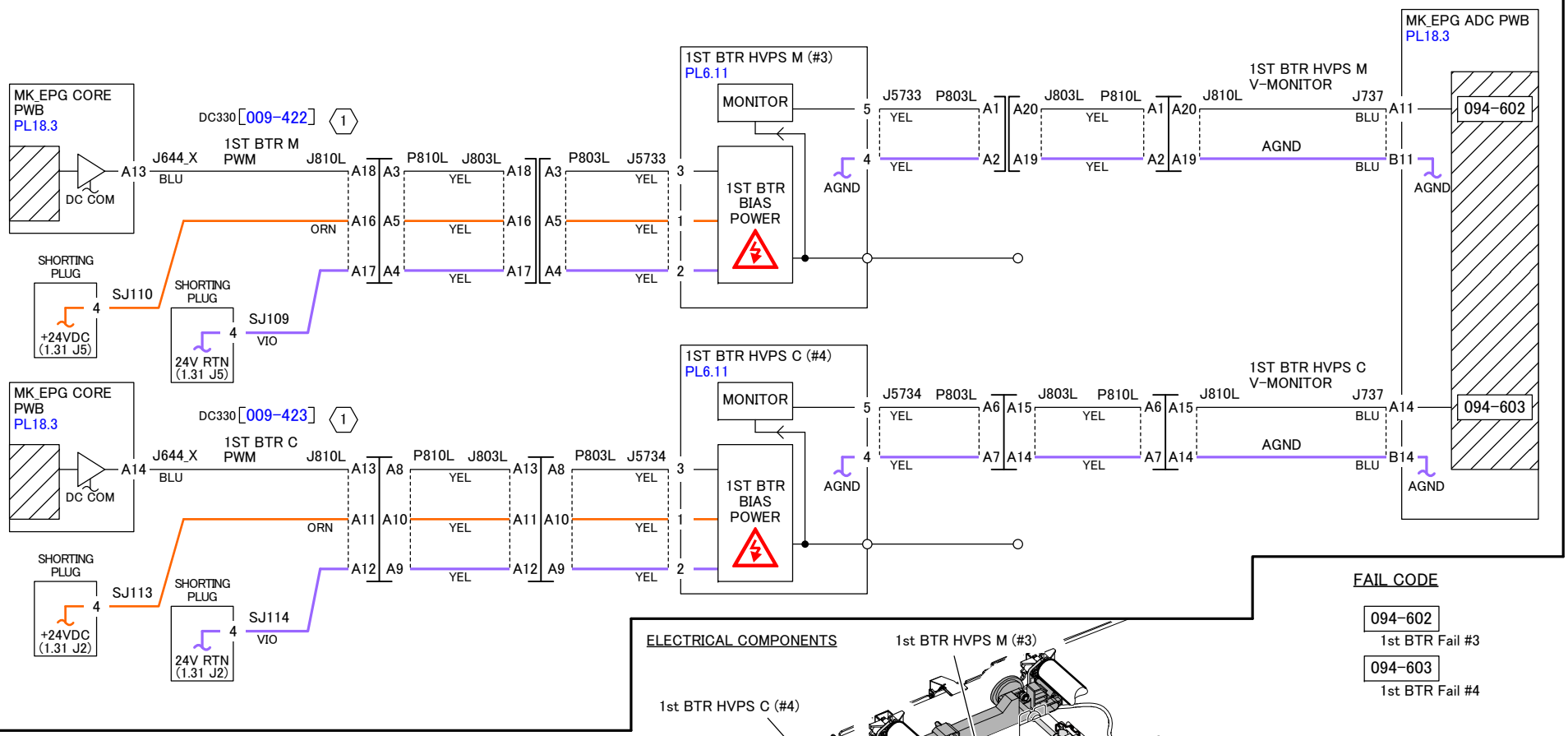
(2) Chip Fuse

NOTE:

(1) Outputs PWM at contact only.
When turning ON this diag, turn ON Drum Motor and IBT Drive Motor simultaneously.

j0cx730953

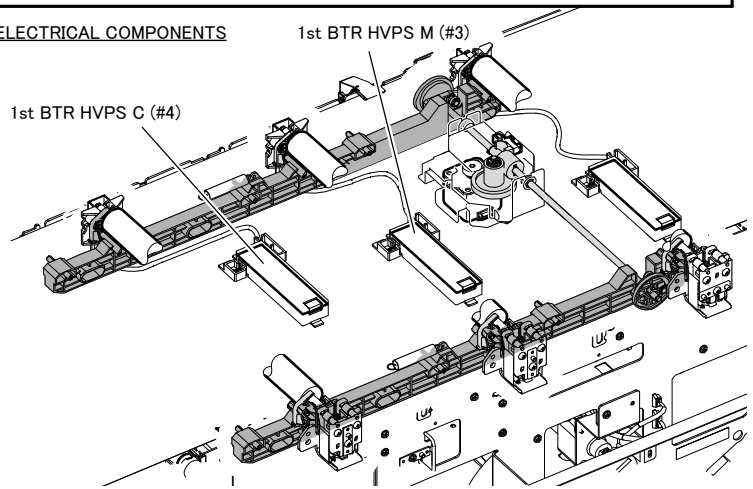
9.54 1ST TRANSFER Y (#2), M (#3), C (#4) (2/2)



NOTE:

(1) Outputs PWM at contact only.
When turning ON this diag, turn ON Drum Motor and IBT Drive Motor simultaneously.

ELECTRICAL COMPONENTS

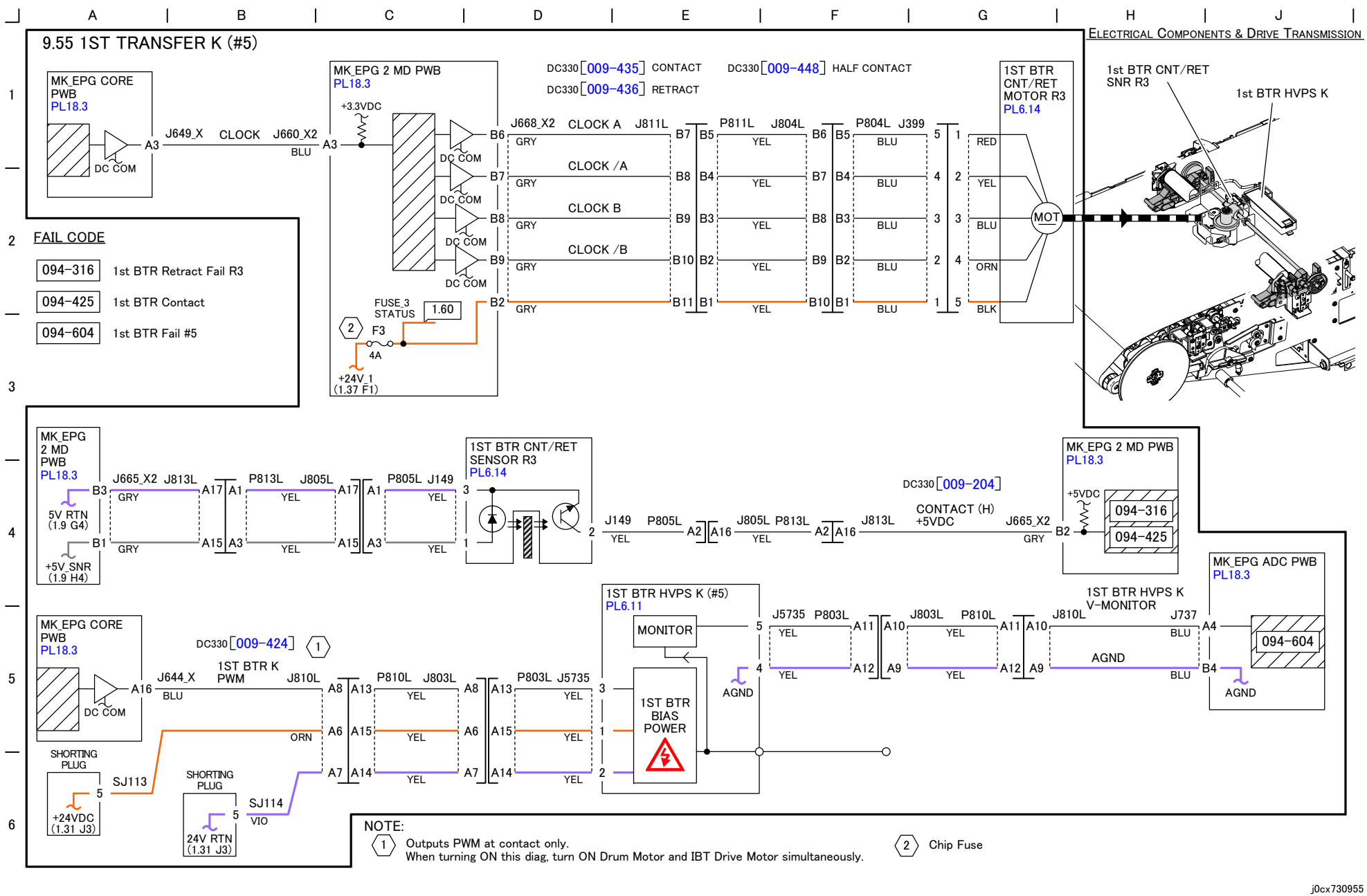


FAIL CODE

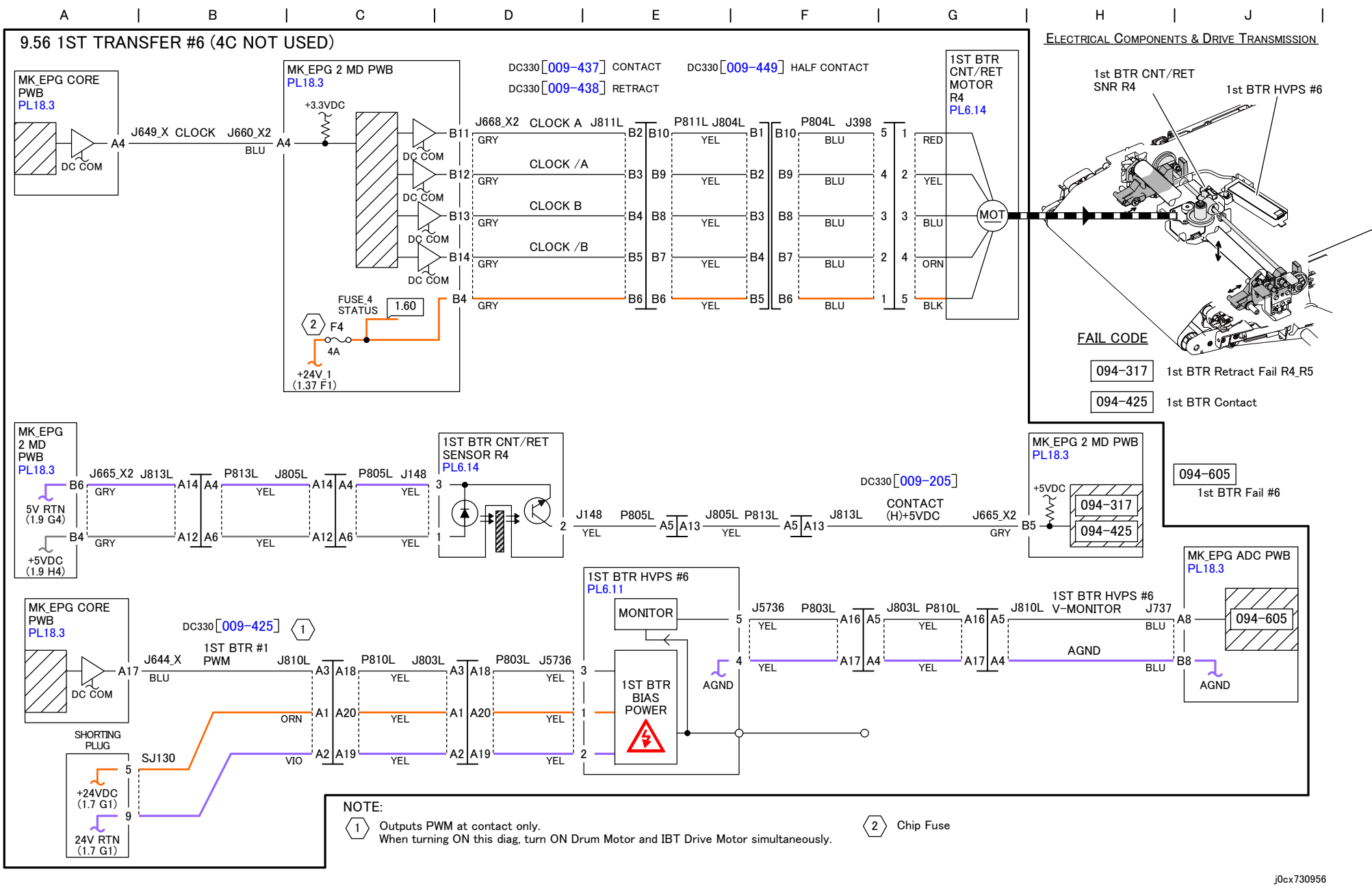
094-602
1st BTR Fail #3

094-603
1st BTR Fail #4

j0cx730954


9.55 1ST TRANSFER K (#5)
MK_EPG CORE PWB PL18.3
MK_EPG 2 MD PWB PL18.3
DC330 [009-435] CONTACT
DC330 [009-436] RETRACT
DC330 [009-448] HALF CONTACT
1ST BTR CNT/RET MOTOR R3 PL6.14
1st BTR CNT/RET SNR R3
1st BTR HVPS K
FAIL CODE
094-316 1st BTR Retract Fail R3
094-425 1st BTR Contact
094-604 1st BTR Fail #5
J649_X CLOCK J660_X2 BLU
+3.3VDC
DC COM
J668_X2 CLOCK A J811L
CLOCK /A
CLOCK B
CLOCK /B
P811L J804L
P804L J399
GRY
YEL
BLU
RED
ORN
BLK
MOT
FUSE_3 STATUS 1.60
F3 4A
+24V_1 (1.37 F1)
MK_EPG 2 MD PWB PL18.3
J665_X2 J813L
P813L J805L
P805L J149
5V RTN (1.9 G4)
+5V_SNR (1.9 H4)
1ST BTR CNT/RET SENSOR R3 PL6.14
J149 P805L
J805L P813L
J813L
CONTACT (H) +5VDC
J665_X2
DC330 [009-204]
MK_EPG 2 MD PWB PL18.3
+5VDC
094-316
094-425
MK_EPG ADC PWB PL18.3
MK_EPG CORE PWB PL18.3
DC330 [009-424] (1)
J644_X BLU
1ST BTR K PWM
J810L
P810L J803L
P803L J5735
1ST BTR HVPS K (#5) PL6.11
MONITOR
1ST BTR BIAS POWER
AGND
J5735 P803L
J803L P810L
J810L
1ST BTR HVPS K V-MONITOR
J737
094-604
SHORTING PLUG
SJ113
+24VDC (1.31 J3)
SHORTING PLUG
SJ114 VIO
24V RTN (1.31 J3)
NOTE:
(1) Outputs PWM at contact only.
When turning ON this diag, turn ON Drum Motor and IBT Drive Motor simultaneously.
(2) Chip Fuse
j0cx730955

9.56 1ST TRANSFER #6 (4C NOT USED)

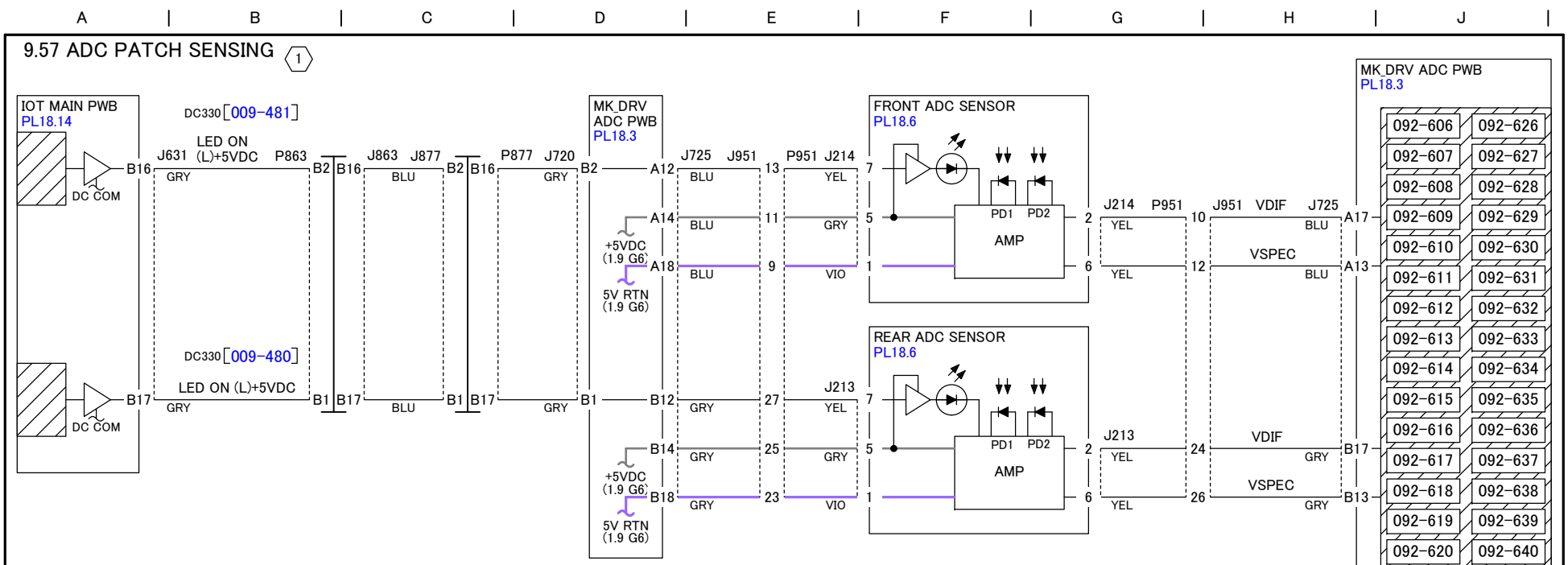


NOTE:

(1) Outputs PWM at contact only.
When turning ON this diag, turn ON Drum Motor and IBT Drive Motor simultaneously.

(2) Chip Fuse

j0cx730956



NOTE:

(1) ADC patch is created for inter-image.
There are 3 types of patches as follows.

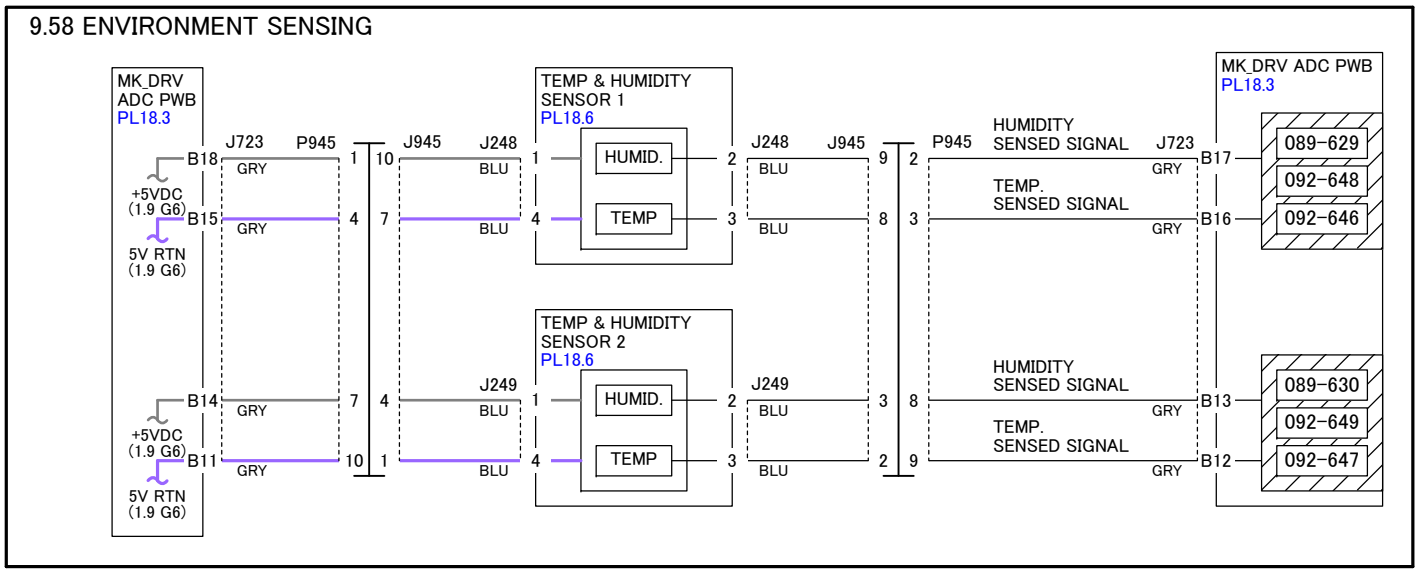
1. Voltage Control Patch
2. Gradation Control Patch High Cin 80%
3. Gradation Control Patch Low Cin 25%

FAIL CODE

092-606	Mini Setup ADC Patch Fail #1	092-618	Mini Setup ADC TRC Coated Fail #1	092-630	Job ADC TRC Fail H #1	092-642	ADC AGC Fail 1
092-607	Mini Setup ADC Patch Fail #2	092-619	Mini Setup ADC TRC Coated Fail #2	092-631	Job ADC TRC Fail H #2	092-643	ADC AGC Fail 2
092-608	Mini Setup ADC Patch Fail #3	092-620	Mini Setup ADC TRC Coated Fail #3	092-632	Job ADC TRC Fail H #3	092-644	ADC Vclean Fail 1
092-609	Mini Setup ADC Patch Fail #4	092-621	Mini Setup ADC TRC Coated Fail #4	092-633	Job ADC TRC Fail H #4	092-645	ADC Vclean Fail 2
092-610	Mini Setup ADC Patch Fail #5	092-622	Mini Setup ADC TRC Coated Fail #5	092-634	Job ADC TRC Fail H #5	092-686～691	#1～#6
092-611	Mini Setup ADC Patch Fail #6	092-623	Mini Setup ADC TRC Coated Fail #6	092-635	Job ADC TRC Fail H #6	092-692～697	#1～#6
092-612	Mini Setup ADC TRC Uncoated Fail #1	092-624	Job ADC Patch Fail #1	092-636	Job ADC TRC Fail L #1		
092-613	Mini Setup ADC TRC Uncoated Fail #2	092-625	Job ADC Patch Fail #2	092-637	Job ADC TRC Fail L #2		
092-614	Mini Setup ADC TRC Uncoated Fail #3	092-626	Job ADC Patch Fail #3	092-638	Job ADC TRC Fail L #3		
092-615	Mini Setup ADC TRC Uncoated Fail #4	092-627	Job ADC Patch Fail #4	092-639	Job ADC TRC Fail L #4		
092-616	Mini Setup ADC TRC Uncoated Fail #5	092-628	Job ADC Patch Fail #5	092-640	Job ADC TRC Fail L #5		
092-617	Mini Setup ADC TRC Uncoated Fail #6	092-629	Job ADC Patch Fail #6	092-641	Job ADC TRC Fail L #6		

j0cx730957

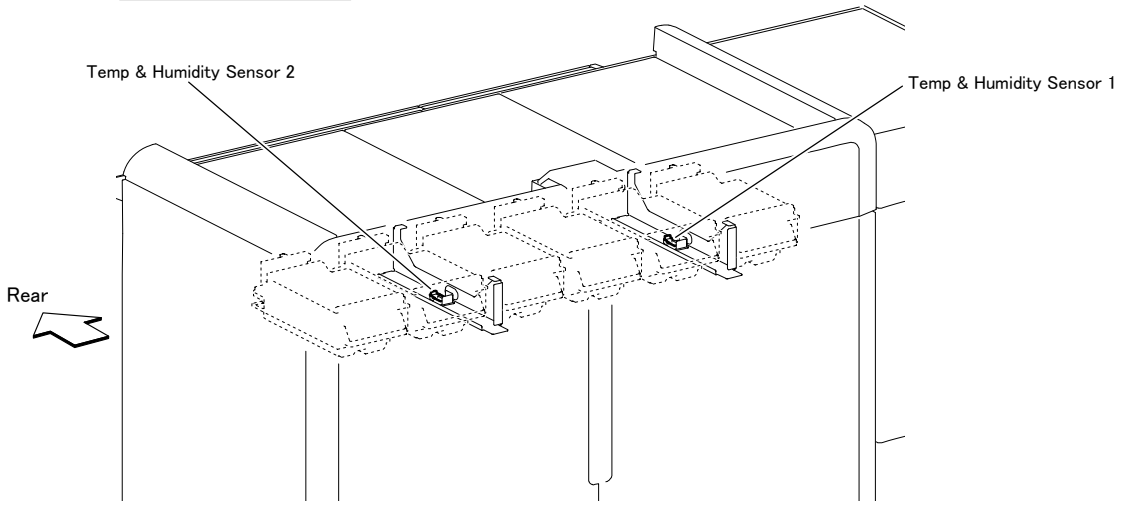
9.58 ENVIRONMENT SENSING



FAIL CODE

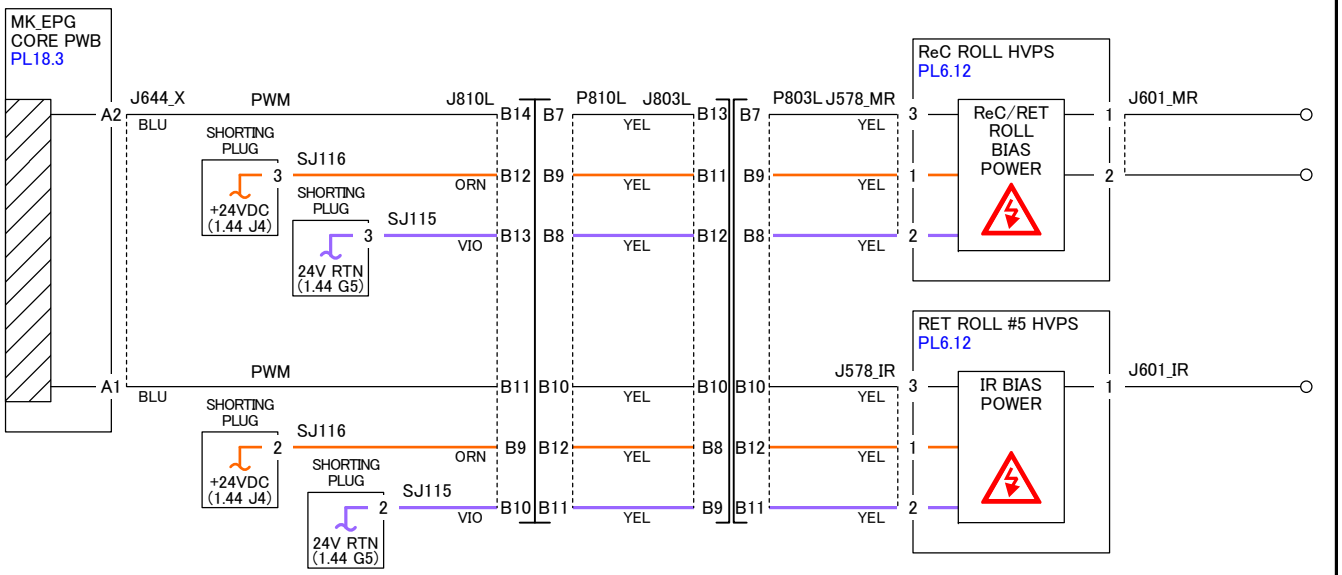
089-629	RC Temp Sensor 1 Fail
089-630	RC Temp Sensor 2 Fail
092-646	Temp Fail 1
092-647	Temp Fail 2
092-648	Humidity Fail 1
092-649	Humidity Fail 2
094-606	X'fer ENV Temp Fail
094-607	X'fer ENV Hum Fail

ELECTRICAL COMPONENTS

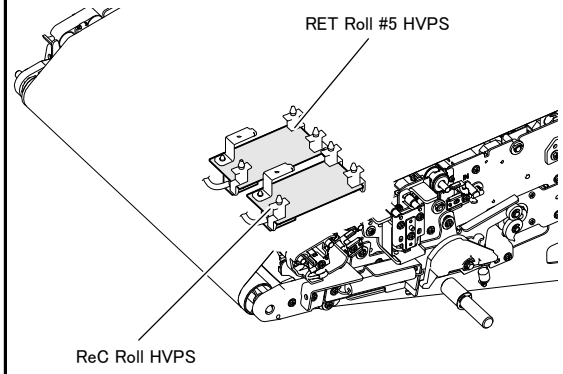


j0cx730958

9.59 TONER SCATTER PREVENTION



ELECTRICAL COMPONENTS

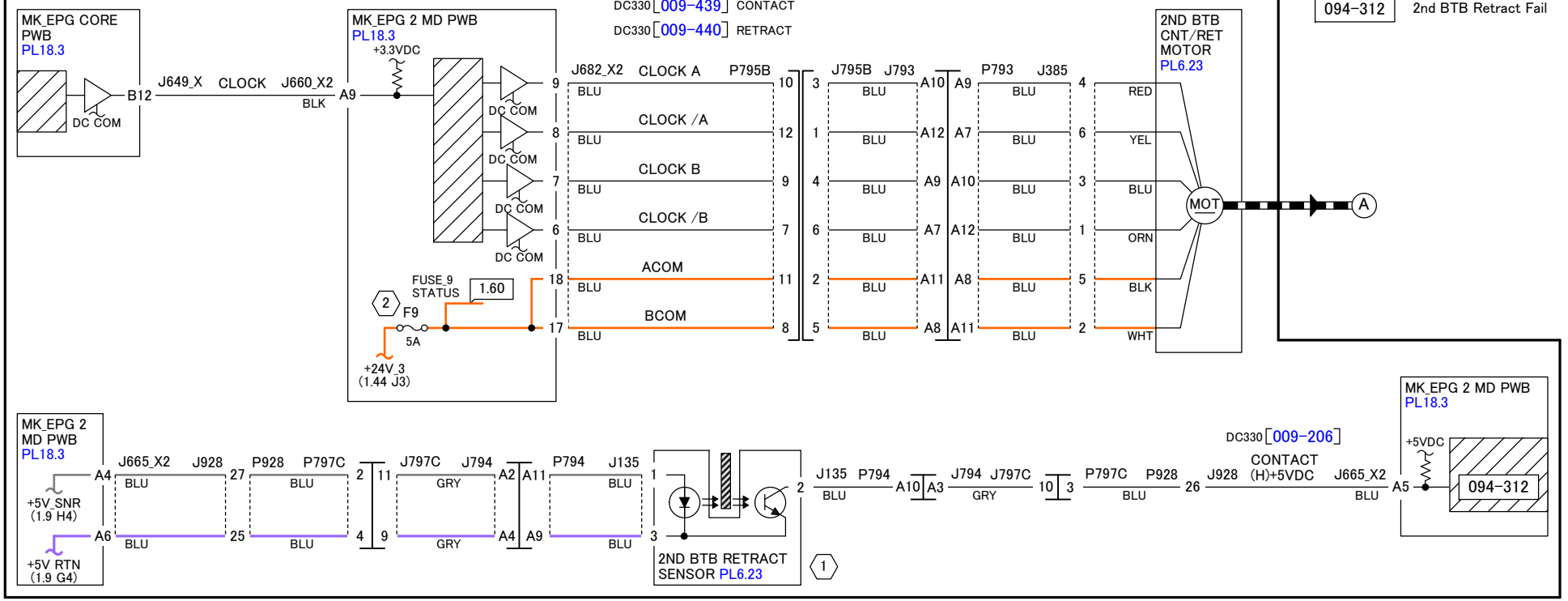


j0cx730959

9.60 2ND BTB CONTACT/RETRACT

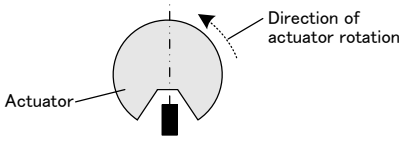
FAIL CODE

094-312 2nd BTB Retract Fail



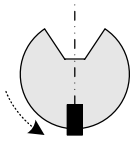
NOTE:

(1) Retract Position



Sensor: Low

Contact Position

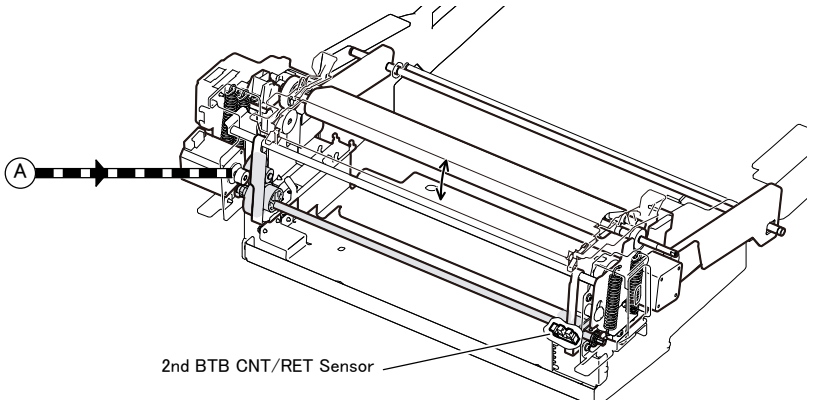


Sensor: High

2nd BTB Home position is in retract (not in contact with IBT Belt) position.

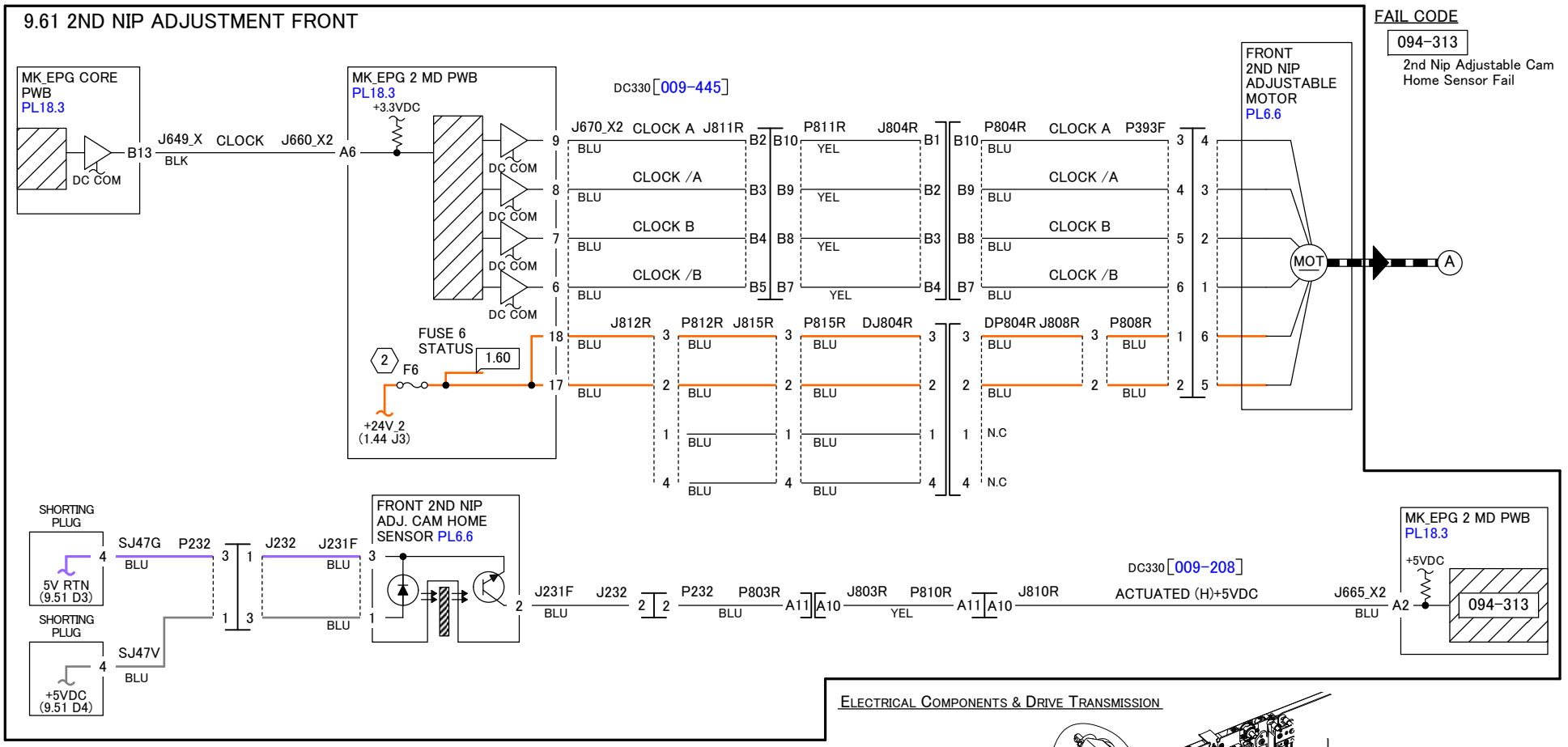
(2) Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730960

9.61 2ND NIP ADJUSTMENT FRONT



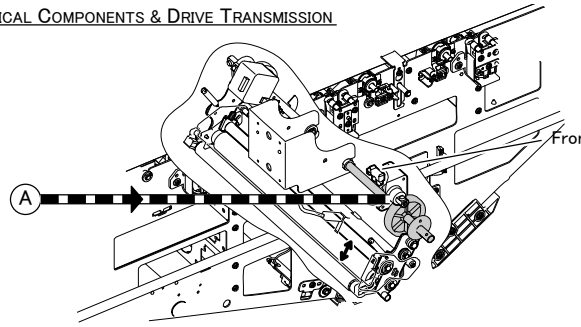
FAIL CODE

094-313

2nd Nip Adjustable Cam Home Sensor Fail

NOTE: Suppresses Heavyweight banding by adjusting (decreasing) the Nip amount of 2ND BTB and BUR during passing of Heavyweight paper.

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730961

9.62 2ND NIP ADJUSTMENT REAR

FAIL CODE
094-313
2nd Nip Adjustable Cam Home Sensor Fail

MK_EPG CORE PWB PL18.3
B14 — J649_X BLK — CLOCK — J660_X2 A5
DC COM

MK_EPG 2 MD PWB PL18.3
+3.3VDC
DC COM ×4
FUSE 5 STATUS 1.60
2 F5 4A
+24V_2 (1.44 J3)

DC330 [009-445]

13	J670_X2 BLU	CLOCK A	J811R A3 A9	P811R J804R YEL	A3 A9	P804R P393R YEL	3 4	REAR 2ND NIP ADJUSTABLE MOTOR PL6.6			
12	BLU	CLOCK /A	A4 A8	YEL	A4 A8	YEL	4 3				
11	BLU	CLOCK B	A5 A7	YEL	A5 A7	YEL	5 2				
10	BLU	CLOCK /B	A6 A6	YEL	A6 A6	YEL	6 1				
20	BLU	ACOM	A1 A11	YEL	A1 A11	YEL	1 6				
19	BLU	BCOM	A2 A10	YEL	A2 A10	YEL	2 5				

1 — MOT — A

MK_EPG 2 MD PWB PL18.3
B9 — J665_X2 GRY — J810R B11 B10 — P810R YEL — J803R B10 B10 — P803R BLU — P231R 3 1
B7 — GRY — B9 B12 — YEL — B8 B12 — BLU — 1 3
5V RTN (1.9 G4)
+5V_SNR (1.9 H4)

REAR 2ND NIP ADJ. CAM HOME SENSOR PL6.6
3 — 2 — 1

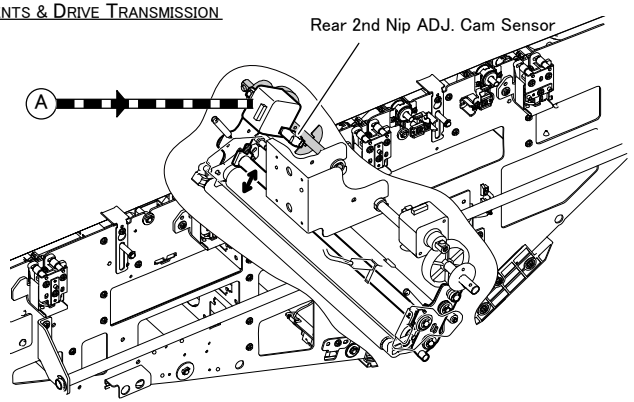
2 2 — P231R BLU — P803R B11 B9 — J803R YEL

DC330 [009-207]
ACTUATED (H)+5VDC

P810R YEL — B11 B10 — J810R GRY — J665_X2 B8

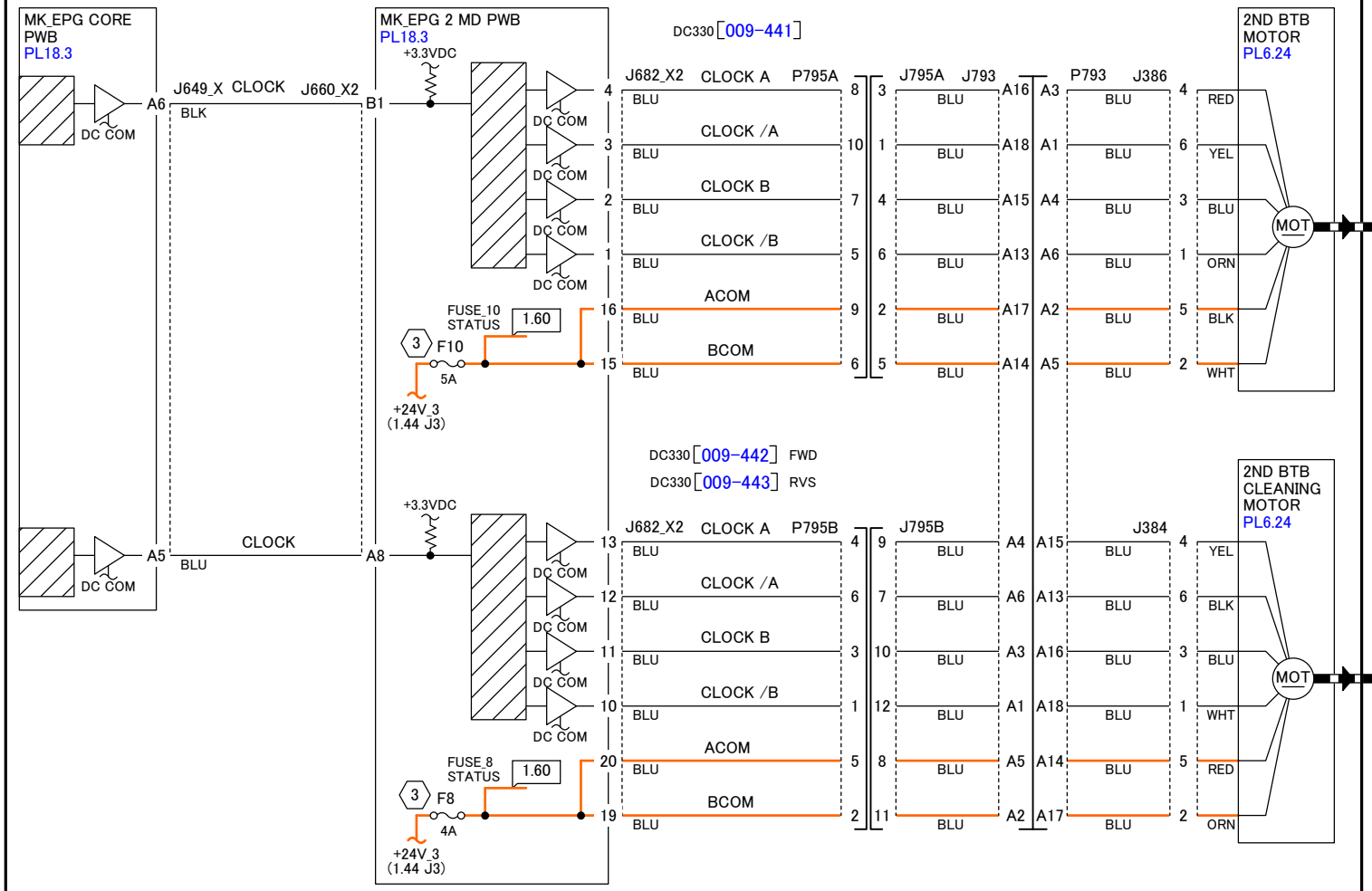
MK_EPG 2 MD PWB PL18.3
+5VDC
094-313

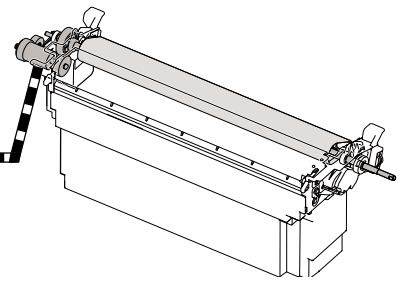
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

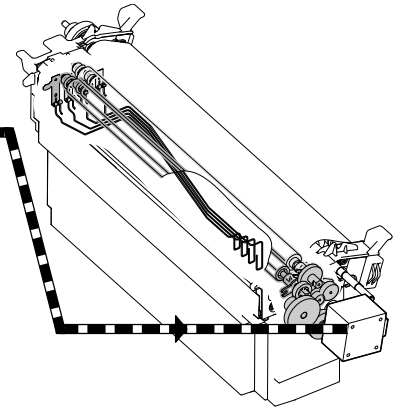


j0cx730962

9.63 2ND TRANSFER & CLEANING (1/2)



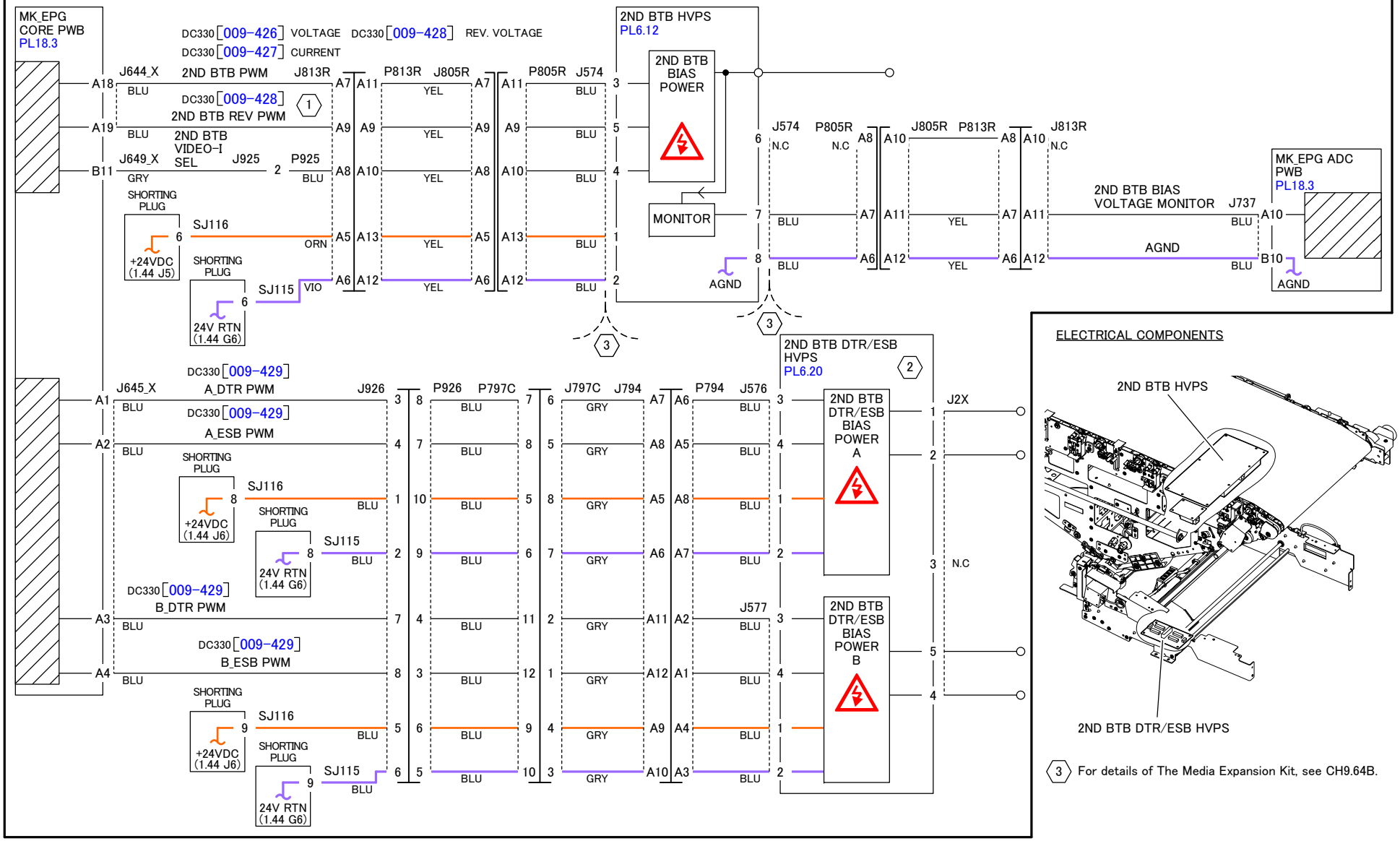




NOTE: (1) Chip Fuse

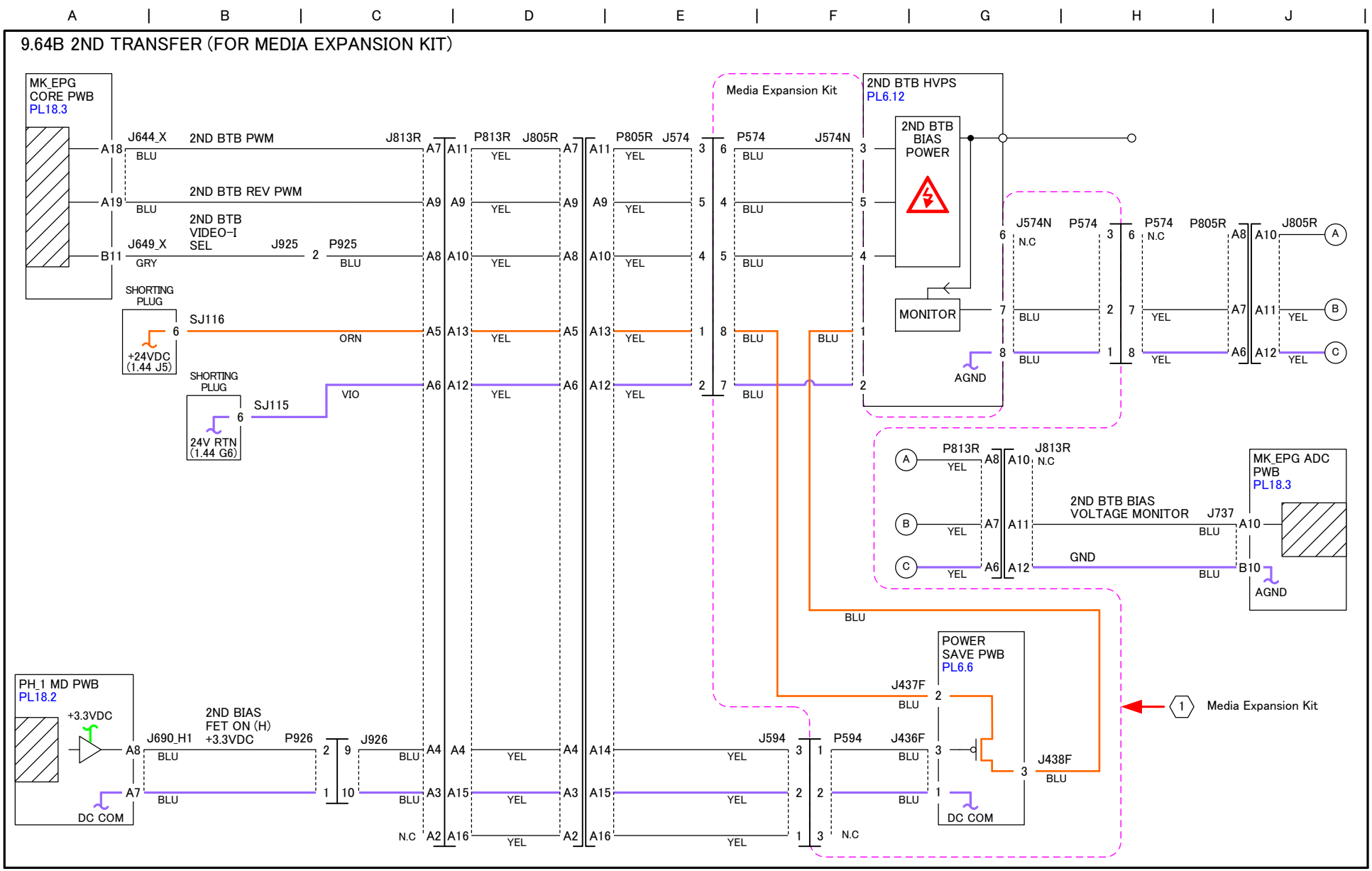
j0cx730963

9.64A 2ND TRANSFER & CLEANING (2/2)



NOTE:

j0cx730964A


9.64B 2ND TRANSFER (FOR MEDIA EXPANSION KIT)
MK_EPG CORE PWB PL18.3
Media Expansion Kit
2ND BTB HVPS PL6.12
2ND BTB BIAS POWER
MONITOR
AGND
2ND BTB PWM
2ND BTB REV PWM
2ND BTB VIDEO-I SEL
SHORTING PLUG
+24VDC (1.44 J5)
24V RTN (1.44 G6)
SJ116
SJ115
ORN
VIO
BLU
YEL
GRY
N.C
2ND BTB BIAS VOLTAGE MONITOR
GND
MK_EPG ADC PWB PL18.3
PH_1 MD PWB PL18.2
+3.3VDC
DC COM
2ND BIAS FET ON (H) +3.3VDC
POWER SAVE PWB PL6.6
Media Expansion Kit
j0cx730964B

9.65 CC CLEANING (1/3)

DC330 [009-071] Auto Cleaning
DC330 [009-077] Home

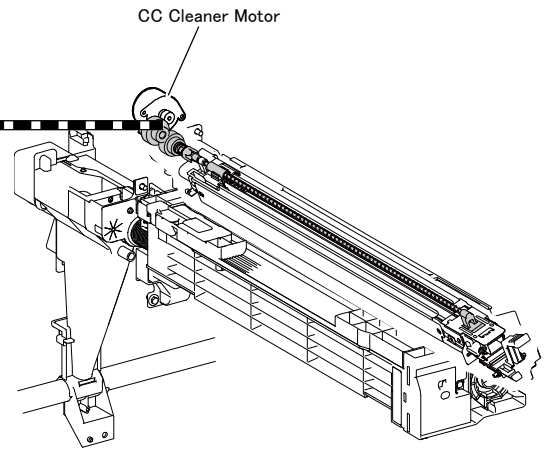
MK_EPG CORE PWB PL18.3
A7 DC COM
J649_X BLK
CLOCK
J660_X2 B2
MK_EPG 2 MD PWB PL18.3
+3.3VDC
DC COM
11 12 13 14
J684_X2 CLOCK A J4311
BLU
CLOCK /A
CLOCK B
CLOCK /B
2 3 4 5
4 3 2 1
1 5
CC CLEANER MOTOR #1 PL8.2
BLK BRN ORN YEL RED
MOT
FUSE_11 STATUS 1.60
1 F11 5A
+24V_4 (1.47 F3)

DC330 [009-072] Auto Cleaning
DC330 [009-078] Home

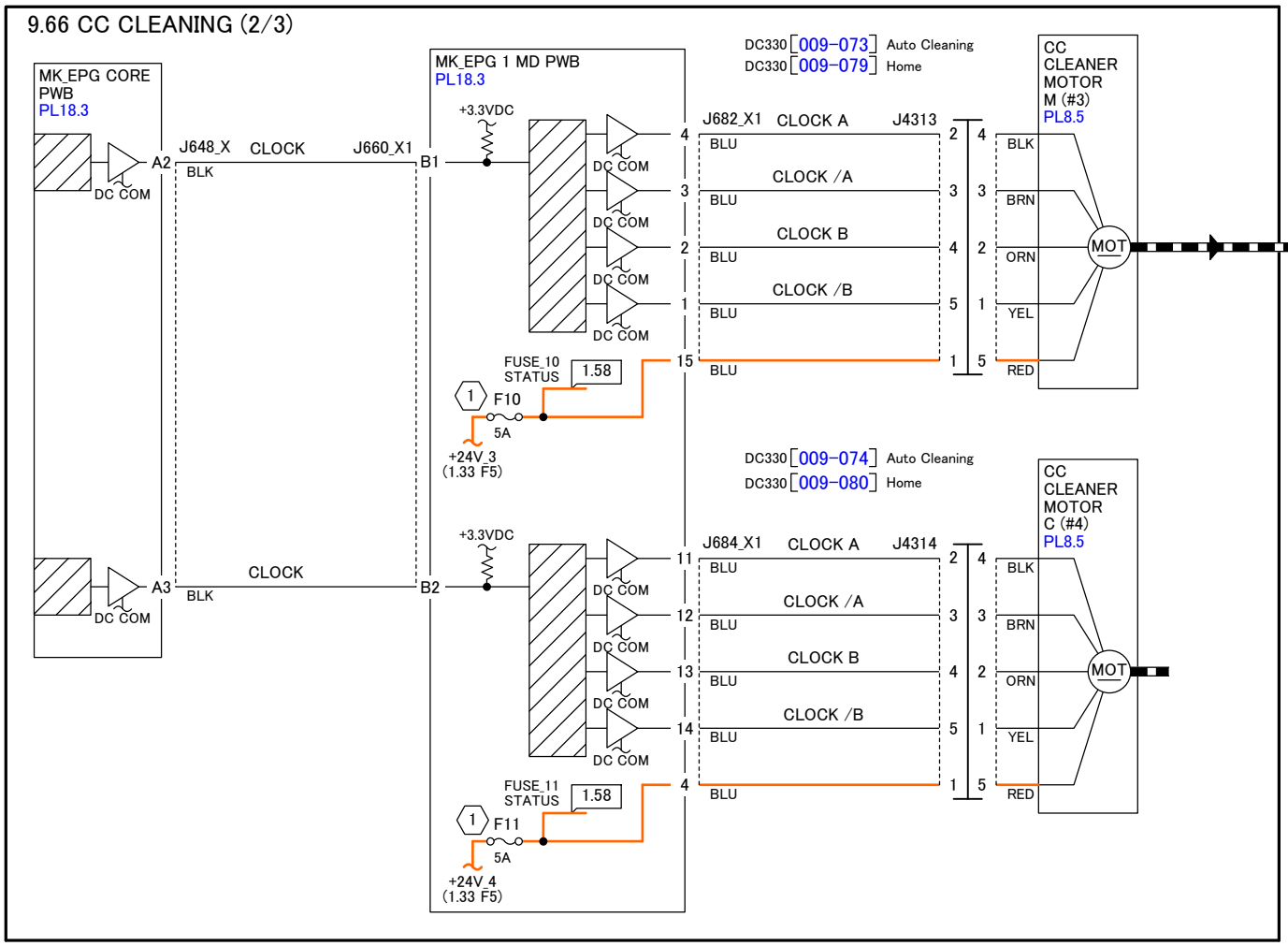
A1 DC COM
J648_X BLU
CLOCK
J660_X1 A9
MK_EPG 1 MD PWB PL18.3
+3.3VDC
DC COM
9 8 7 6
J682_X1 CLOCK A J4312
BLU
CLOCK /A
CLOCK B
CLOCK /B
2 3 4 5
4 3 2 1
1 5
CC CLEANER MOTOR Y (#2) PL8.5
BLK BRN ORN YEL RED
MOT
FUSE_9 STATUS 1.58
1 F9 5A
+24V_3 (1.33 F5)
17

NOTE:
1 Chip Fuse

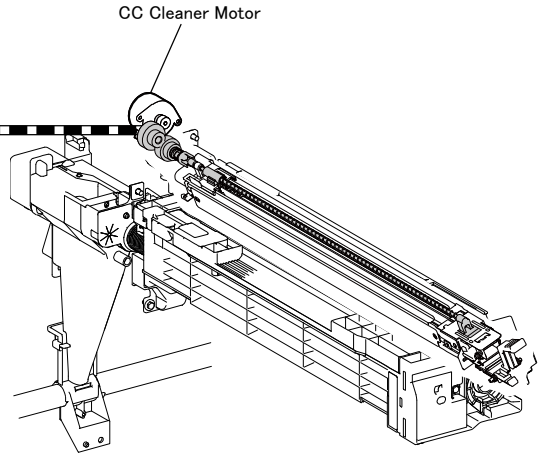
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



9.66 CC CLEANING (2/3)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



NOTE:
(1) Chip Fuse

j0cx730966

9.67 CC CLEANING (3/3)

MK_EPG CORE PWB
PL18.3

J648_X
BLK
CLOCK
J660_X1
B3
A4
DC COM

MK_EPG 1 MD PWB
PL18.3

+3.3VDC
DC COM
FUSE_12 STATUS
1.58
1
F12
5A
+24V_4
(1.33 F5)

DC330 [009-075] Auto Cleaning
DC330 [009-081] Home

J684_X1
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
BLU
J4315

CC CLEANER MOTOR K (#5)
PL8.5
BLK
BRN
ORN
YEL
RED
MOT

J649_X
BLK
CLOCK
J660_X2
B3
A8
DC COM

MK_EPG 2 MD PWB
PL18.3

+3.3VDC
DC COM
FUSE_12 STATUS
1.60
1
F12
5A
+24V_4
(1.47 F3)

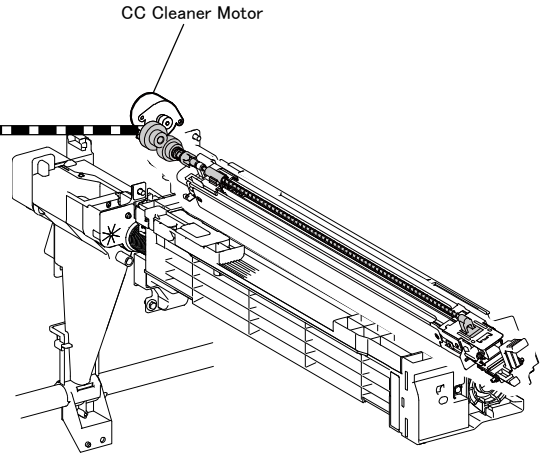
DC330 [009-076] Auto Cleaning
DC330 [009-082] Home

J684_X2
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
BLU
J4316

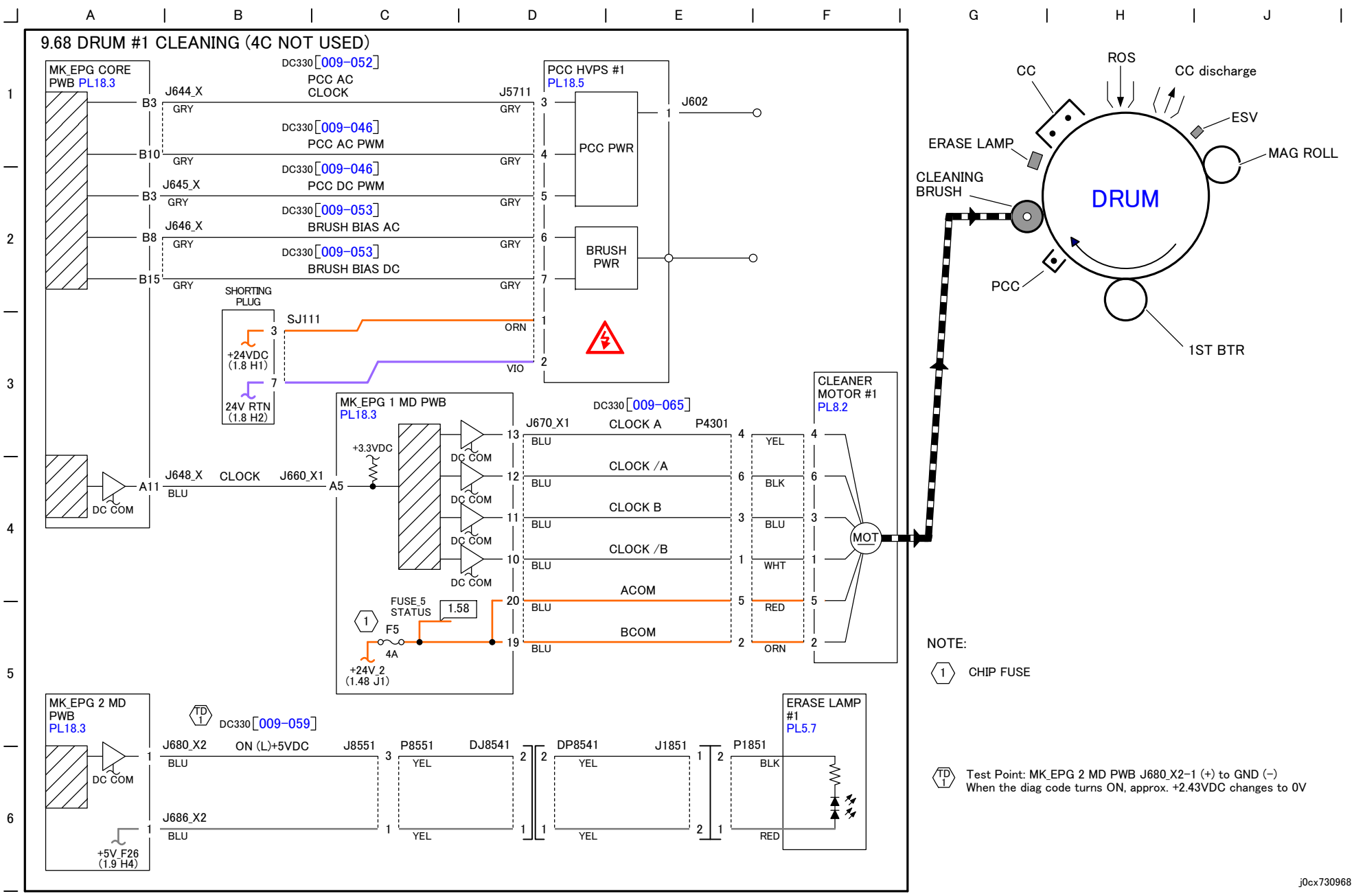
CC CLEANER MOTOR #6
PL8.2
BLK
BRN
ORN
YEL
RED
MOT

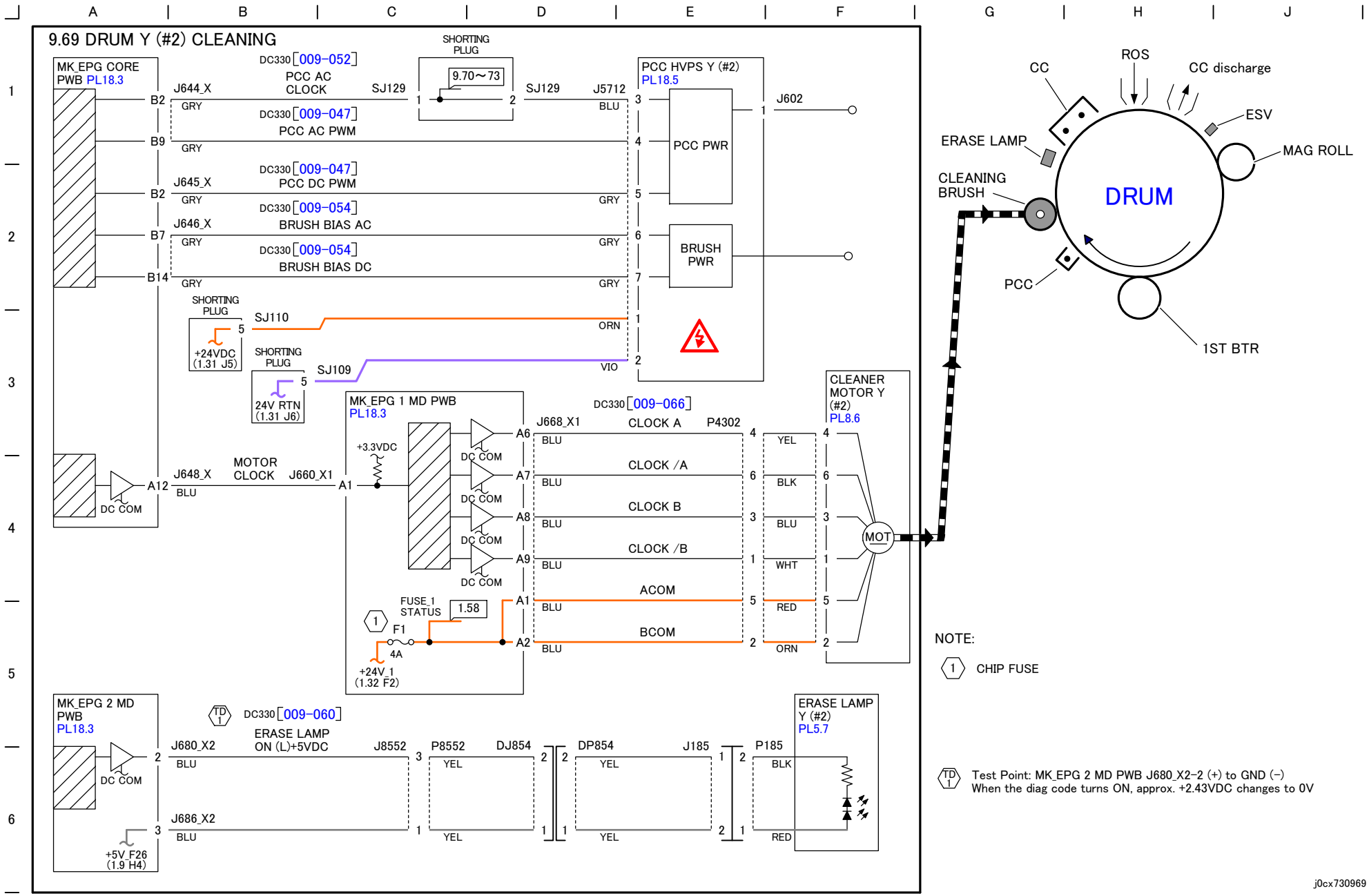
NOTE:
1 Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730967


9.68 DRUM #1 CLEANING (4C NOT USED)
MK_EPG CORE PWB PL18.3
PCC HVPS #1 PL18.5
PCC PWR
BRUSH PWR
J602
DC330 [009-052] PCC AC CLOCK
DC330 [009-046] PCC AC PWM
DC330 [009-046] PCC DC PWM
DC330 [009-053] BRUSH BIAS AC
DC330 [009-053] BRUSH BIAS DC
J644_X
J645_X
J646_X
J5711
B3
B10
B8
B15
GRY
SHORTING PLUG
+24VDC (1.8 H1)
24V RTN (1.8 H2)
SJ111
ORN
VIO
MK_EPG 1 MD PWB PL18.3
+3.3VDC
DC COM
J648_X
CLOCK
J660_X1
A11
A5
BLU
DC330 [009-065]
J670_X1
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
P4301
CLEANER MOTOR #1 PL8.2
YEL
BLK
BLU
WHT
RED
ORN
MOT
FUSE_5 STATUS
1.58
F5
4A
+24V_2 (1.48 J1)
MK_EPG 2 MD PWB PL18.3
TD 1
DC330 [009-059]
J680_X2
ON (L)+5VDC
J8551
P8551
DJ8541
DP8541
J1851
P1851
J686_X2
+5V_F26 (1.9 H4)
ERASE LAMP #1 PL5.7
CC
ROS
CC discharge
ESV
ERASE LAMP
MAG ROLL
CLEANING BRUSH
DRUM
PCC
1ST BTR
NOTE:
1 CHIP FUSE
TD 1 Test Point: MK_EPG 2 MD PWB J680_X2-1 (+) to GND (-)
When the diag code turns ON, approx. +2.43VDC changes to 0V
j0cx730968

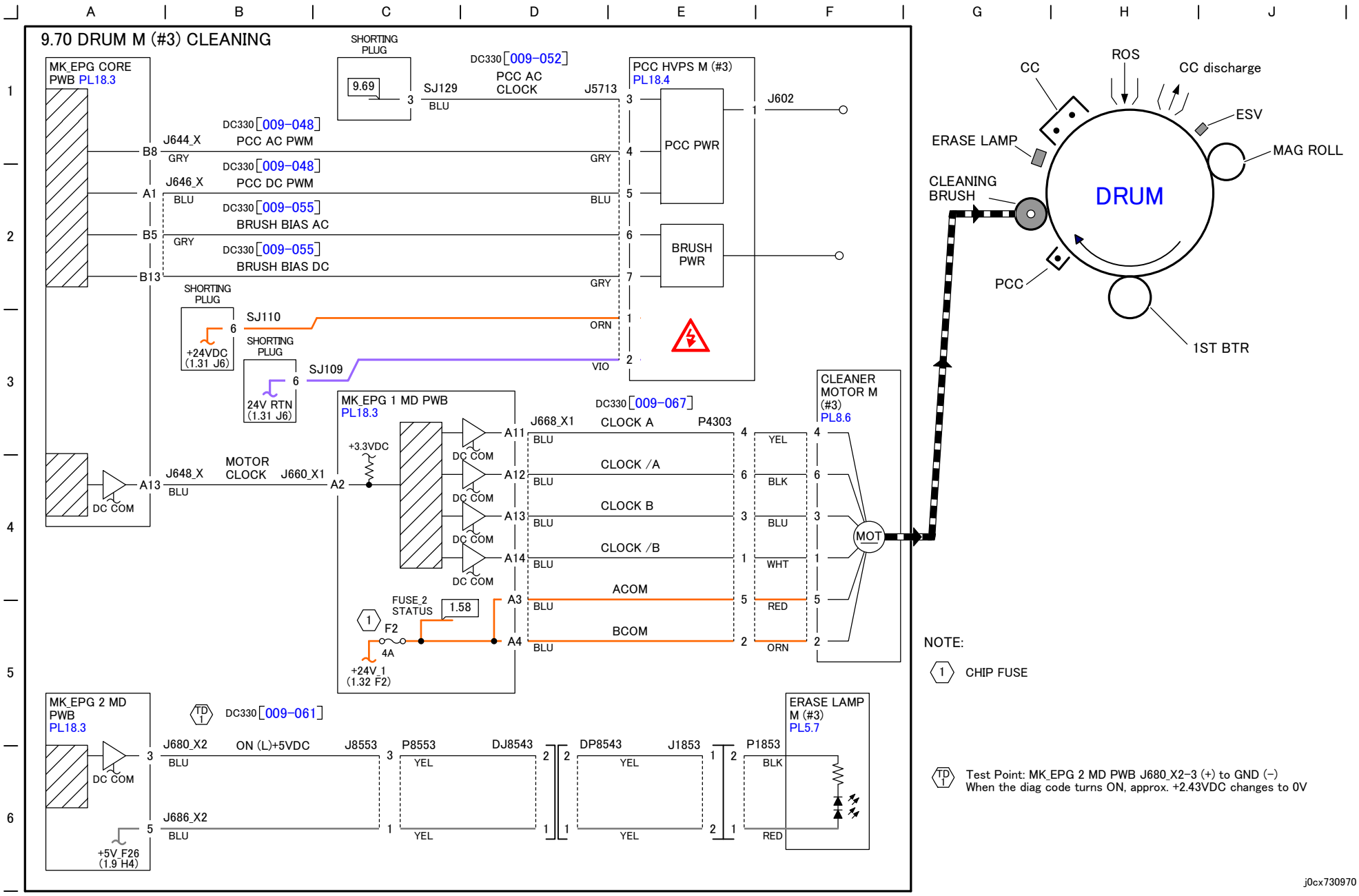


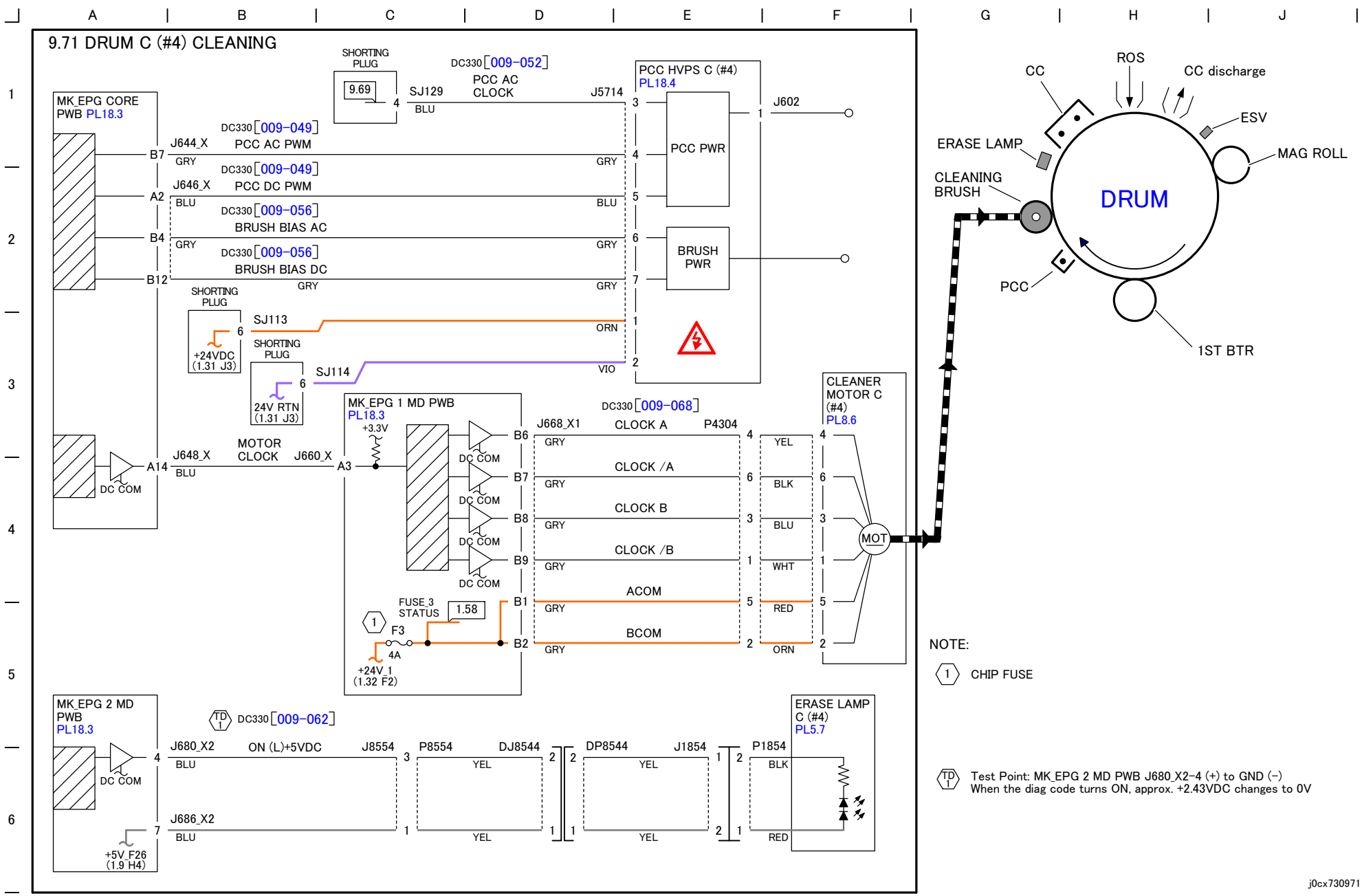
NOTE:

1 CHIP FUSE

TD 1 Test Point: MK_EPG 2 MD PWB J680_X2-2 (+) to GND (-)
When the diag code turns ON, approx. +2.43VDC changes to 0V

j0cx730969


9.70 DRUM M (#3) CLEANING
MK_EPG CORE PWB PL18.3
SHORTING PLUG
9.69
SJ129
DC330 [009-052]
PCC AC CLOCK
J5713
PCC HVPS M (#3) PL18.4
J602
PCC PWR
BRUSH PWR
DC330 [009-048]
PCC AC PWM
J644_X
B8
GRY
DC330 [009-048]
PCC DC PWM
J646_X
A1
BLU
DC330 [009-055]
BRUSH BIAS AC
B5
GRY
DC330 [009-055]
BRUSH BIAS DC
B13
SHORTING PLUG
SJ110
+24VDC (1.31 J6)
SHORTING PLUG
SJ109
24V RTN (1.31 J6)
MK_EPG 1 MD PWB PL18.3
DC330 [009-067]
CLEANER MOTOR M (#3) PL8.6
J668_X1
CLOCK A
P4303
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
MOT
+3.3VDC
DC COM
MOTOR CLOCK
J660_X1
J648_X
A13
A2
A11
A12
A13
A14
A3
A4
FUSE_2 STATUS
1.58
F2
4A
+24V_1 (1.32 F2)
MK_EPG 2 MD PWB PL18.3
TD 1
DC330 [009-061]
J680_X2
ON (L)+5VDC
J8553
P8553
DJ8543
DP8543
J1853
P1853
ERASE LAMP M (#3) PL5.7
J686_X2
+5V_F26 (1.9 H4)
YEL
BLK
BLU
WHT
RED
ORN
GRY
VIO
CC
ROS
CC discharge
ESV
ERASE LAMP
MAG ROLL
CLEANING BRUSH
DRUM
PCC
1ST BTR
NOTE:
1 CHIP FUSE
TD 1 Test Point: MK_EPG 2 MD PWB J680_X2-3 (+) to GND (-)
When the diag code turns ON, approx. +2.43VDC changes to 0V
j0cx730970

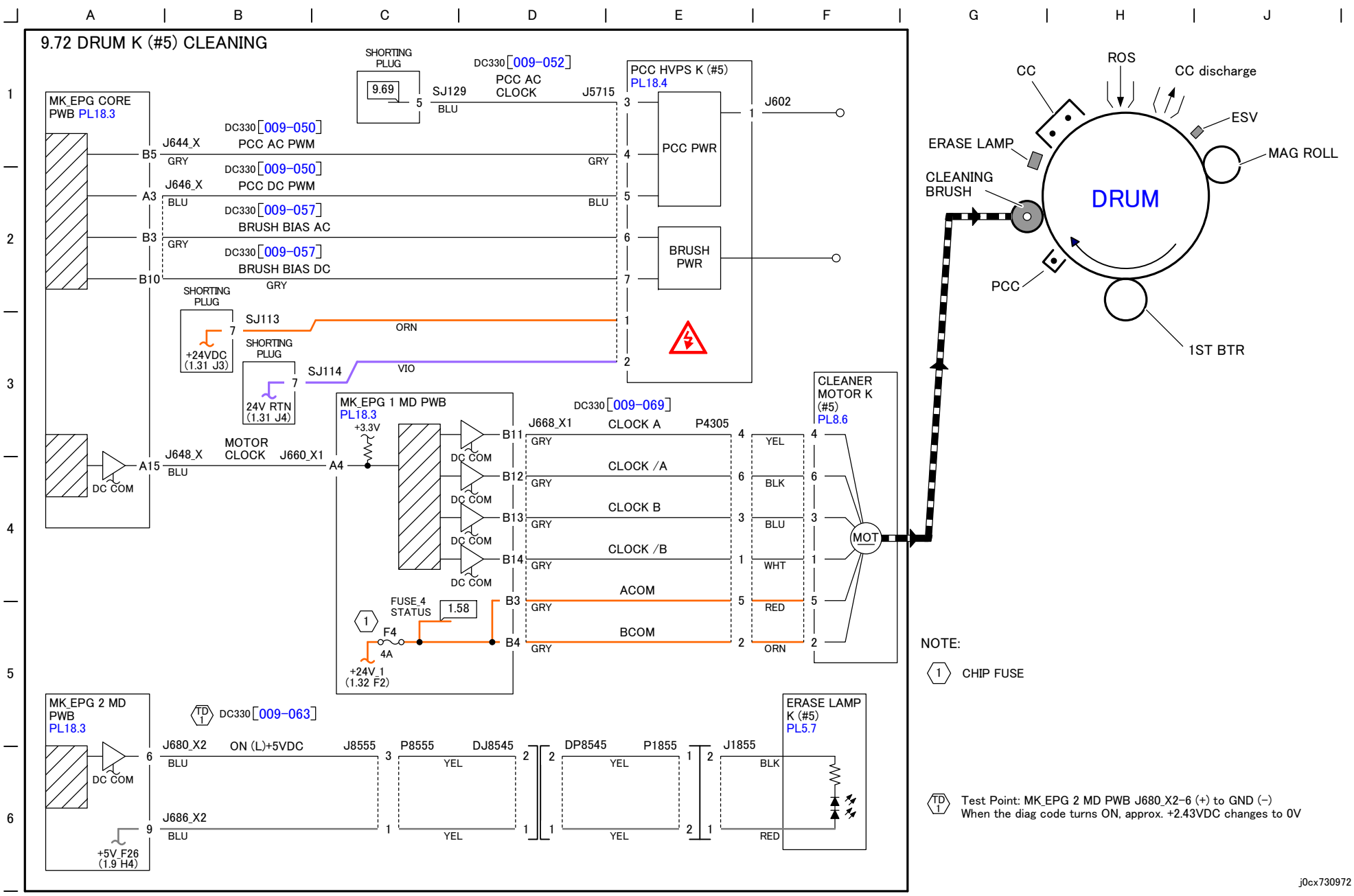


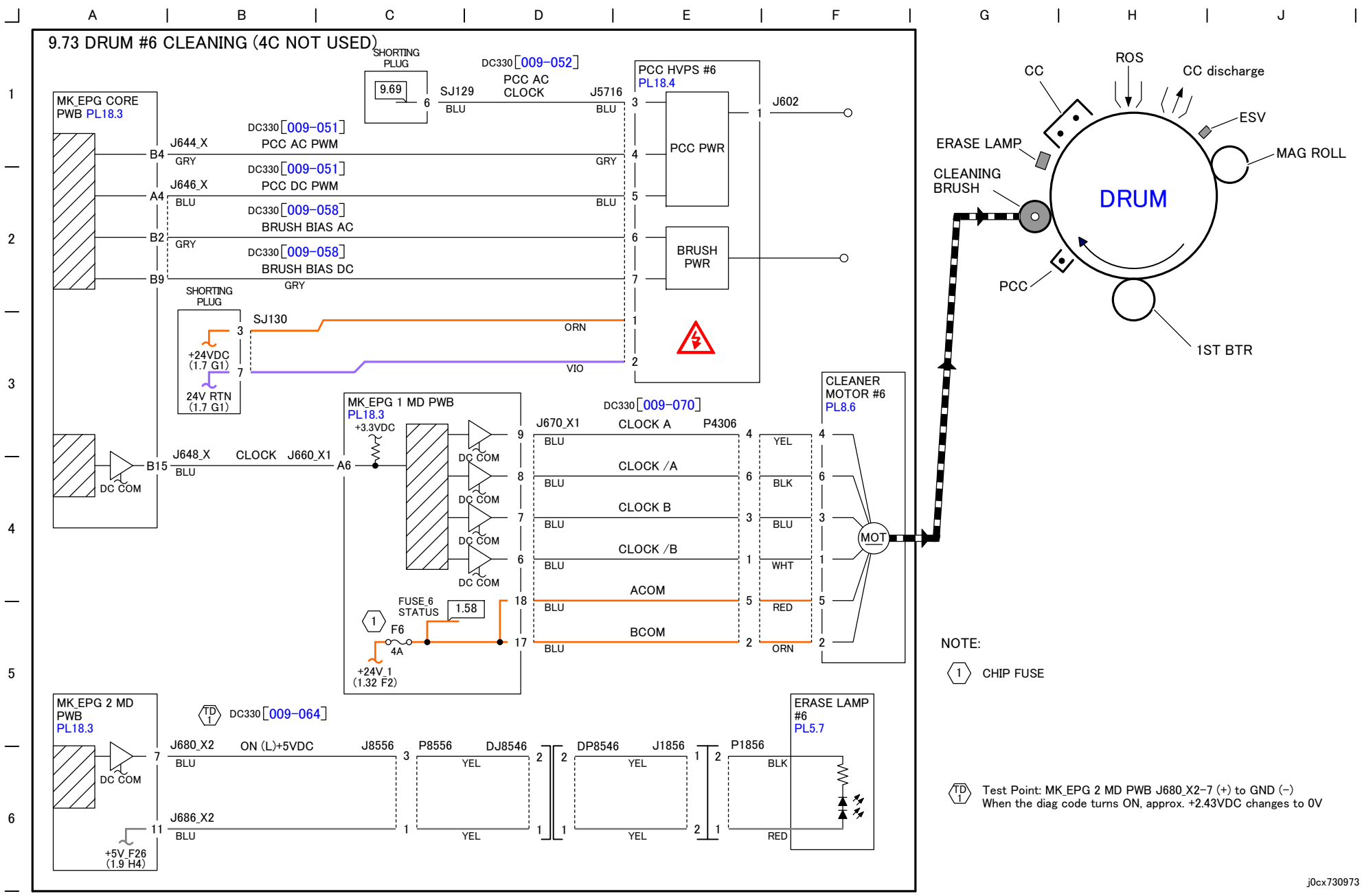
NOTE:

1 CHIP FUSE

TD 1 Test Point: MK_EPG 2 MD PWB J680_X2-4 (+) to GND (-)
When the diag code turns ON, approx. +2.43VDC changes to 0V

j0cx730971


9.72 DRUM K (#5) CLEANING
SHORTING PLUG
9.69
SJ129
BLU
DC330 [009-052]
PCC AC CLOCK
J5715
PCC HVPS K (#5)
PL18.4
PCC PWR
BRUSH PWR
J602
MK_EPG CORE PWB PL18.3
J644_X
DC330 [009-050]
PCC AC PWM
GRY
J646_X
DC330 [009-050]
PCC DC PWM
BLU
DC330 [009-057]
BRUSH BIAS AC
GRY
DC330 [009-057]
BRUSH BIAS DC
GRY
SHORTING PLUG
+24VDC (1.31 J3)
SJ113
ORN
SHORTING PLUG
24V RTN (1.31 J4)
SJ114
VIO
MK_EPG 1 MD PWB
PL18.3
+3.3V
MOTOR CLOCK
J660_X1
J648_X
BLU
DC COM
J668_X1
DC330 [009-069]
CLOCK A
CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM
P4305
CLEANER MOTOR K (#5)
PL8.6
MOT
FUSE_4 STATUS
1.58
F4
4A
+24V_1 (1.32 F2)
MK_EPG 2 MD PWB
PL18.3
DC330 [009-063]
J680_X2
ON (L)+5VDC
J8555
P8555
DJ8545
DP8545
P1855
J1855
ERASE LAMP K (#5)
PL5.7
J686_X2
+5V_F26 (1.9 H4)
CC
ROS
CC discharge
ESV
ERASE LAMP
MAG ROLL
CLEANING BRUSH
DRUM
PCC
1ST BTR
NOTE:
CHIP FUSE
Test Point: MK_EPG 2 MD PWB J680_X2-6 (+) to GND (-)
When the diag code turns ON, approx. +2.43VDC changes to 0V
j0cx730972



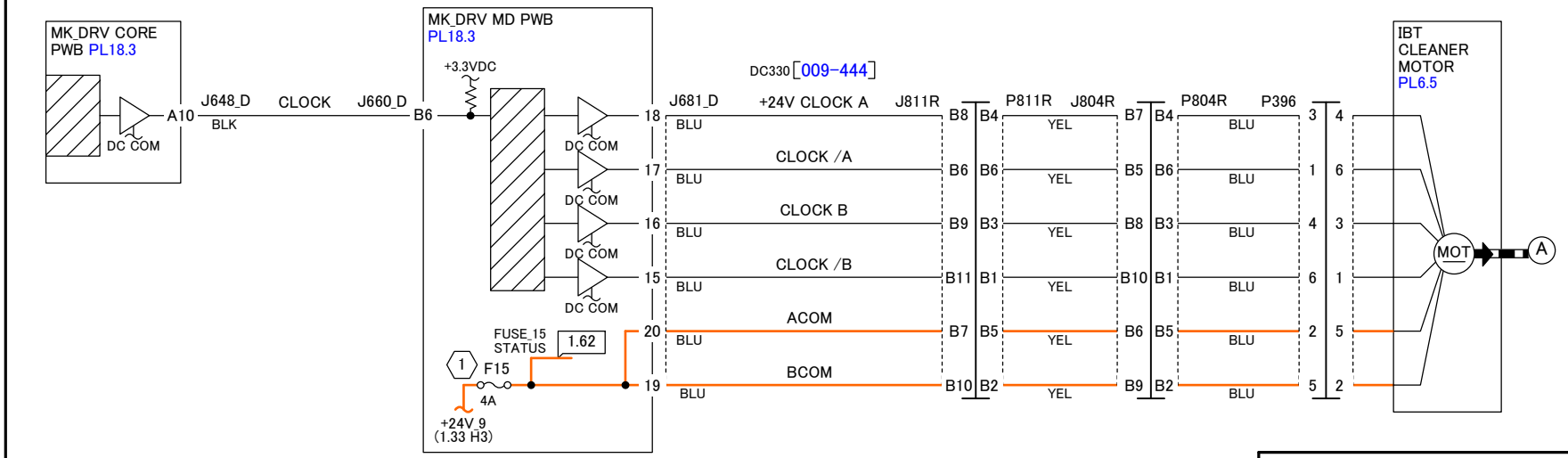
NOTE:

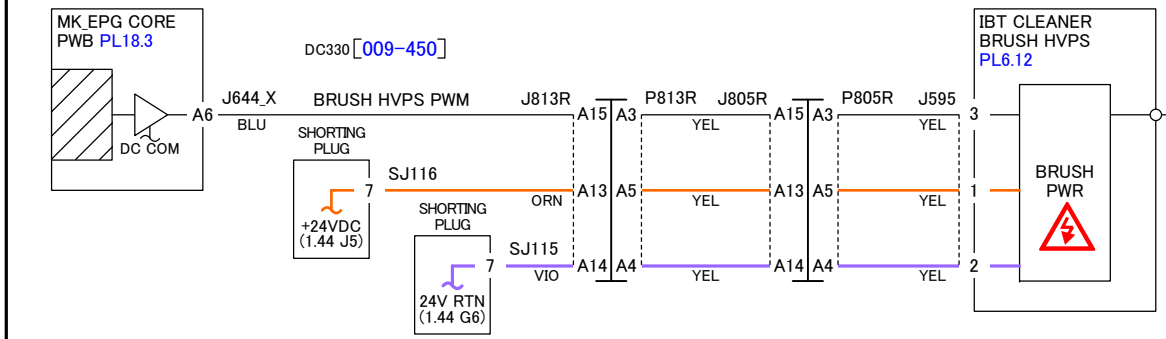
1 CHIP FUSE

TD 1 Test Point: MK_EPG 2 MD PWB J680_X2-7 (+) to GND (-)
When the diag code turns ON, approx. +2.43VDC changes to 0V

j0cx730973

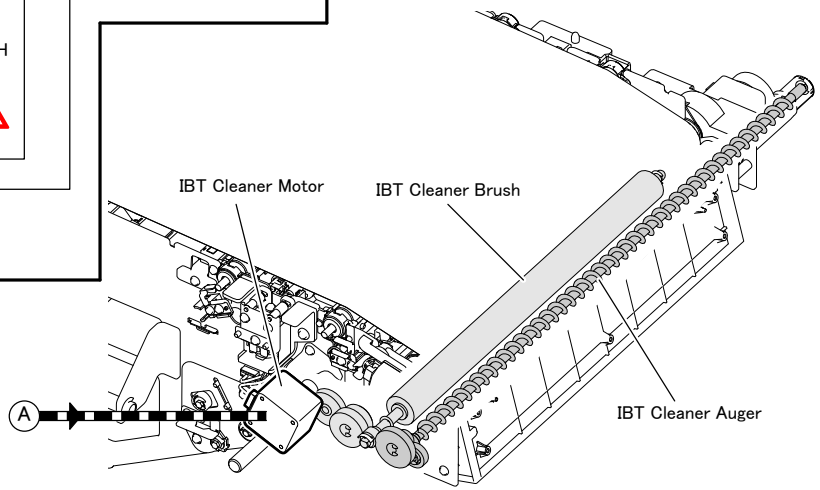
9.74 IBT CLEANING





NOTE:
1 Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730974

9.75 WASTE TONER DISPOSAL (1/3)

MK_DRV CORE PWB
PL18.3

MK_DRV MD PWB
PL18.3

+3.3VDC

DC COM

J648_D — A3 — BLU — CLOCK — A5 — J660_D

DC330 [009-083]

J670_D — CLOCK A — J432

13 BLU — CLOCK A — 2 4 — BLK
12 BLU — CLOCK /A — 3 3 — BRN
11 BLU — CLOCK B — 4 2 — ORN
10 BLU — CLOCK /B — 5 1 — YEL
19 BLU — 1 5 — RED

AUGER MOTOR 1
PL8.1

MOT

FUSE_5 STATUS 1.62

1 F5 4A

+24V_2
(1.38 F3)

DC330 [009-087]

J668_D — CLOCK A — J433

A1 — BLU — CLOCK — A1

A6 BLU — CLOCK A — 2 4 — BLK
A7 BLU — CLOCK /A — 3 3 — BRN
A8 BLU — CLOCK B — 4 2 — ORN
A9 BLU — CLOCK /B — 5 1 — YEL
A2 BLU — 1 5 — RED

TONER COLLECT MOTOR
PL8.4

MOT

FUSE_1 STATUS 1.62

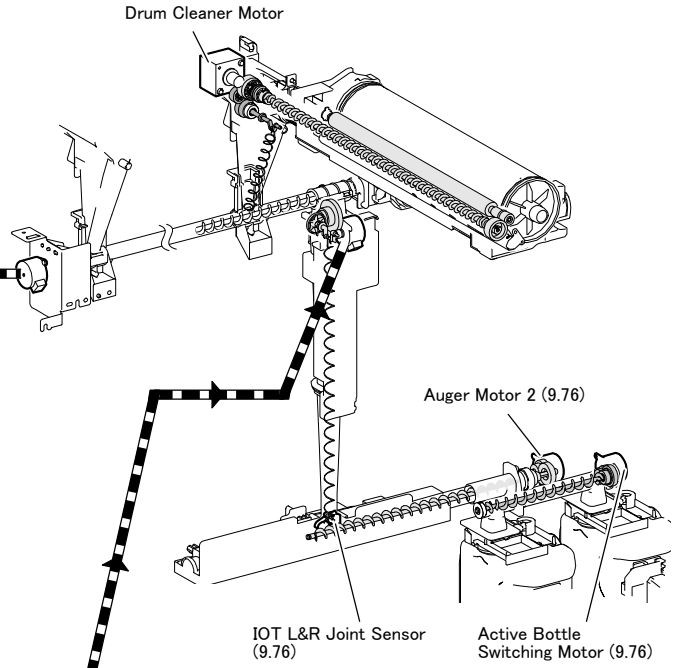
1 F1 4A

+24V_1
(1.8 G4)

NOTE:

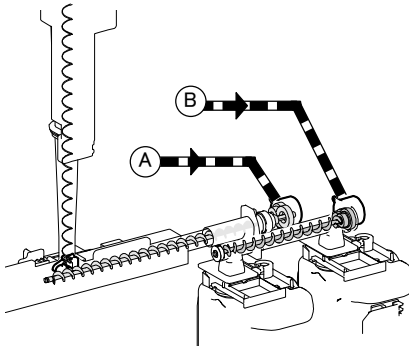
1 CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx730975

9.76 WASTE TONER DISPOSAL (2/3)



NOTE:

(1) CHIP FUSE

MK_DRV CORE PWB PL18.3

MK_DRV MD PWB PL18.3

+3.3VDC

DC COM

J648_D A4 BLU CLOCK J660_D A6

J670_D CLOCK A J853M 2 P853M 9 J853 23 P853 22 J434 2 4 BLU BLU BLU YEL BLK

CLOCK /A 8 3 8 3 3 BRN

CLOCK B 7 4 7 4 2 ORN

CLOCK /B 6 5 6 5 1 YEL

17 1 10 24 5 RED

AUGER MOTOR 2 PL4.8

MOT A

DC330[009-084]

FUSE_6 STATUS 1.62

(1) F6 4A

+24V_2 (1.38 F3)

DC330[009-085] BOTTLE 1

DC330[009-086] BOTTLE 2

J648_D A2 BLU CLOCK J660_D A7

J670_D CLOCK A J435 4 7 4 18 2 4 BLU BLU BLU YEL BLK

CLOCK /A 3 8 3 17 3 3 BRN

CLOCK B 2 9 2 16 4 2 ORN

CLOCK /B 1 10 1 15 5 1 YEL

15 6 5 19 1 5 RED

ACTIVE BOTTLE SWITCHING MOTOR PL4.8

MOT B

FUSE_7 STATUS 1.62

(1) F7 5A

+24V_2 (1.38 F3)

J665_D B1 GRY J182 1

+5V_SNR (1.9 H5)

B3 GRY 3

5V RTN (1.9 G5)

IOT L&R JOINT SENSOR PL8.3

DC330[009-160]

J182 2 JOINT (L)+5VDC J665_D B2 GRY

MK_DRV MD PWB PL18.3

+5VDC

091-323

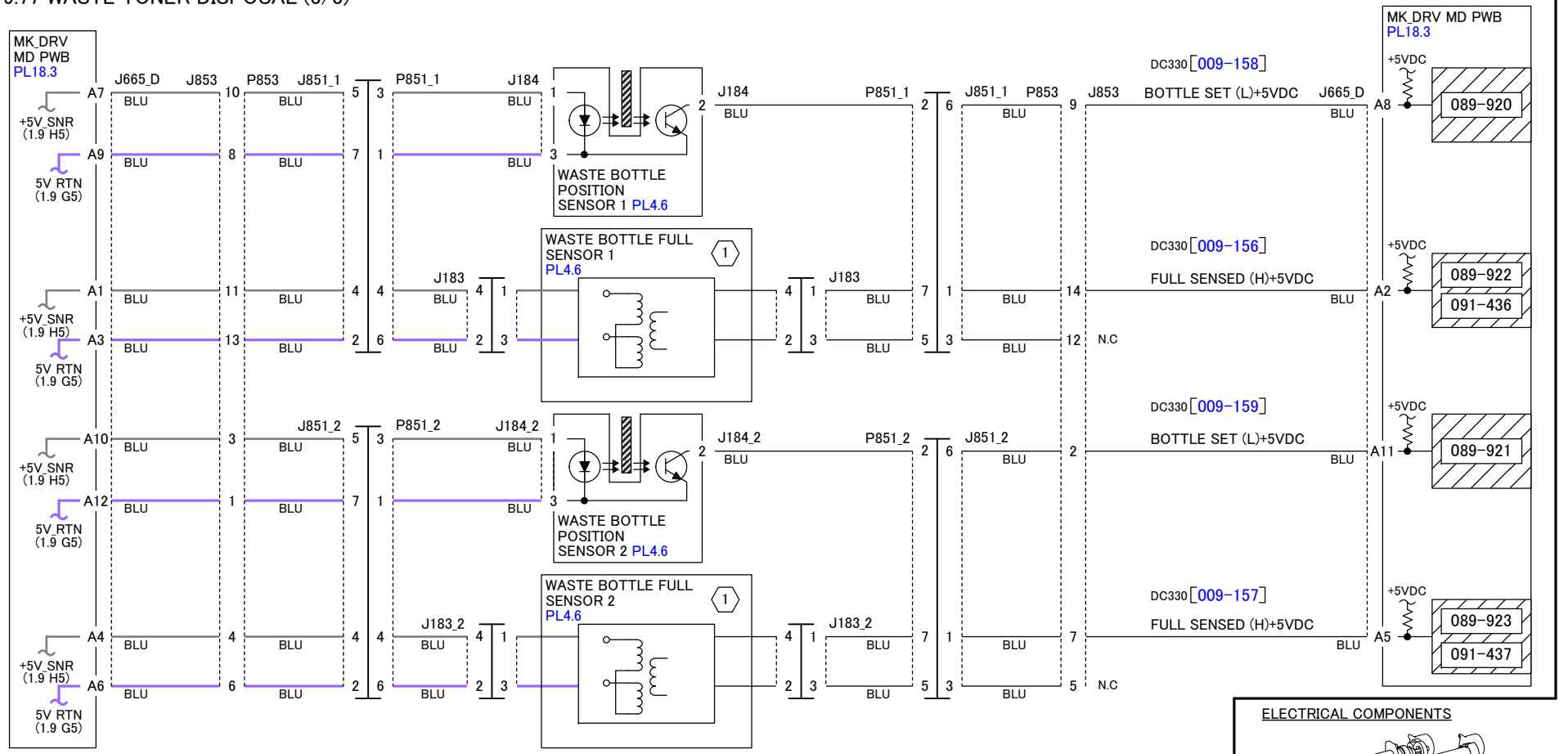
FAIL CODE

091-323

IOT-L & IOT-R Joint Sensor Fail

j0cx730976

9.77 WASTE TONER DISPOSAL (3/3)



NOTE:

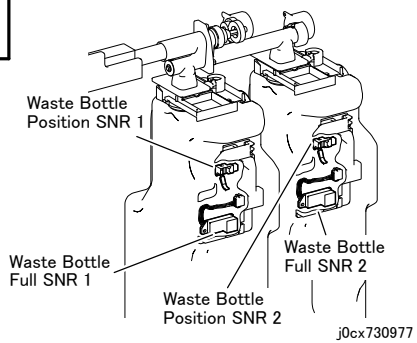
(1) Do not bring magnetically charged objects close to the sensing part of the Waste Bottle Full Sensor.
The Sensor may fail. (Same when Power Off)

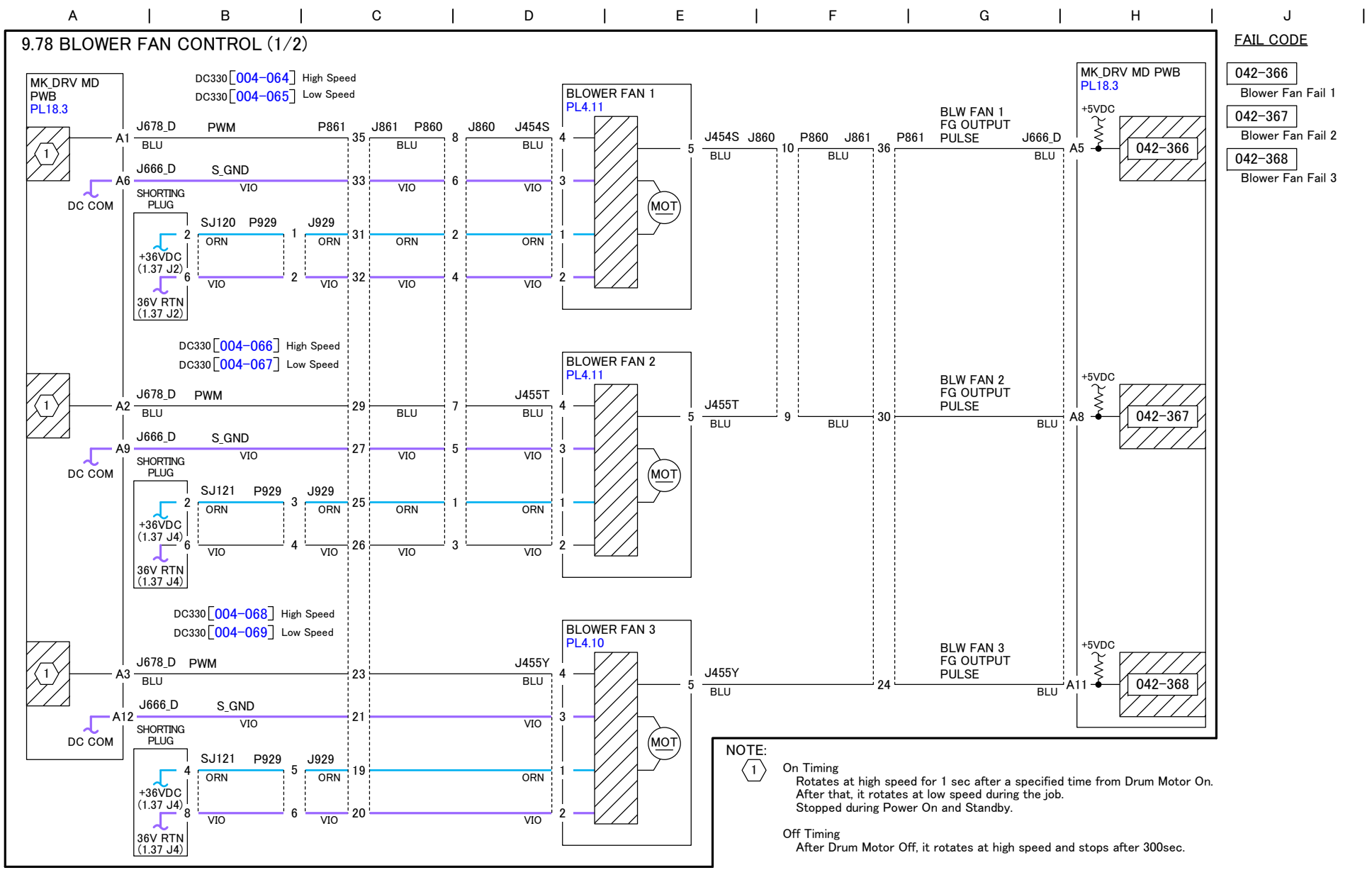
Becomes Near Full when Waste Bottle Full Sensor detects waste toner.
From Near Full to Full is Dispense Time x Coefficient.

FAIL CODE

089-920	Waste Toner Bottle 1 Not Position	091-436	Waste Toner Bottle 1 Near Full
089-921	Waste Toner Bottle 2 Not Position	091-437	Waste Toner Bottle 2 Near Full
089-922	Waste Toner Bottle 1 Full		
089-923	Waste Toner Bottle 2 Full		

ELECTRICAL COMPONENTS




9.78 BLOWER FAN CONTROL (1/2)
MK_DRV MD PWB PL18.3
DC330 [004-064] High Speed
DC330 [004-065] Low Speed
BLOWER FAN 1 PL4.11
J678_D PWM P861 J861 P860 J860 J454S
A1 BLU 35 BLU 8 BLU 4
J666_D S_GND
A6 VIO 33 VIO 6 VIO 3
SHORTING PLUG
DC COM
SJ120 P929 J929
+36VDC (1.37 J2) 2 ORN 1 ORN 31 ORN 2 ORN 1
36V RTN (1.37 J2) 6 VIO 2 VIO 32 VIO 4 VIO 2
MOT
J454S J860 P860 J861 P861 J666_D
5 BLU 10 BLU 36 BLU A5
BLW FAN 1 FG OUTPUT PULSE
MK_DRV MD PWB PL18.3
+5VDC
042-366
DC330 [004-066] High Speed
DC330 [004-067] Low Speed
BLOWER FAN 2 PL4.11
J678_D PWM J455T
A2 BLU 29 BLU 7 BLU 4
J666_D S_GND
A9 VIO 27 VIO 5 VIO 3
SHORTING PLUG
DC COM
SJ121 P929 J929
+36VDC (1.37 J4) 2 ORN 3 ORN 25 ORN 1 ORN 1
36V RTN (1.37 J4) 6 VIO 4 VIO 26 VIO 3 VIO 2
MOT
J455T
5 BLU 9 BLU 30 BLU A8
BLW FAN 2 FG OUTPUT PULSE
+5VDC
042-367
DC330 [004-068] High Speed
DC330 [004-069] Low Speed
BLOWER FAN 3 PL4.10
J678_D PWM J455Y
A3 BLU 23 BLU 4
J666_D S_GND
A12 VIO 21 VIO 3
SHORTING PLUG
DC COM
SJ121 P929 J929
+36VDC (1.37 J4) 4 ORN 5 ORN 19 ORN 1
36V RTN (1.37 J4) 8 VIO 6 VIO 20 VIO 2
MOT
J455Y
5 BLU 24 BLU A11
BLW FAN 3 FG OUTPUT PULSE
+5VDC
042-368
FAIL CODE
042-366
Blower Fan Fail 1
042-367
Blower Fan Fail 2
042-368
Blower Fan Fail 3
NOTE:
1 On Timing
Rotates at high speed for 1 sec after a specified time from Drum Motor On.
After that, it rotates at low speed during the job.
Stopped during Power On and Standby.
Off Timing
After Drum Motor Off, it rotates at high speed and stops after 300sec.

j0cx730978

9.79 BLOWER FAN CONTROL (2/2)

MK_DRV MD PWB PL18.3

DC330 [004-070] High Speed
DC330 [004-071] Low Speed

J678_D PWM A4 BLU → P861 17 → J861 → J455M 4 → BLOWER FAN 4 PL4.10

J666_D S_GND B6 VIO → P861 15 → J861 → J455M 3 → BLOWER FAN 4 PL4.10

DC COM

SHORTING PLUG

+36VDC (1.37 J5) 2 → J122 ORN → P929 7 → J929 ORN → J861 13 → J455M 1 → BLOWER FAN 4 PL4.10

36V RTN (1.37 J5) 6 → J122 VIO → P929 8 → J929 VIO → J861 14 → J455M 2 → BLOWER FAN 4 PL4.10

BLOWER FAN 4 PL4.10 5 → J455M BLU → J861 18 → P861 → J666_D GRY B5 → MK_DRV MD PWB PL18.3

BLW FAN 4 FG OUTPUT PULSE

MK_DRV MD PWB PL18.3 +5VDC → 042-369

DC330 [004-072] High Speed
DC330 [004-073] Low Speed

J678_D PWM A5 BLU → P861 11 → J861 → J455C 4 → BLOWER FAN 5 PL4.10

J666_D S_GND B9 VIO → P861 9 → J861 → J455C 3 → BLOWER FAN 5 PL4.10

DC COM

SHORTING PLUG

+36VDC (1.37 J6) 4 → SJ122 ORN → P929 9 → J929 ORN → J861 7 → J455C 1 → BLOWER FAN 5 PL4.10

36V RTN (1.37 J6) 8 → SJ122 VIO → P929 10 → J929 VIO → J861 8 → J455C 2 → BLOWER FAN 5 PL4.10

BLOWER FAN 5 PL4.10 5 → J455C BLU → J861 12 → P861 → J666_D GRY B8 → MK_DRV MD PWB PL18.3

BLW FAN 5 FG OUTPUT PULSE

MK_DRV MD PWB PL18.3 +5VDC → 042-370

DC330 [004-074] High Speed
DC330 [004-075] Low Speed

J678_D PWM A6 BLU → P861 5 → J861 → J455K 4 → BLOWER FAN 6 PL4.10

J666_D S_GND B12 VIO → P861 3 → J861 → J455K 3 → BLOWER FAN 6 PL4.10

DC COM

SHORTING PLUG

+36VDC (1.37 J3) 4 → SJ120 ORN → P929 11 → J929 ORN → J861 1 → J455K 1 → BLOWER FAN 6 PL4.10

36V RTN (1.37 J3) 8 → SJ120 VIO → P929 12 → J929 VIO → J861 2 → J455K 2 → BLOWER FAN 6 PL4.10

BLOWER FAN 6 PL4.10 5 → J455K BLU → J861 6 → P861 → J666_D GRY B11 → MK_DRV MD PWB PL18.3

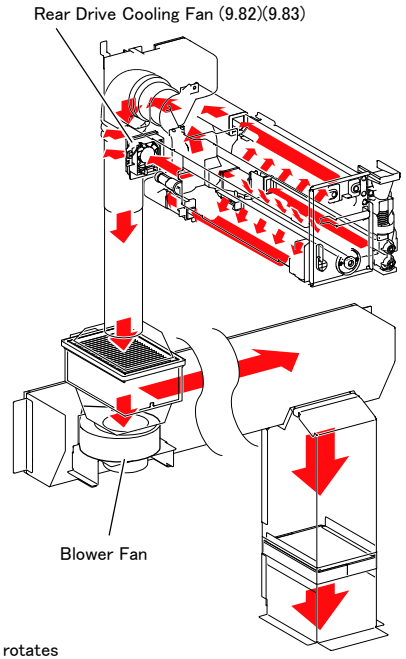
BLW FAN 6 FG OUTPUT PULSE

MK_DRV MD PWB PL18.3 +5VDC → 042-371

FAIL CODE

042-369	Blower Fan Fail 4
042-370	Blower Fan Fail 5
042-371	Blower Fan Fail 6

ELECTRICAL COMPONENTS



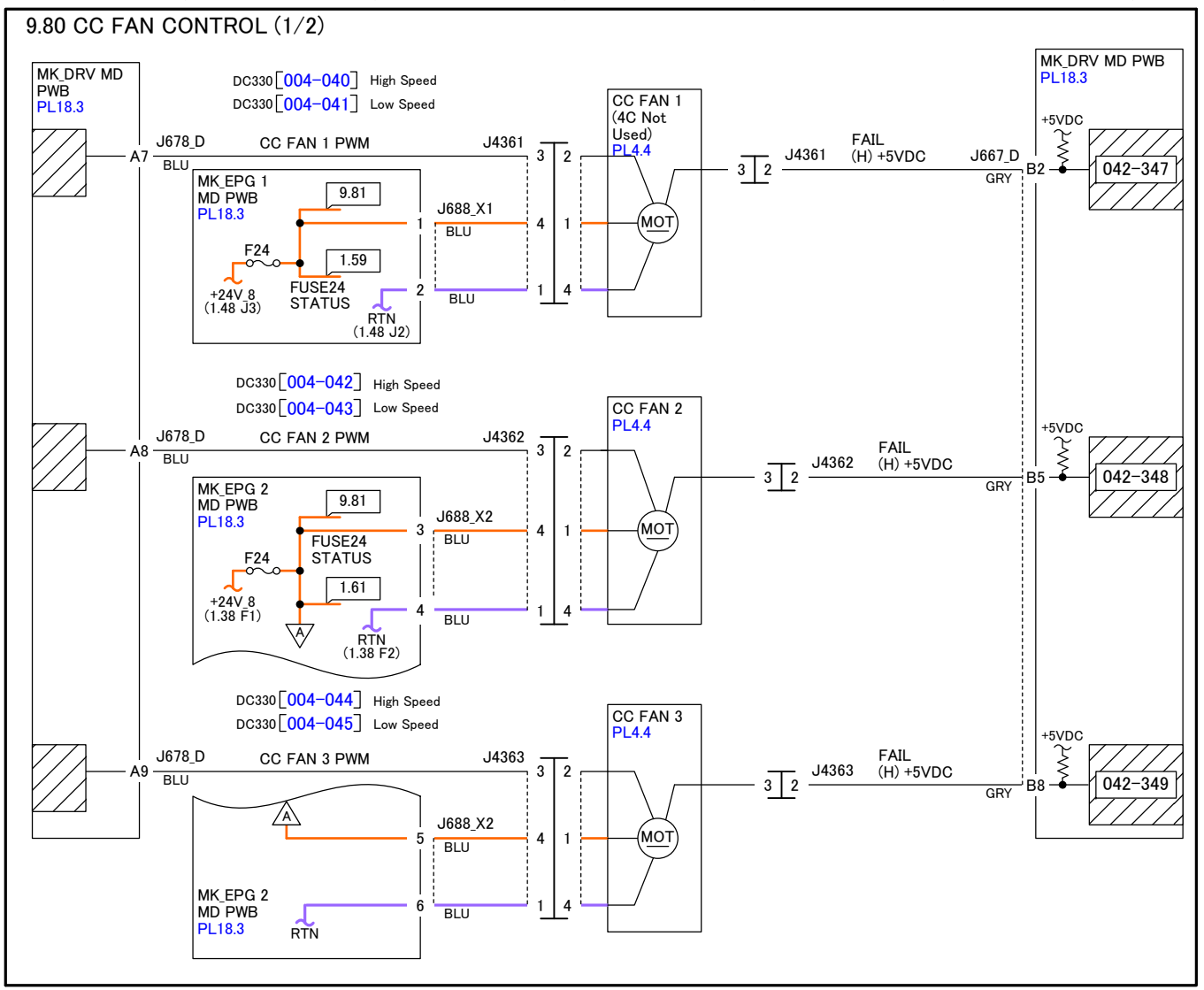
NOTE:

(1) On Timing
An elapse of 500 msec after Drum Motor turns On, the fan rotates at high speed for 2 sec. After that, it rotates at low speed during job. It does not rotate at power on and on standby.

Off Timing
After Drum Motor turns Off, the fan rotates at high speed for 15 sec then stops.

j0cx730979

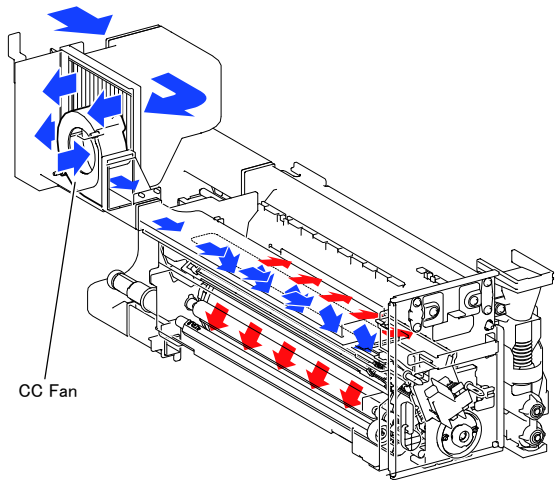
9.80 CC FAN CONTROL (1/2)



FAIL CODE

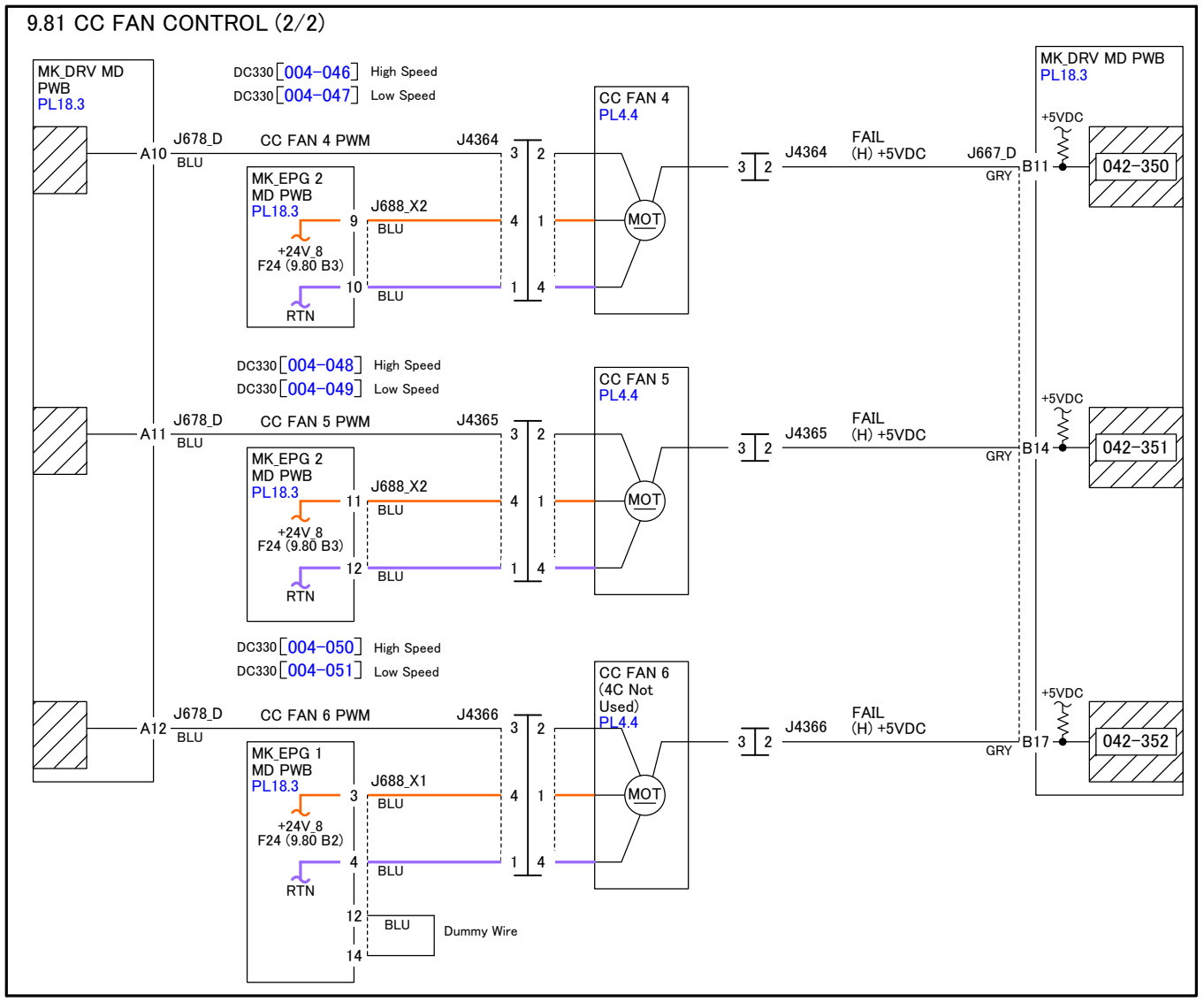
042-347	CC Fan Fail 1
042-348	CC Fan Fail 2
042-349	CC Fan Fail 3

ELECTRICAL COMPONENTS



j0cx730980

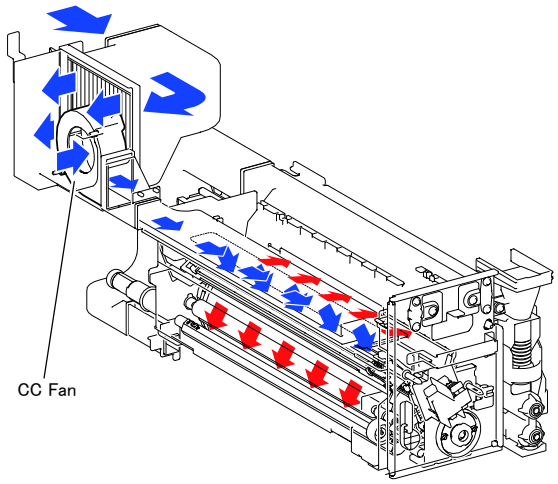
9.81 CC FAN CONTROL (2/2)



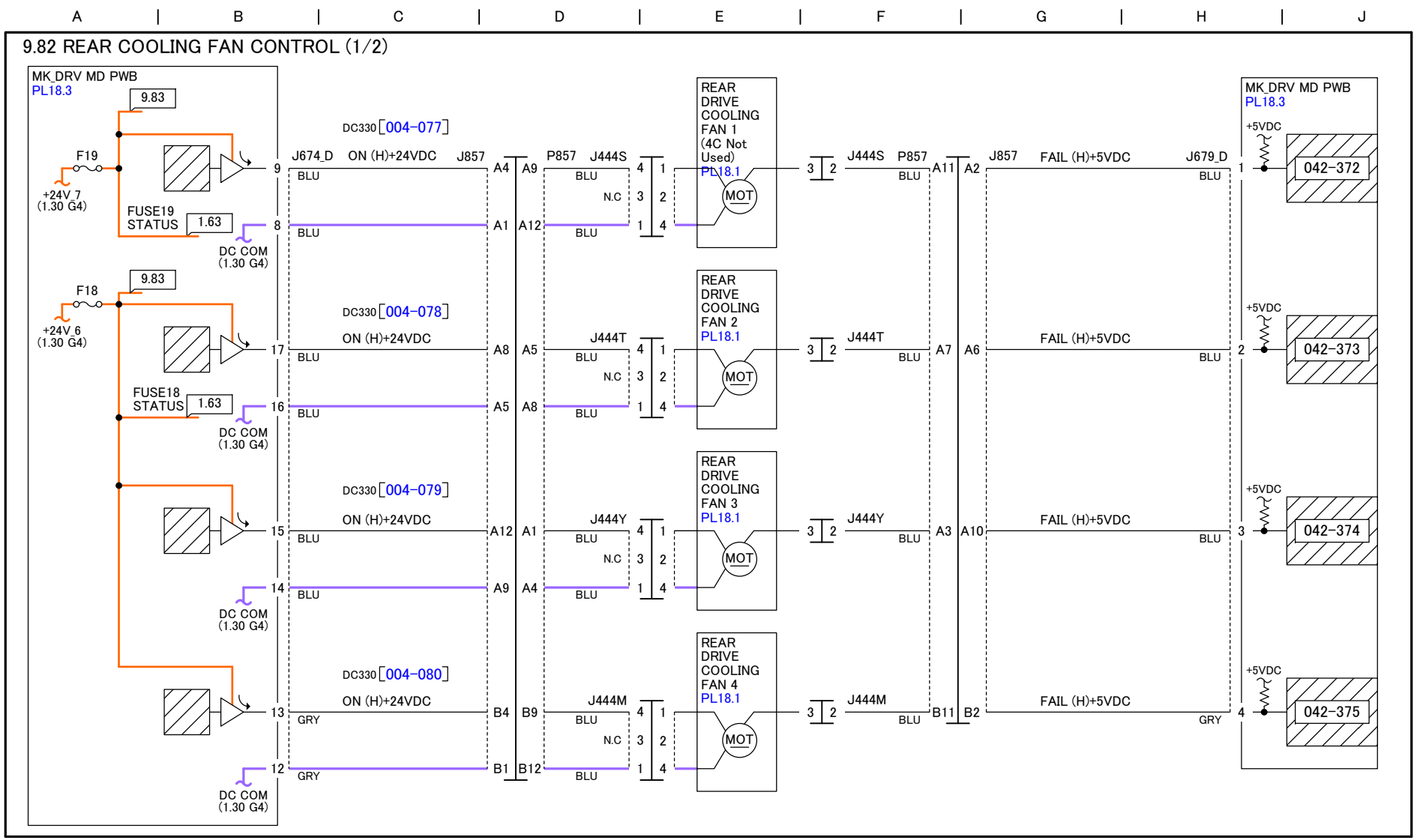
FAIL CODE

042-350	CC Fan Fail 4
042-351	CC Fan Fail 5
042-352	CC Fan Fail 6

ELECTRICAL COMPONENTS



j0cx730981

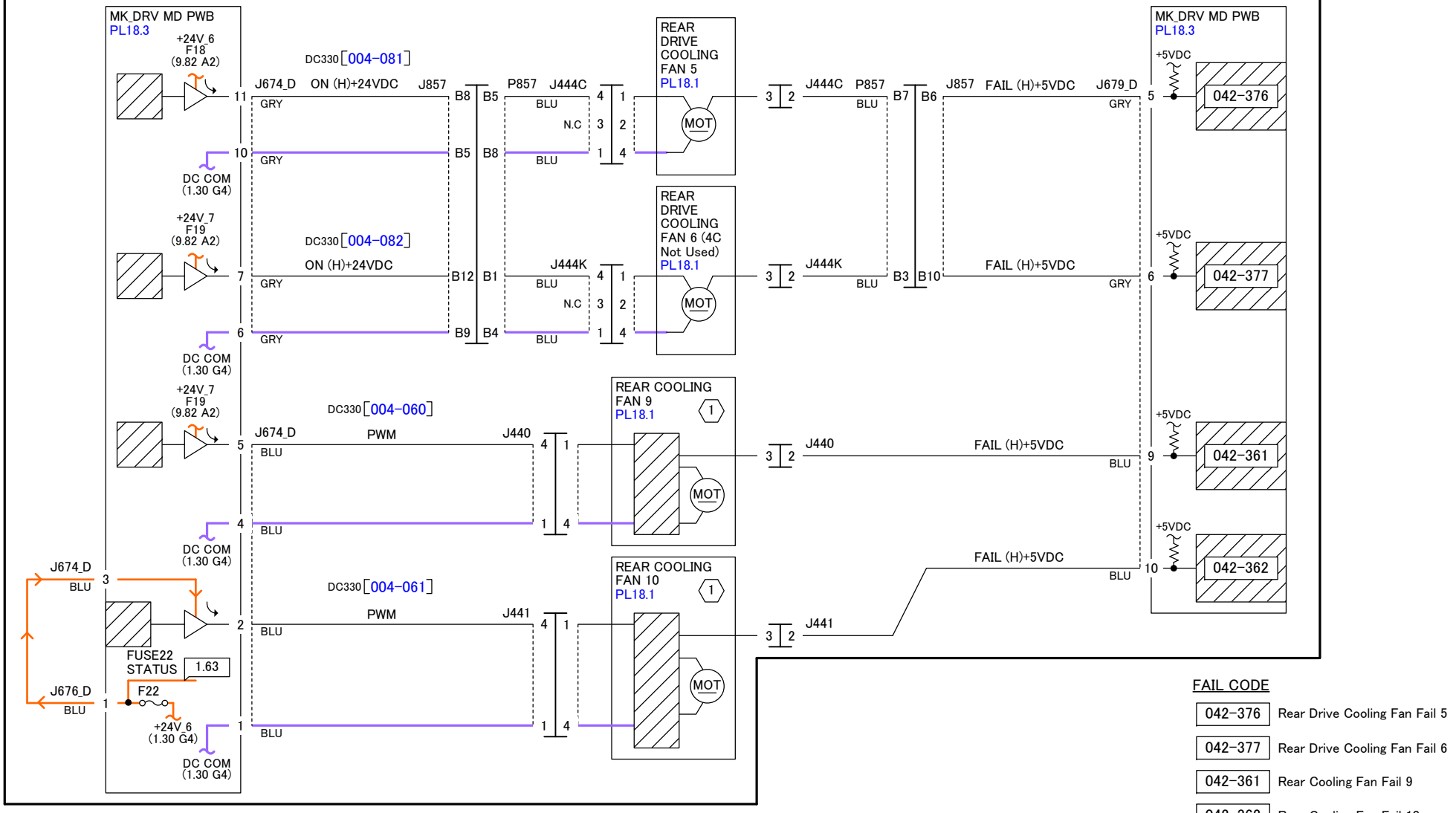


FAIL CODE

042-372 Rear Drive Cooling Fan Fail 1	042-374 Rear Drive Cooling Fan Fail 3
042-373 Rear Drive Cooling Fan Fail 2	042-375 Rear Drive Cooling Fan Fail 4

j0cx730982

9.83 REAR COOLING FAN CONTROL (2/2)



FAIL CODE

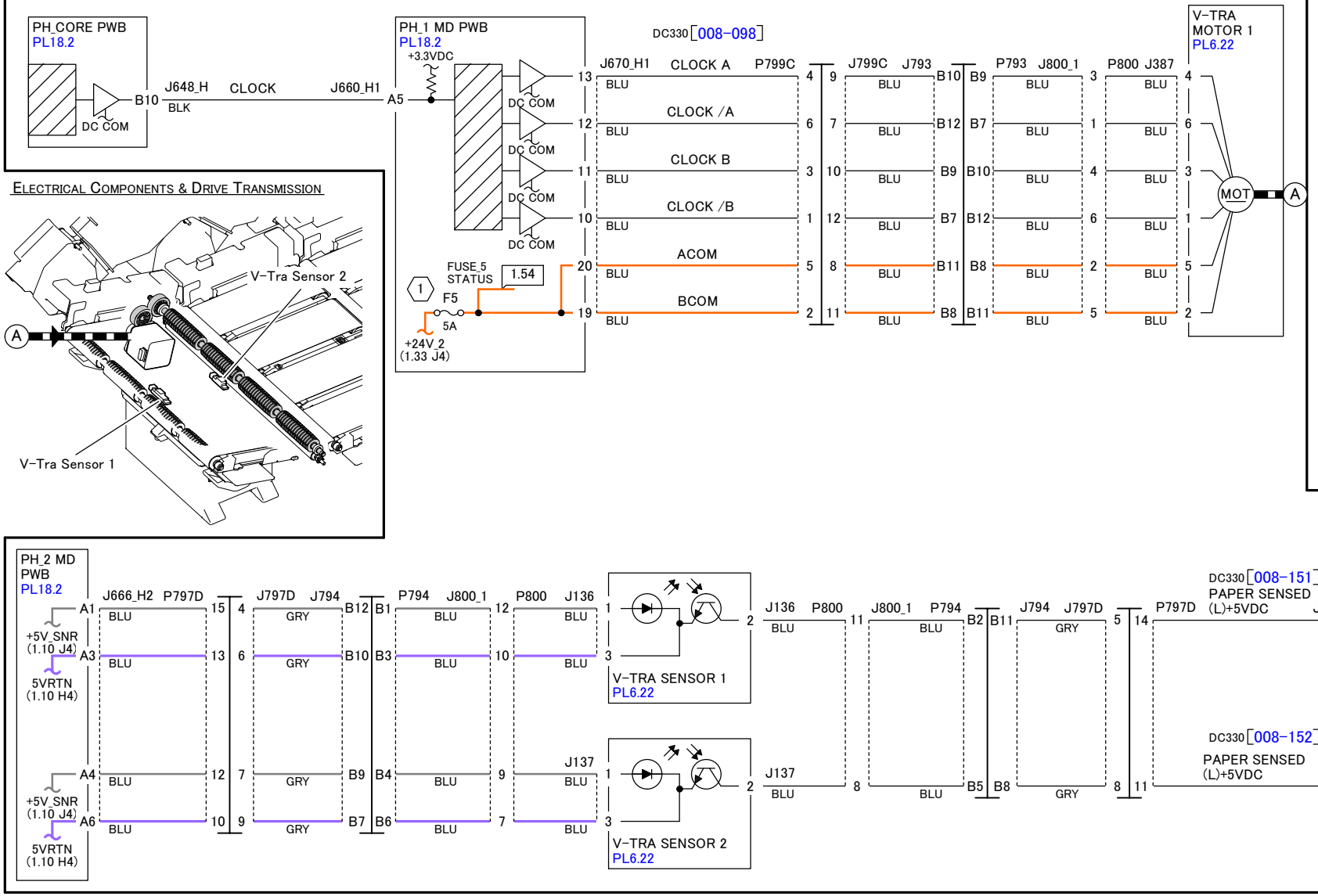
042-376	Rear Drive Cooling Fan Fail 5
042-377	Rear Drive Cooling Fan Fail 6
042-361	Rear Cooling Fan Fail 9
042-362	Rear Cooling Fan Fail 10

NOTE:

(1) See 7.4.19 Electrical Component Location.

j0cx730983

10.1 V-TRA 1 PAPER TRANSPORTATION



FAIL CODE

- 077-113 — V-Tra SNR 1 On Jam
- 077-137 — POB V-Tra SNR 1 On Jam
- 077-138 — POB V-Tra SNR 1 Off Jam
- 077-139 — POB V-Tra SNR 2 On Jam
- 077-178 — V-Tra SNR 1 On Jam (UpPurge)
- 077-918 — V-Tra SNR 1 Static Jam
- 077-919 — V-Tra SNR 2 Static Jam

NOTE: (1) CHIP FUSE

j0cx731001

10.2 V-TRA 2 PAPER TRANSPORTATION

PH_CORE PWB PL18.2 — B11 — DC COM — J648_H — BLK — CLOCK — J660_H1 — A6

PH_1 MD PWB PL18.2 (+3.3V; DC COM ×4; FUSE_6 STATUS 1.54; F6 5A; +24V_2 (1.33 J4))

DC330 [008-099]

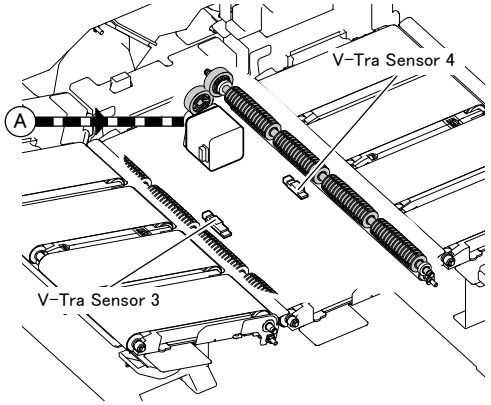
J670_H1	CLOCK A	P799C	J799C	J793	P793	J800_2	P800	J387_2	V-TRA MOTOR 2 PL6.22
9 BLU		10 3	B16 B3	BLU	BLU	3	BLU	4	
8 BLU	CLOCK /A	12 1	B18 B1	BLU	BLU	1	BLU	6	
7 BLU	CLOCK B	9 4	B15 B4	BLU	BLU	4	BLU	3	MOT — A
6 BLU	CLOCK /B	7 6	B13 B6	BLU	BLU	6	BLU	1	
18 BLU	ACOM	11 2	B17 B2	BLU	BLU	2	BLU	5	
17 BLU	BCOM	8 5	B14 B5	BLU	BLU	5	BLU	2	

FAIL CODE

077-920 — V-Tra Sensor 3 Static Jam

077-921 — V-Tra Sensor 4 Static Jam

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



PH_2 MD PWB PL18.2

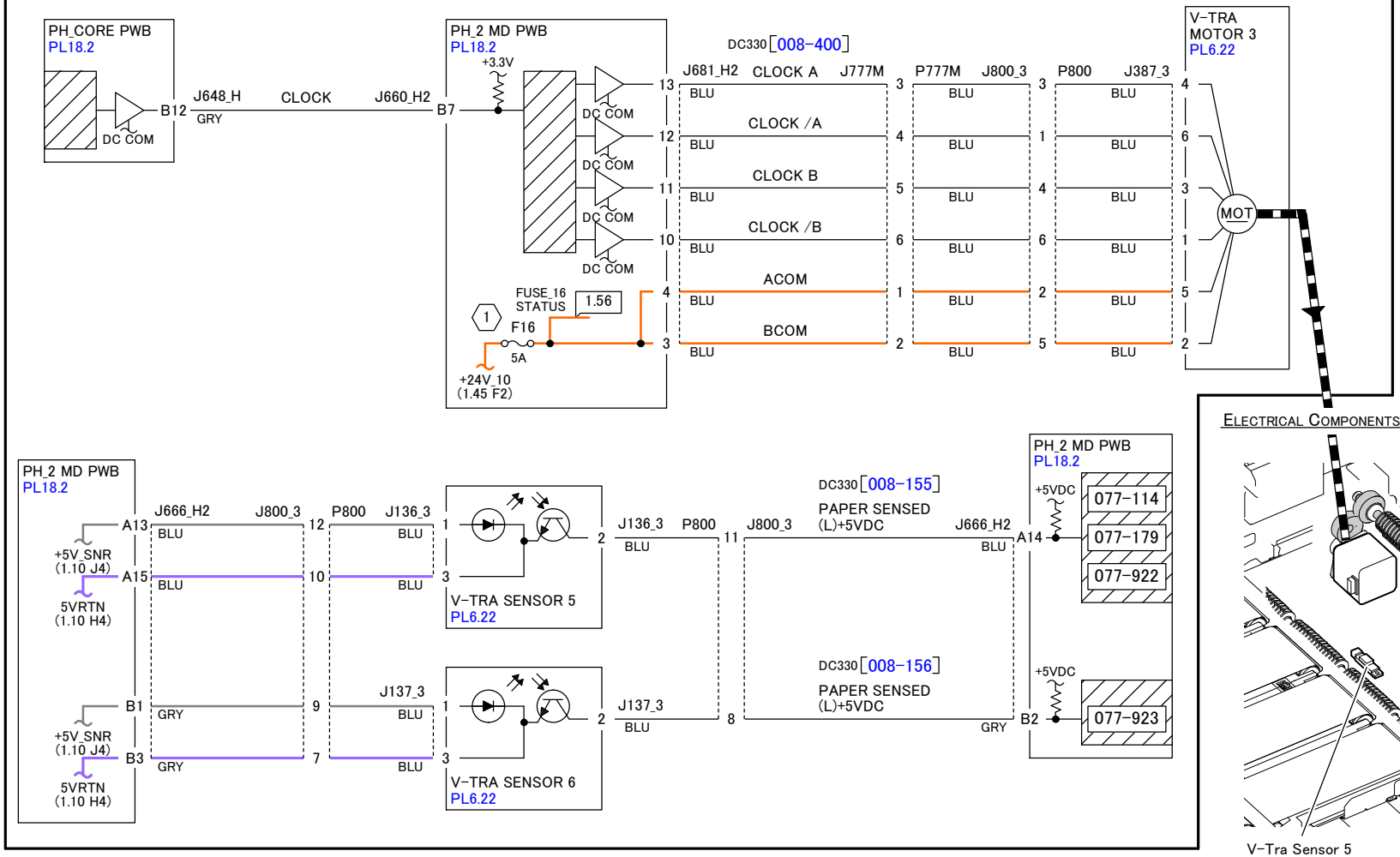
J666_H2 P797D		J797D	J794		P794 J800_2		P800 J136_2		
A7 BLU	9 10	GRY	B6 B7	BLU	12	BLU	1	V-TRA SENSOR 3 PL6.22	2
+5V_SNR (1.10 J4)									
A9 BLU	7 12	GRY	B4 B9	BLU	10	BLU	3		
5VRTN (1.10 H4)									
A10 BLU	6 13	GRY	B3 B10	BLU	9	J137_2 BLU	1	V-TRA SENSOR 4 PL6.22	2
+5V_SNR (1.10 J4)									
A12 BLU	4 15	GRY	B1 B12	BLU	7	BLU	3		
5VRTN (1.10 H4)									

J136_2 P800		J800_2 P794		J794 J797D		P797D		J666_H2	PH_2 MD PWB PL18.2
2	J136_2 BLU	11	BLU	B8 B5	GRY	11 8	DC330 [008-153] PAPER SENSED (L)+5VDC	BLU	A8 — +5VDC — 077-920
	J137_2 BLU	8	BLU	B11 B2	GRY	14 5	DC330 [008-154] PAPER SENSED (L)+5VDC	BLU	A11 — +5VDC — 077-921

NOTE: (1) Chip Fuse

j0cx731002

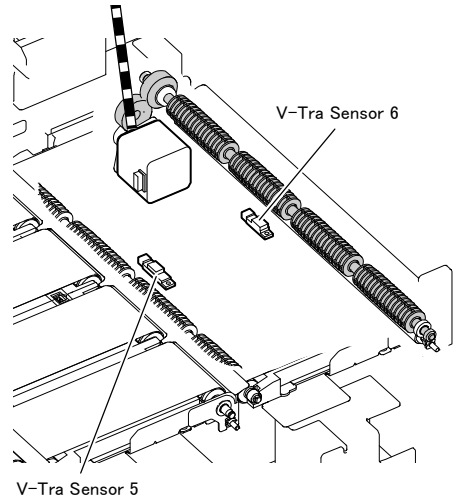
10.3 V-TRA 3 PAPER TRANSPORTATION



FAIL CODE

077-114	V-Tra Sensor 5 On Jam
077-179	V-Tra Sensor 5 On Jam (UpPurge)
077-922	V-Tra Sensor 5 Static Jam
077-923	V-Tra Sensor 6 Static Jam

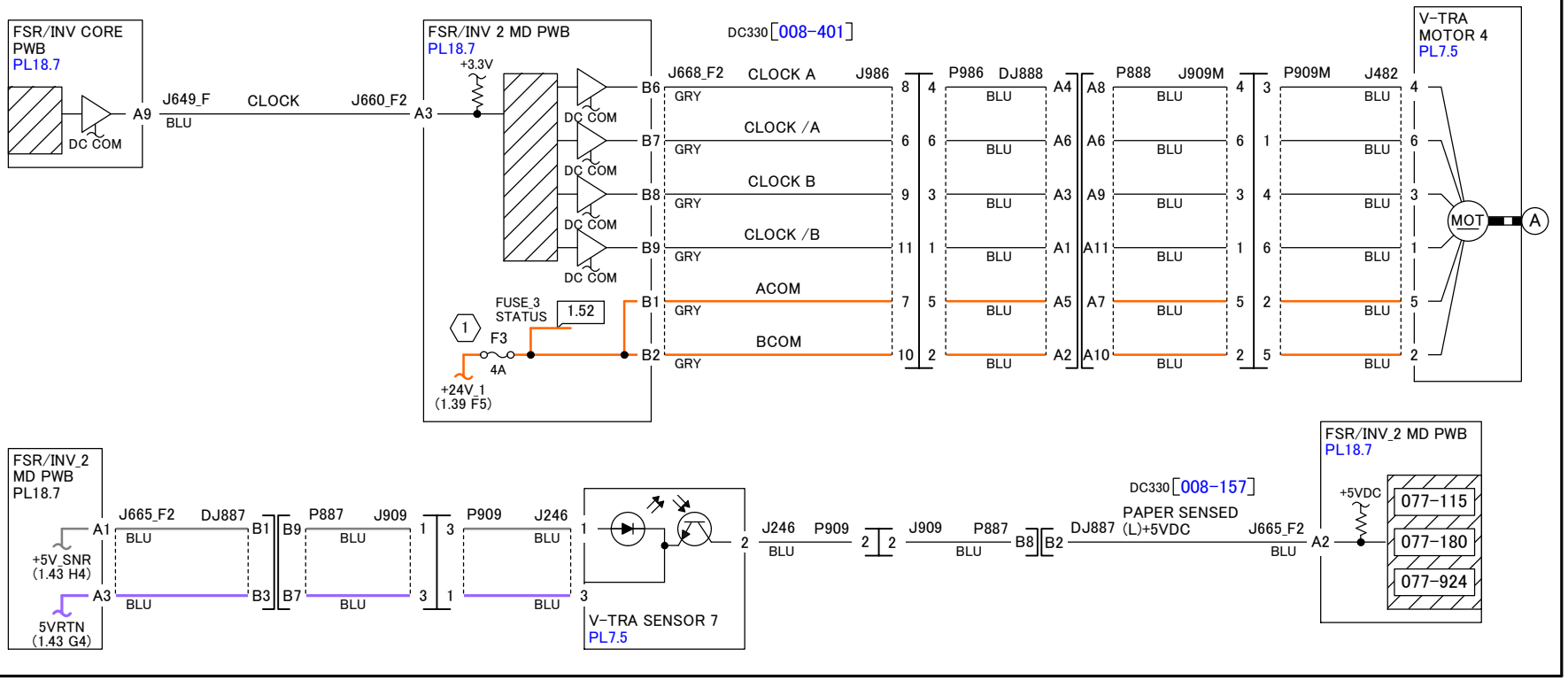
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



NOTE:
(1) CHIP FUSE

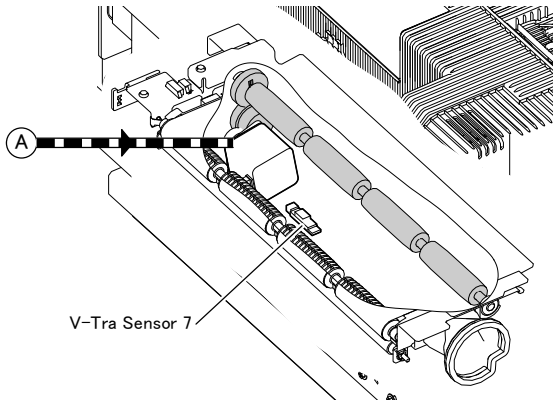
j0cx731003

10.4 V-TRA 4 PAPER TRANSPORTATION



NOTE: (1) Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



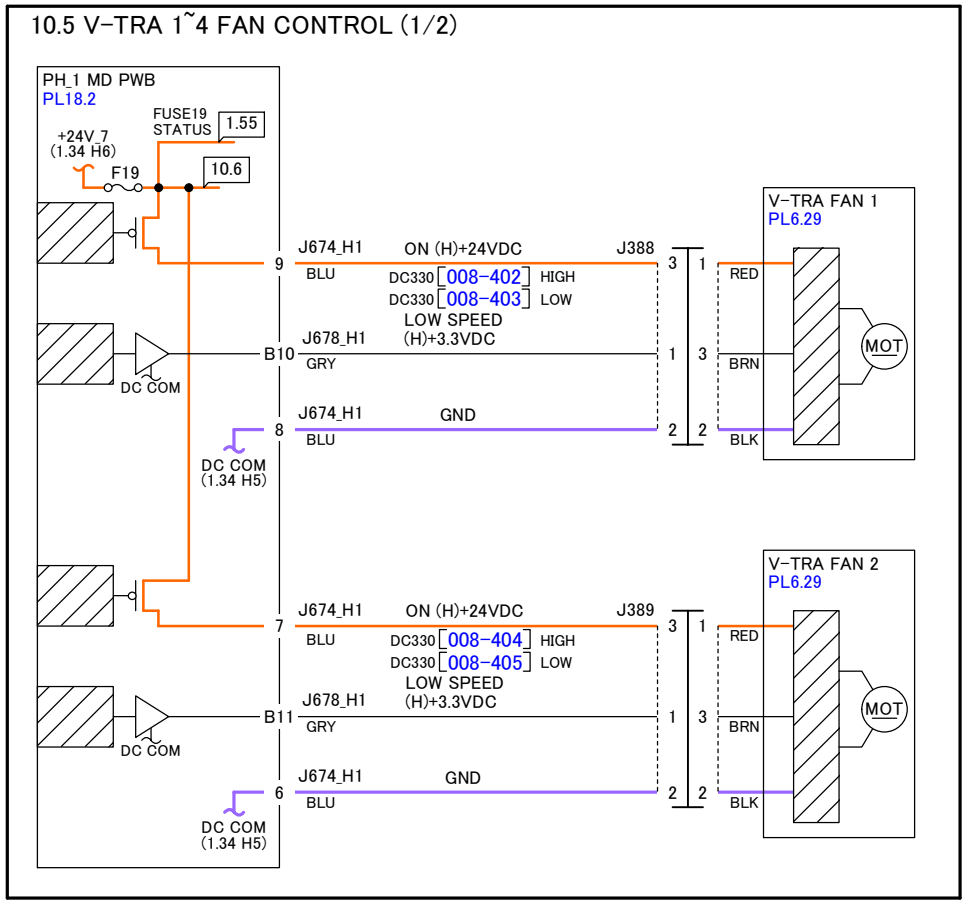
FAIL CODE

077-115
V-Tra SNR 7 On Jam

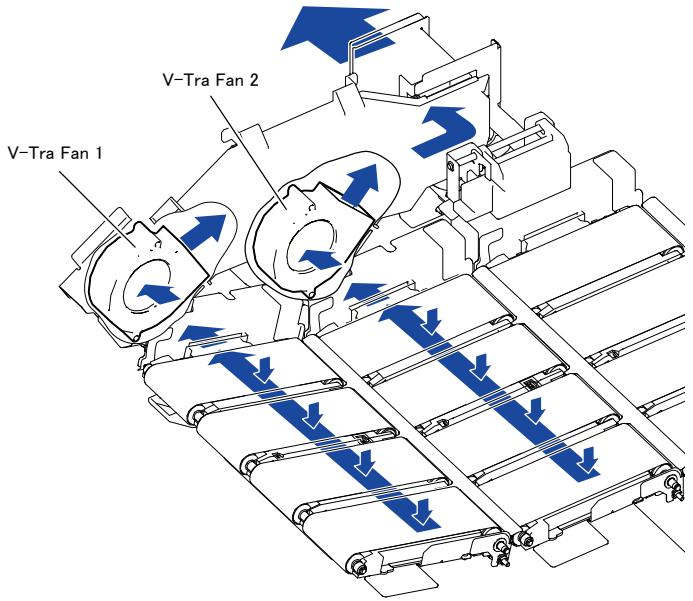
077-180
V-Tra SNR 7 On Jam (UpPurge)

077-924
V-Tra SNR 7 Static Jam

j0cx731004

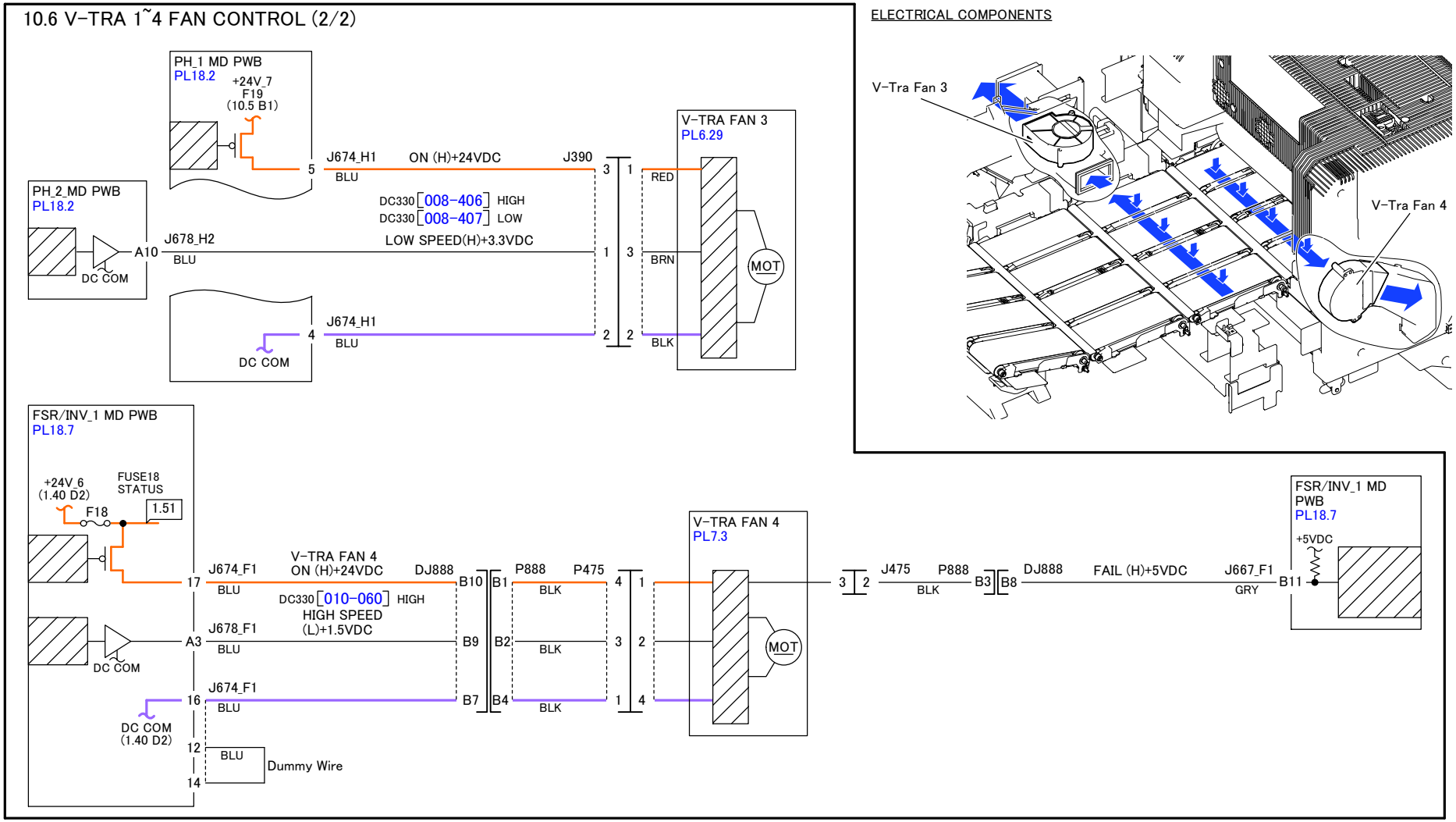


ELECTRICAL COMPONENTS



j0cx731005

10.6 V-TRA 1~4 FAN CONTROL (2/2)



ELECTRICAL COMPONENTS

j0cx731006

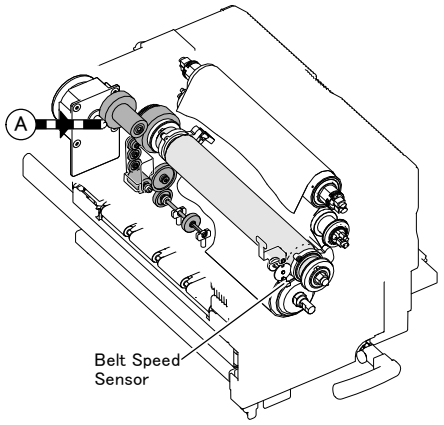
10.7 FUSING DRIVE (1/2)

DC330 [010-001] 3sec
DC330 [010-065] PR CNT_H
DC330 [010-066] PR RET_H
DC330 [010-067] PR CNT_L
DC330 [010-068] PR RET_L

FSR/INV_CORE PWB PL18.7
FSR/INV_2 MD PWB PL18.7
FUSING MOTOR PL7.12
FSR/INV_1 SNR PWB PL18.7
FUSING BELT SPEED SENSOR PL7.13

MOTOR CLOCK
MOTOR ON (L)+6.3VDC
REF. CLOCK
BRAKE
GAIN 1
GAIN 2
FAIL (H)+5VDC
ACTUATED (H)+5VDC

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



NOTE:

1. If any of the following Fail has occurred, Diag will not be On.
   - Fusing Belt In Limit Fail
   - Fusing Belt Out Limit Fail
   - H/R, I/R, E/R Over Heat Fail
   - E/Roll Motor Fail
2. Relationship of Fusing Motor Drive Speed and various signals is as follows.

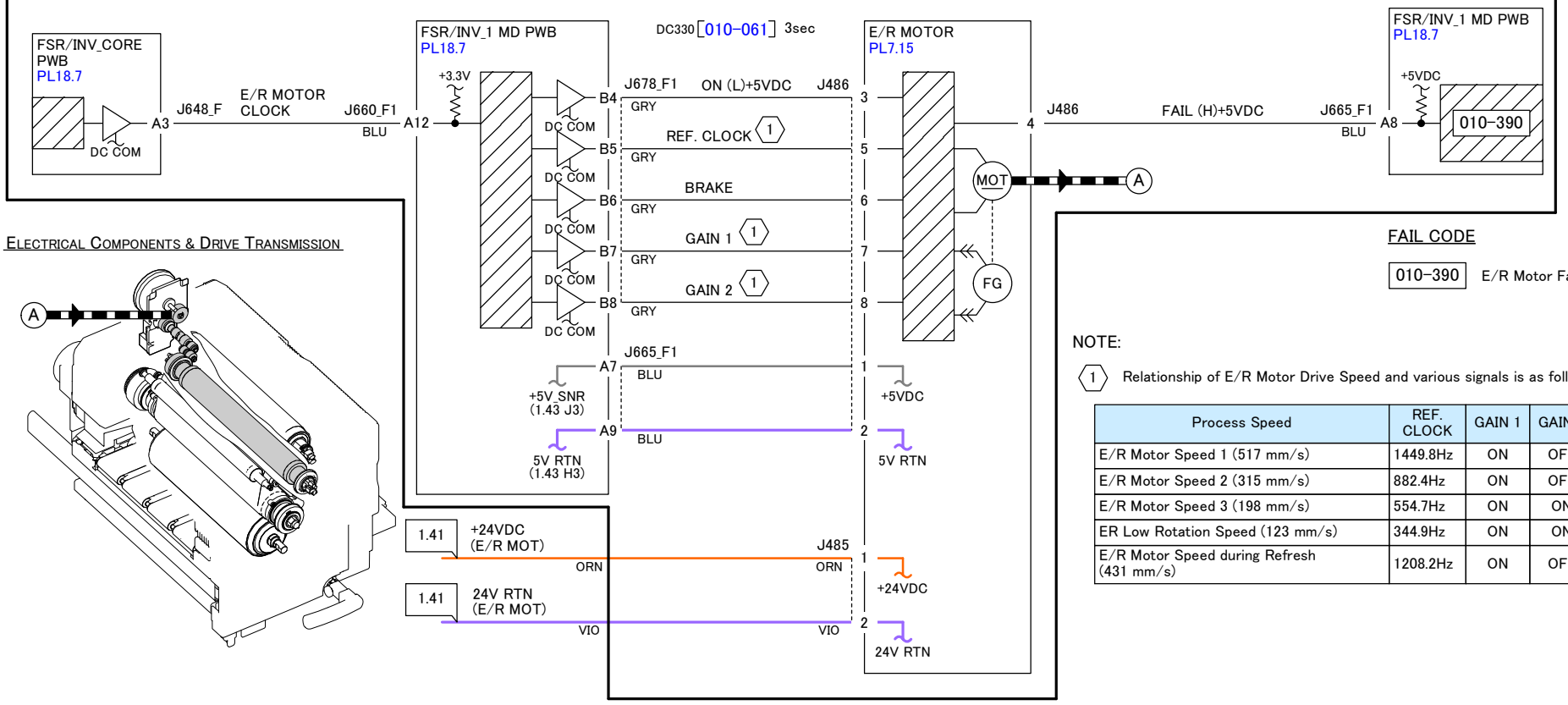
Process Speed	REF. CLOCK	GAIN 1	GAIN 2
Fusing Motor Speed 1 (534 mm/s)	1809.1Hz	OFF	ON
Fusing Motor Speed 2 (319 mm/s)	1084.2Hz	OFF	ON
Fusing Motor Speed 3 (200 mm/s)	678.1Hz	ON	ON
BELT Low Rotation Speed (125 mm/s)	423.7Hz	ON	ON
Fusing Motor Speed during Refresh (445 mm/s)	1508.5Hz	OFF	ON

FAIL CODE

010-310	Fusing Unit Belt Speed Sensor Fail	010-618	Fusing Belt Speed Sensor Fail Warning Print	010-330	Fusing Belt Speed Sensor Fail High
010-329	Fusing Belt Speed Sensor Fail Low	010-619	Fusing Belt Speed Sensor Fail Warning Low		

j0cx731007

10.8 FUSING DRIVE (2/2)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

FAIL CODE

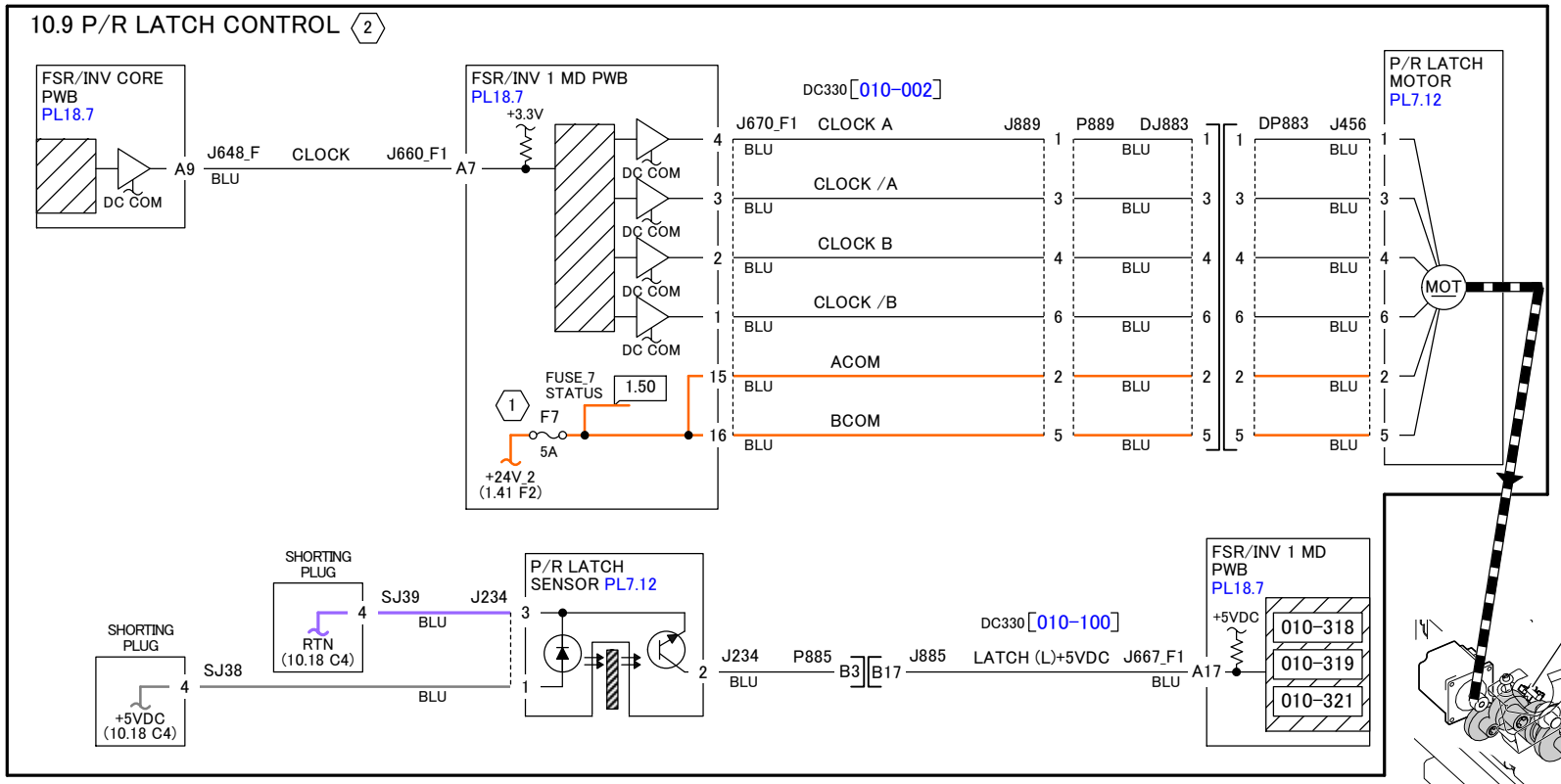
010-390	E/R Motor Fail

NOTE:

(1) Relationship of E/R Motor Drive Speed and various signals is as follows.

Process Speed	REF. CLOCK	GAIN 1	GAIN 2
E/R Motor Speed 1 (517 mm/s)	1449.8Hz	ON	OFF
E/R Motor Speed 2 (315 mm/s)	882.4Hz	ON	OFF
E/R Motor Speed 3 (198 mm/s)	554.7Hz	ON	ON
ER Low Rotation Speed (123 mm/s)	344.9Hz	ON	ON
E/R Motor Speed during Refresh (431 mm/s)	1208.2Hz	ON	OFF

j0cx731008



NOTE:

(1) Chip Fuse

(2) [P/R Latch Control]
P/R comes into contact when Print starts and retracts when Print ends.
Also, in order to maintain the temperature of P/R, latch control is performed according to the temperature of P/R even during warm-up or standby.
During power Off, when Fail or Jam occurs, and Interlock is open, retract operation is performed.
However, retract may not be possible when the following situations occur.

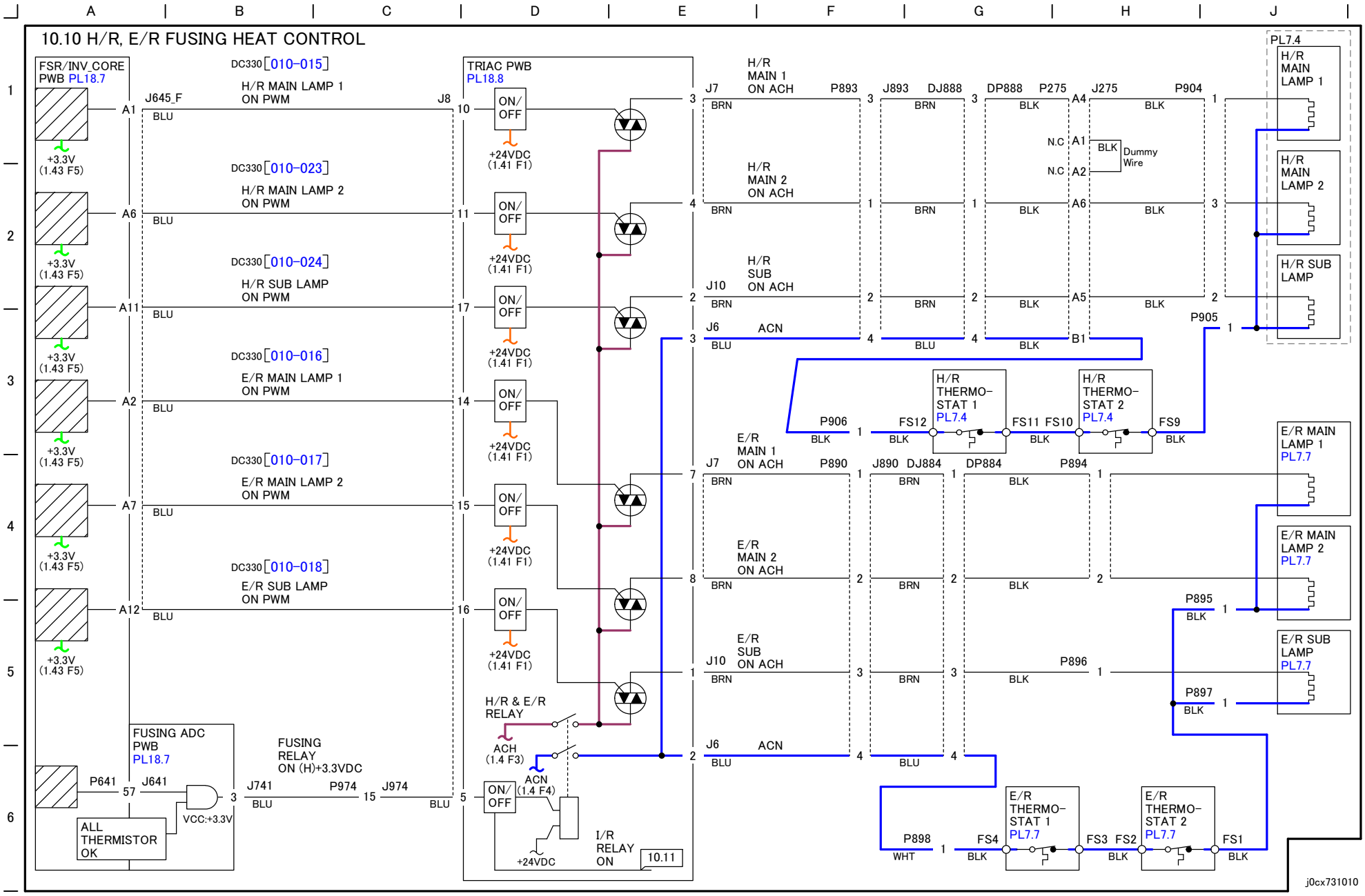
<Case when retract is not possible>
1. Emergency Switch (red switch) is Off while Front Door Intlk is cheated.
2. Fusing Drawer Intlk is opened immediately after Jam has occurred.
3. Power outage

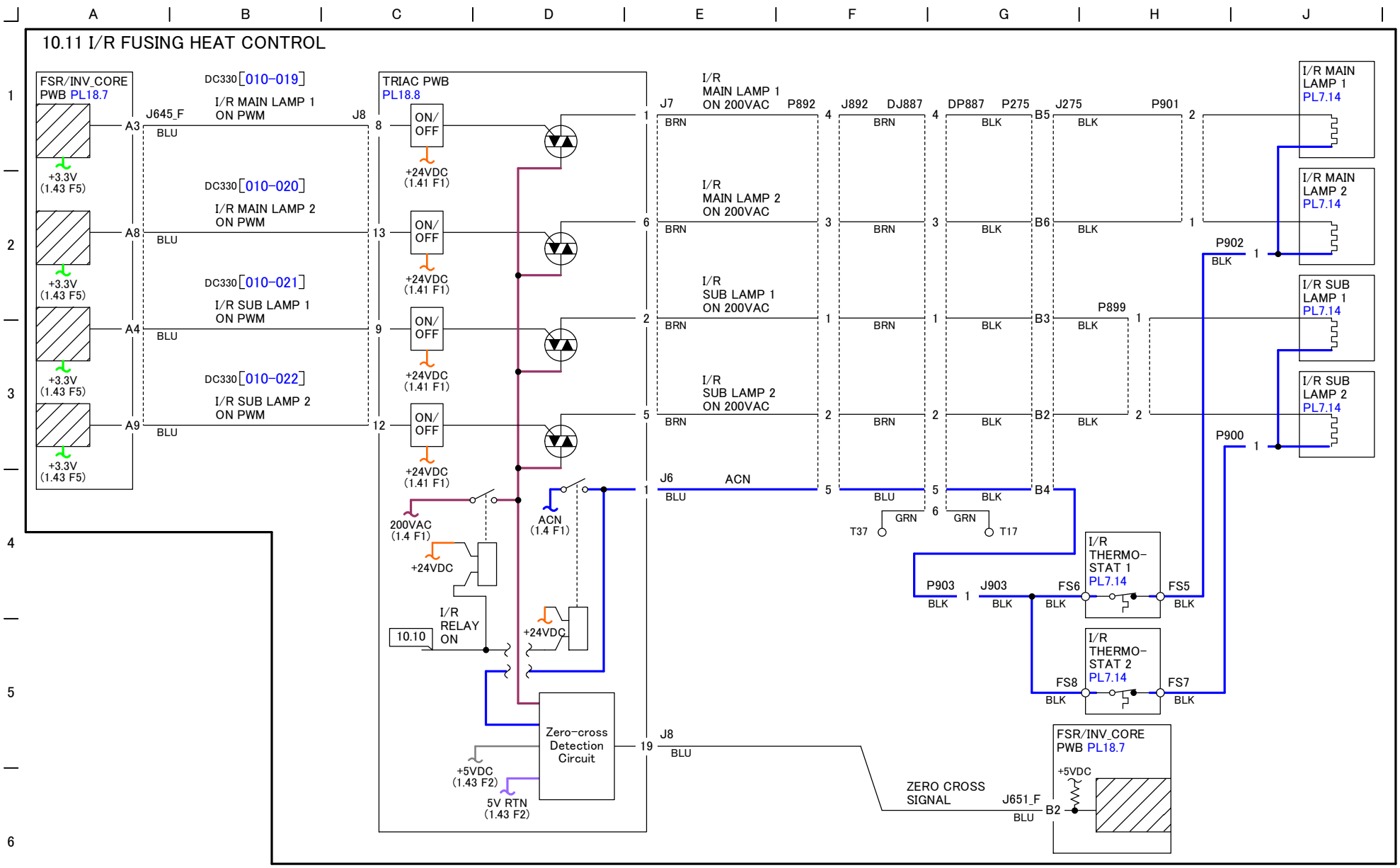
<Failure in the case when retract is not possible>
If paper remains jammed in Fusing Nip (Fusing Exit Sensor On), retract will not occur even when Power Off/On or closing Interlock.
As such, +24V, +36V in Fusing is cut for safety reason.

<Corrective Action>
Remove contact by DC330 [010-002] P/R Latch Motor.

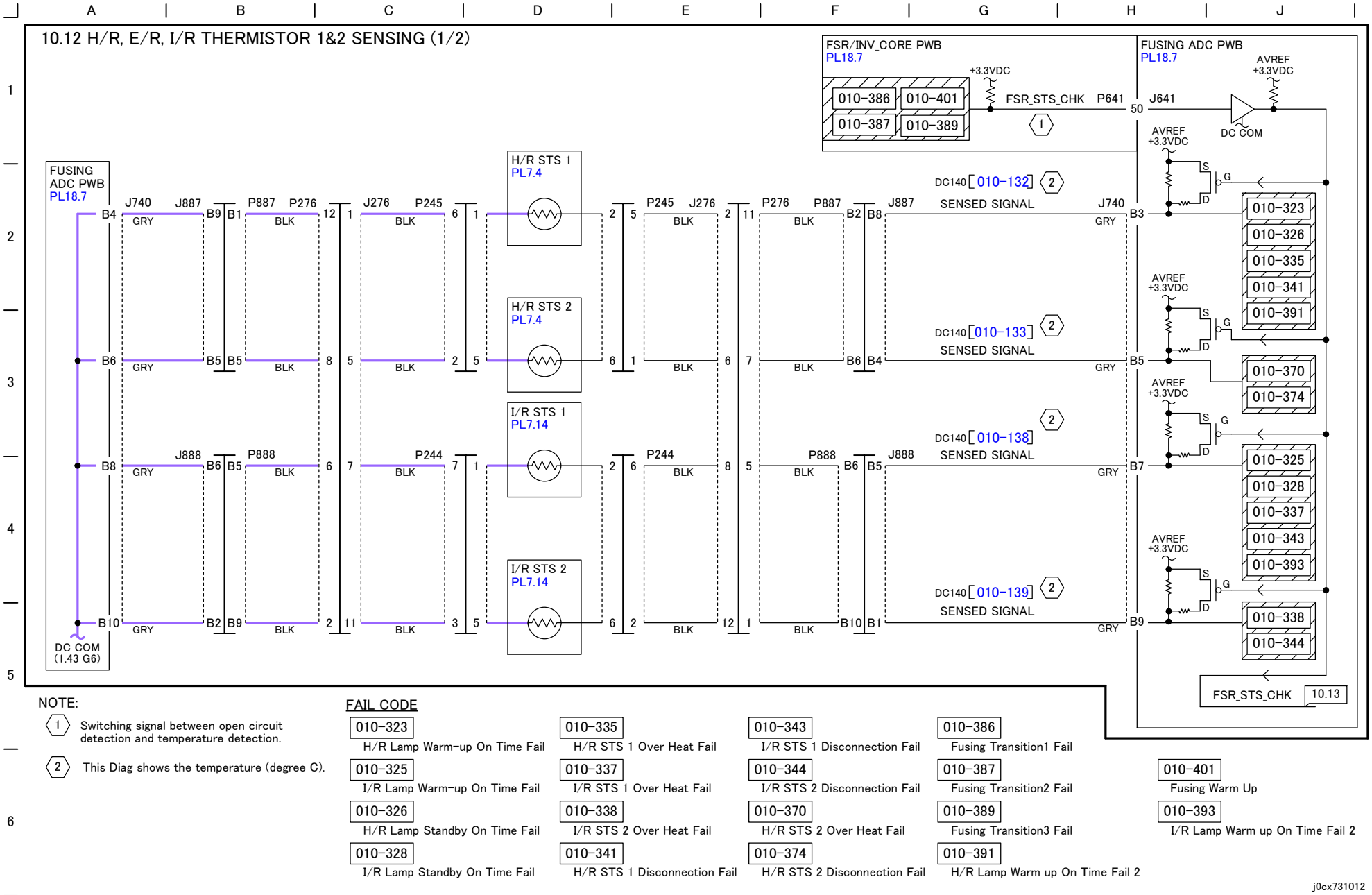
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

j0cx731009


10.10 H/R, E/R FUSING HEAT CONTROL
FSR/INV_CORE PWB PL18.7
TRIAC PWB PL18.8
DC330 [010-015]
H/R MAIN LAMP 1 ON PWM
DC330 [010-023]
H/R MAIN LAMP 2 ON PWM
DC330 [010-024]
H/R SUB LAMP ON PWM
DC330 [010-016]
E/R MAIN LAMP 1 ON PWM
DC330 [010-017]
E/R MAIN LAMP 2 ON PWM
DC330 [010-018]
E/R SUB LAMP ON PWM
J645_F
J8
BLU
+3.3V (1.43 F5)
ON/ OFF
+24VDC (1.41 F1)
H/R MAIN 1 ON ACH
H/R MAIN 2 ON ACH
H/R SUB ON ACH
E/R MAIN 1 ON ACH
E/R MAIN 2 ON ACH
E/R SUB ON ACH
J7
J10
J6
ACN
BRN
BLU
P893
J893
DJ888
DP888
P275
J275
P904
P905
P906
P890
J890
DJ884
DP884
P894
P895
P896
P897
P898
BLK
WHT
N.C
Dummy Wire
H/R THERMO-STAT 1 PL7.4
H/R THERMO-STAT 2 PL7.4
E/R THERMO-STAT 1 PL7.7
E/R THERMO-STAT 2 PL7.7
FS12
FS11
FS10
FS9
FS4
FS3
FS2
FS1
PL7.4
H/R MAIN LAMP 1
H/R MAIN LAMP 2
H/R SUB LAMP
E/R MAIN LAMP 1 PL7.7
E/R MAIN LAMP 2 PL7.7
E/R SUB LAMP PL7.7
H/R & E/R RELAY
ACH (1.4 F3)
ACN (1.4 F4)
I/R RELAY ON
+24VDC
10.11
FUSING ADC PWB PL18.7
FUSING RELAY ON (H)+3.3VDC
P641
J641
J741
P974
J974
VCC:+3.3V
ALL THERMISTOR OK
j0cx731010


10.11 I/R FUSING HEAT CONTROL
FSR/INV_CORE PWB PL18.7
TRIAC PWB PL18.8
DC330[010-019] I/R MAIN LAMP 1 ON PWM
DC330[010-020] I/R MAIN LAMP 2 ON PWM
DC330[010-021] I/R SUB LAMP 1 ON PWM
DC330[010-022] I/R SUB LAMP 2 ON PWM
J645_F
J8
A3
A8
A4
A9
BLU
+3.3V (1.43 F5)
ON/OFF
+24VDC (1.41 F1)
I/R MAIN LAMP 1 ON 200VAC
I/R MAIN LAMP 2 ON 200VAC
I/R SUB LAMP 1 ON 200VAC
I/R SUB LAMP 2 ON 200VAC
J7
P892
J892
DJ887
DP887
P275
J275
P901
BRN
BLK
J6
ACN
BLU
T37
T17
GRN
200VAC (1.4 F1)
ACN (1.4 F1)
+24VDC
I/R RELAY ON
10.10
Zero-cross Detection Circuit
+5VDC (1.43 F2)
5V RTN (1.43 F2)
J8
BLU
ZERO CROSS SIGNAL
J651_F
B2
FSR/INV_CORE PWB PL18.7
+5VDC
I/R THERMO-STAT 1 PL7.14
I/R THERMO-STAT 2 PL7.14
FS5
FS6
FS7
FS8
P903
J903
P902
P900
P899
I/R MAIN LAMP 1 PL7.14
I/R MAIN LAMP 2 PL7.14
I/R SUB LAMP 1 PL7.14
I/R SUB LAMP 2 PL7.14

j0cx731011



NOTE:

(1) Switching signal between open circuit detection and temperature detection.

(2) This Diag shows the temperature (degree C).

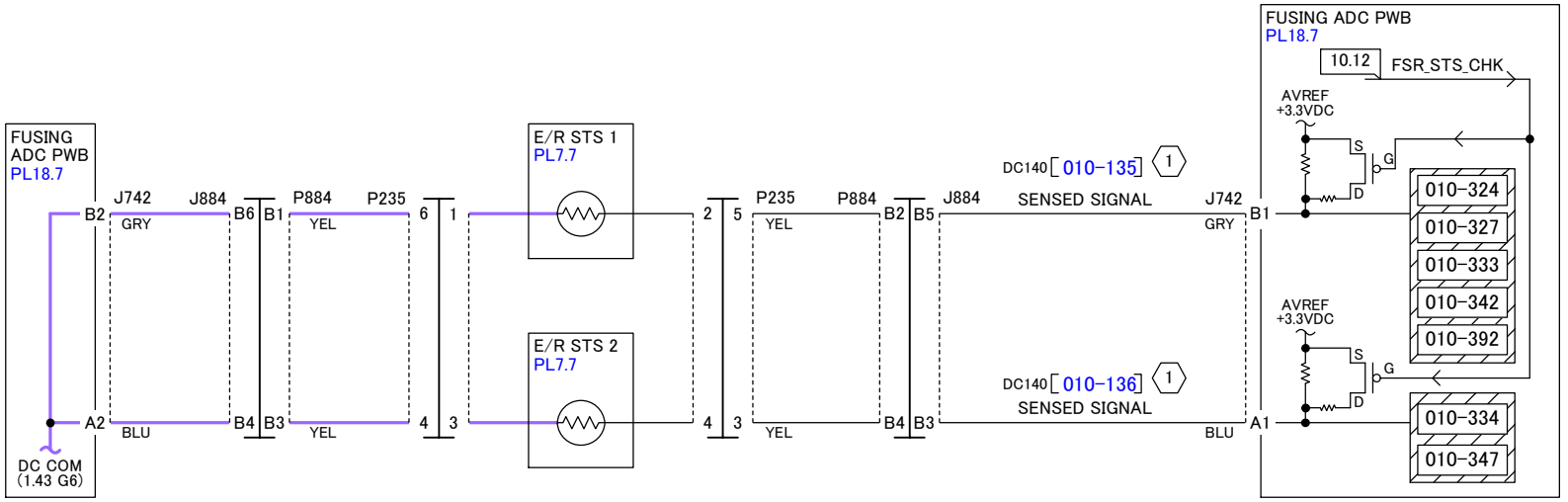
FAIL CODE

010-323 H/R Lamp Warm-up On Time Fail	010-335 H/R STS 1 Over Heat Fail	010-343 I/R STS 1 Disconnection Fail	010-386 Fusing Transition1 Fail
010-325 I/R Lamp Warm-up On Time Fail	010-337 I/R STS 1 Over Heat Fail	010-344 I/R STS 2 Disconnection Fail	010-387 Fusing Transition2 Fail
010-326 H/R Lamp Standby On Time Fail	010-338 I/R STS 2 Over Heat Fail	010-370 H/R STS 2 Over Heat Fail	010-389 Fusing Transition3 Fail
010-328 I/R Lamp Standby On Time Fail	010-341 H/R STS 1 Disconnection Fail	010-374 H/R STS 2 Disconnection Fail	010-391 H/R Lamp Warm up On Time Fail 2

010-401 Fusing Warm Up
010-393 I/R Lamp Warm up On Time Fail 2

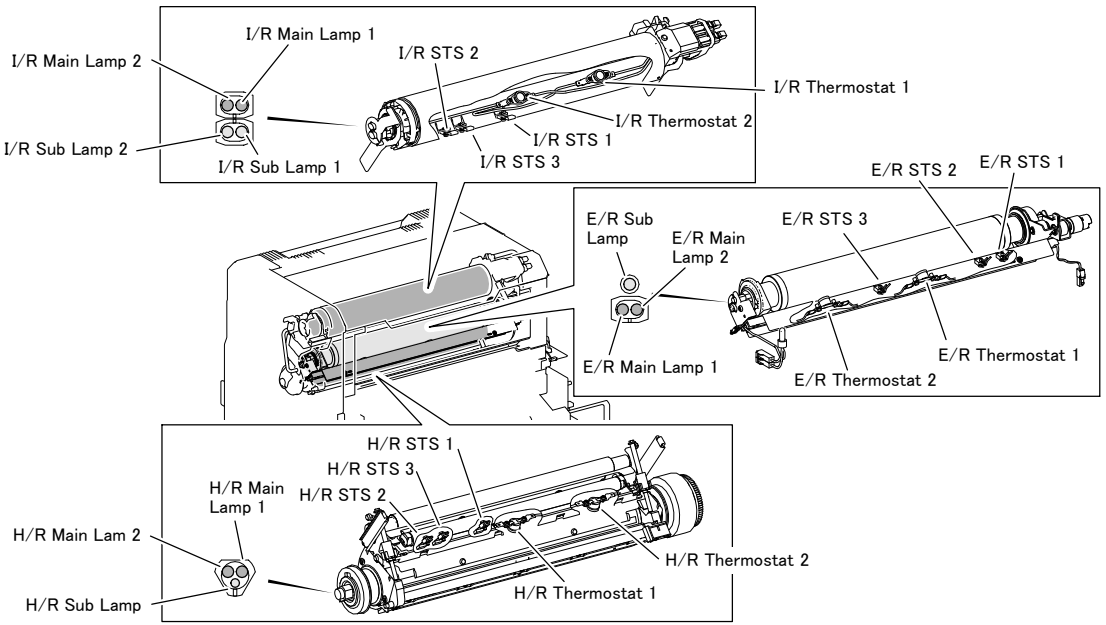
j0cx731012

10.13 H/R, E/R, I/R THERMISTOR 1&2 SENSING (2/2)



NOTE: (1) This Diag shows the temperature (degree C).

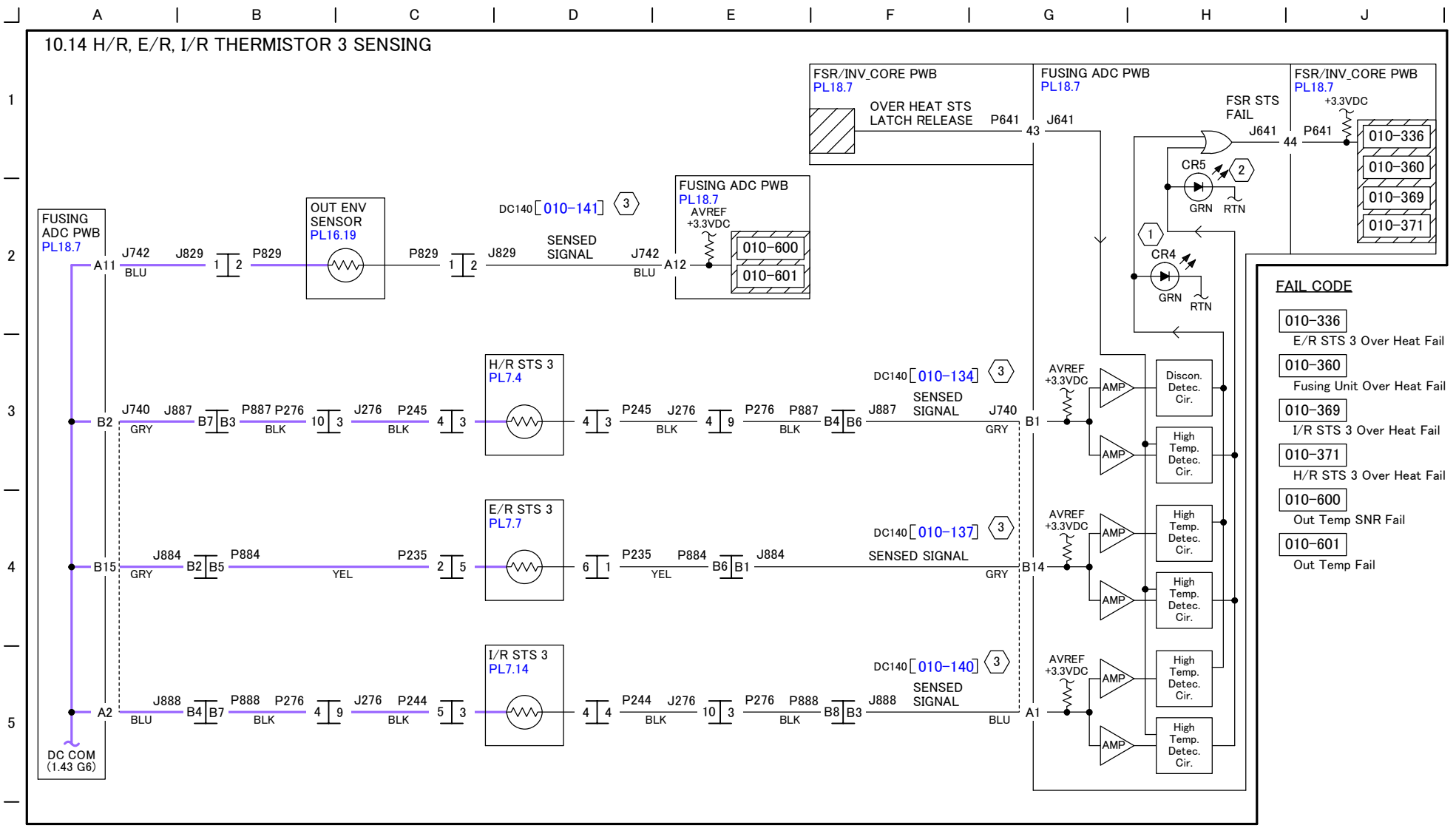
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FAIL CODE

- 010-324 E/R Lamp Warm-up On Time Fail
- 010-327 E/R Lamp Standby On Time Fail
- 010-333 E/R STS 1 Over Heat Fail
- 010-334 E/R STS 2 Over Heat Fail
- 010-342 E/R STS 1 Disconnection Fail
- 010-347 E/R STS 2 Disconnection Fail
- 010-392 E/R Lamp Warm up On Time Fail 2

j0cx731013

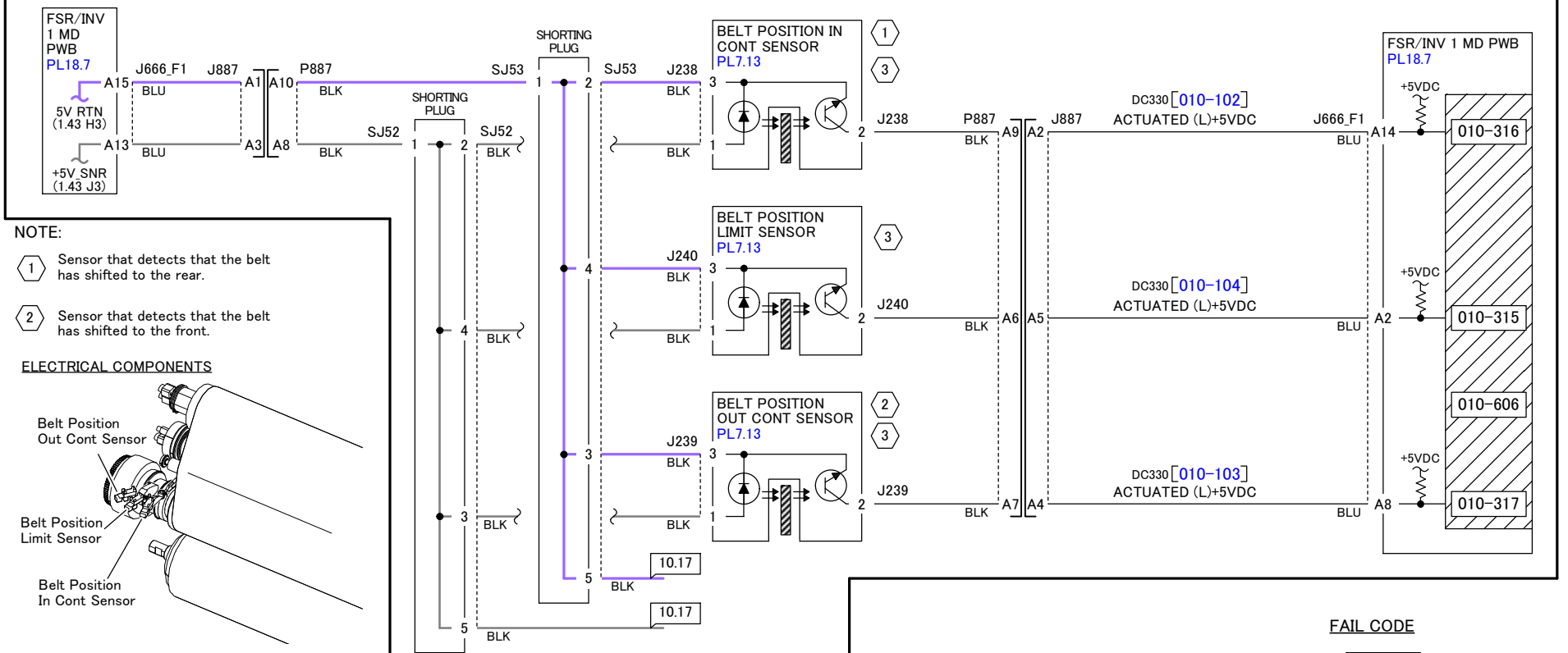


NOTE:

1. CR4 (GRN) Lit: Open circuit of either H/R, E/R, or I/R STS 3.
2. CR5 (GRN) Lit: Sensor of either H/R, E/R, or I/R STS 3 detected 230 degrees C or more.
3. This Diag shows the temperature (degree C).

j0cx731014

10.15 FUSING BELT STEERING CONTROL (1/2)



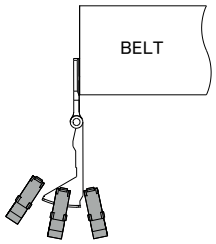
NOTE:

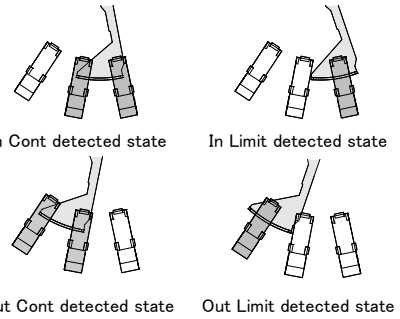
1. Sensor that detects that the belt has shifted to the rear.
2. Sensor that detects that the belt has shifted to the front.

ELECTRICAL COMPONENTS

3. Belt Position Sensor operation concept

The Sensor Actuator is in contact with the end of the Belt as shown in the diagram, and moves in the In (Rear) <-> Out (Front) directions according to the Belt Walk operation.



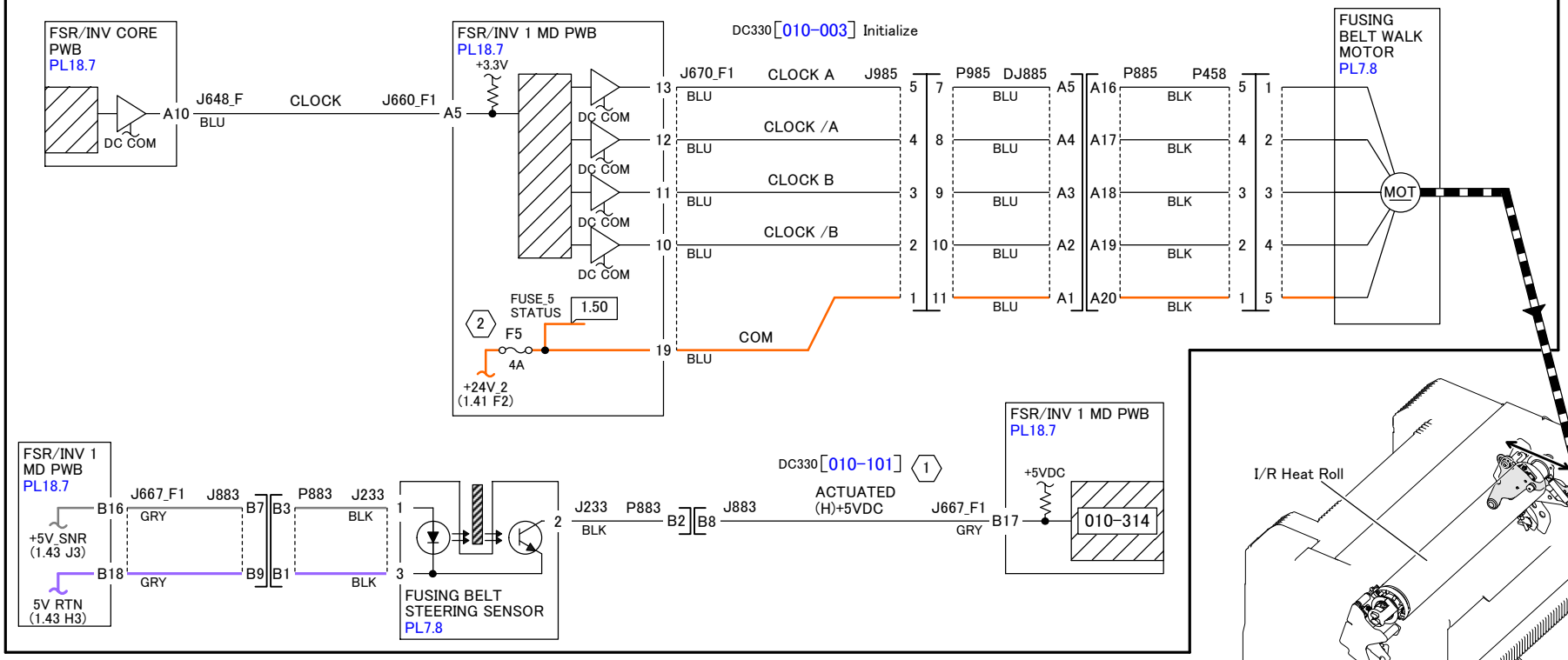


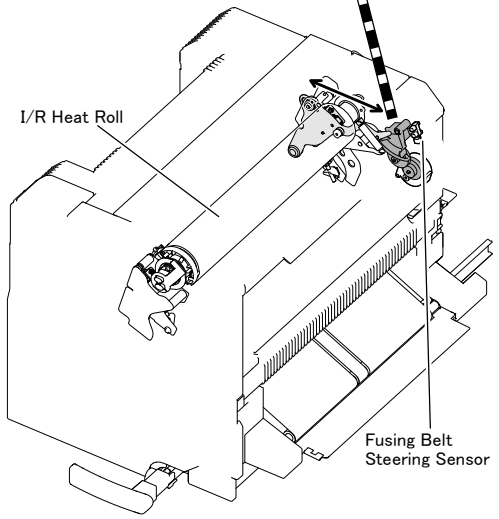
FAIL CODE

- 010-315 Fusing Belt Position Sensor Fail
- 010-316 Fusing Belt In Limit Fail
- 010-317 Fusing Belt Out Limit Fail
- 010-606 Fusing Belt Walk Fail

j0cx731015

10.16 FUSING BELT STEERING CONTROL (2/2)





ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

NOTE:

1. Performs the operation of moving Belt from front to rear when Low is displayed.
2. CHIP FUSE

FAIL CODE

010-314	Fusing Steering Position Sensor Fail

10.17 FUSING BELT REFRESHMENT

DC330 [010-007] Contact
DC330 [010-008] Initialize

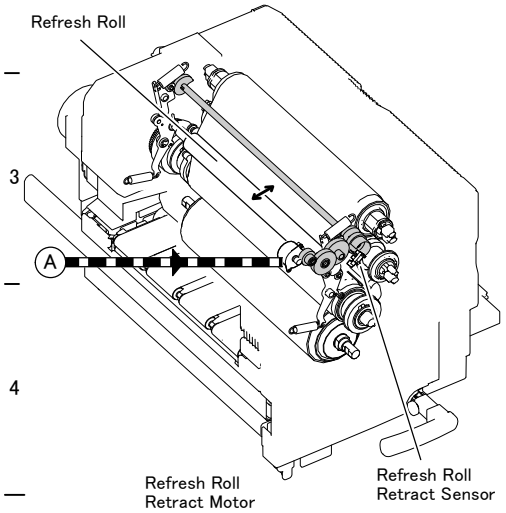
FSR/INV CORE PWB
PL18.7
A15 — J648_F — BLU — CLOCK — J660_F1 — A6
DC COM

FSR/INV 1 MD PWB
PL18.7
+3.3V
DC COM
9 — J670_F1 — BLU — CLOCK A — J986 — 5
8 — BLU — CLOCK /A — 4
7 — BLU — CLOCK B — 3
6 — BLU — CLOCK /B — 2
17 — BLU — COM — 1
FUSE_6 STATUS 1.50
1 F6 4A
+24V_2 (1.41 F2)

J986 — 5 7 — P986 J888 — BLU — A11 A1 — P888 P459 — BLK — 5 1 — REFRESH ROLL RETRACT MOTOR PL7.10
4 8 — BLU — A10 A2 — BLK — 4 2
3 9 — BLU — A9 A3 — BLK — 3 3 — MOT — A
2 10 — BLU — A8 A4 — BLK — 2 4
1 11 — BLU — A7 A5 — BLK — 1 5

FAIL CODE
010-311
Refresh Roll Contact Fail

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



SHORTING PLUG
5 — SJ52 — BLK — J241 — 1
+5V_SNR (10.15 D4)
SHORTING PLUG
5 — SJ53 — BLK — 3
5V RTN (10.15 D4)
REFRESH ROLL RETRACT SENSOR PL7.10
2 — J241 — BLK — P887 — A5 A6 — J887 — RETRACT (H)+5VDC — J667_F1 — BLU — A2

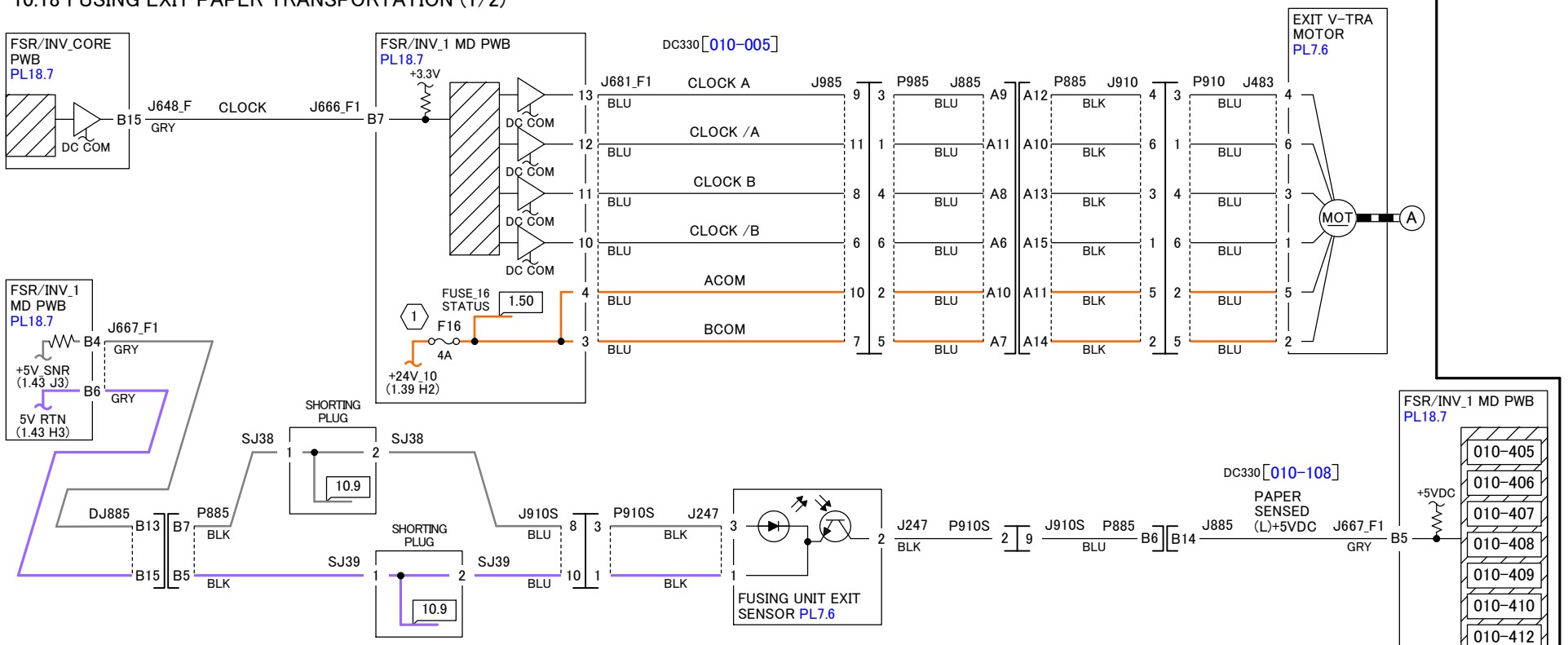
DC330 [010-106]

FSR/INV 1 MD PWB
PL18.7
+5VDC
010-311

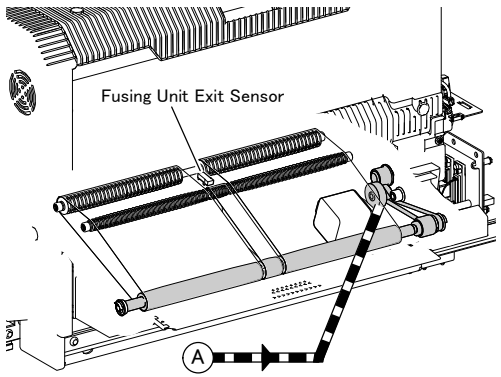
NOTE:
1 CHIP FUSE

j0cx731017

10.18 FUSING EXIT PAPER TRANSPORTATION (1/2)



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



NOTE:

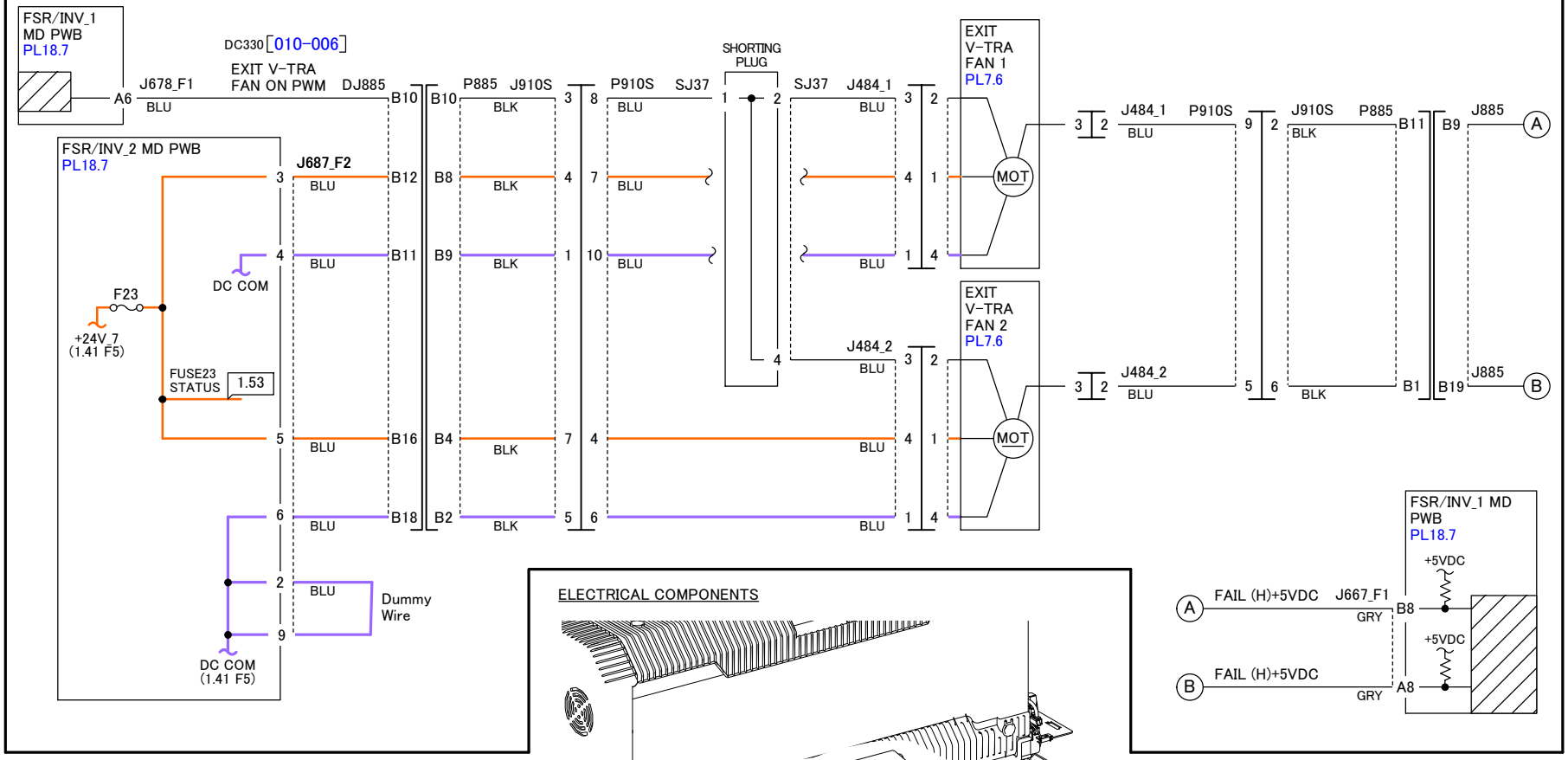
(1) CHIP FUSE

FAIL CODE

010-405	Oil Wick Life Limit	010-415	Trim (Cooling Belt) Life Limit
010-406	Fusing Belt Life Limit	010-416	Cooling Belt Lower Life Limit
010-407	P/Roll Life Limit	077-116	Fusing Unit Exit Sensor On Jam
010-408	Sheet Life Limit	077-117	Fusing Unit Exit Sensor Off Jam
010-409	Chute Assy-Finger PR Life Limit	077-181	Fusing Unit Exit Sensor On Jam (UpPurge)
010-410	Trim (V-Tra Belt Exit) Life Limit	077-925	Fusing Unit Exit Sensor Static Jam
010-412	Cooling Belt Upper Life Limit		
010-414	Fusing Belt (Envelop) Life Limit		

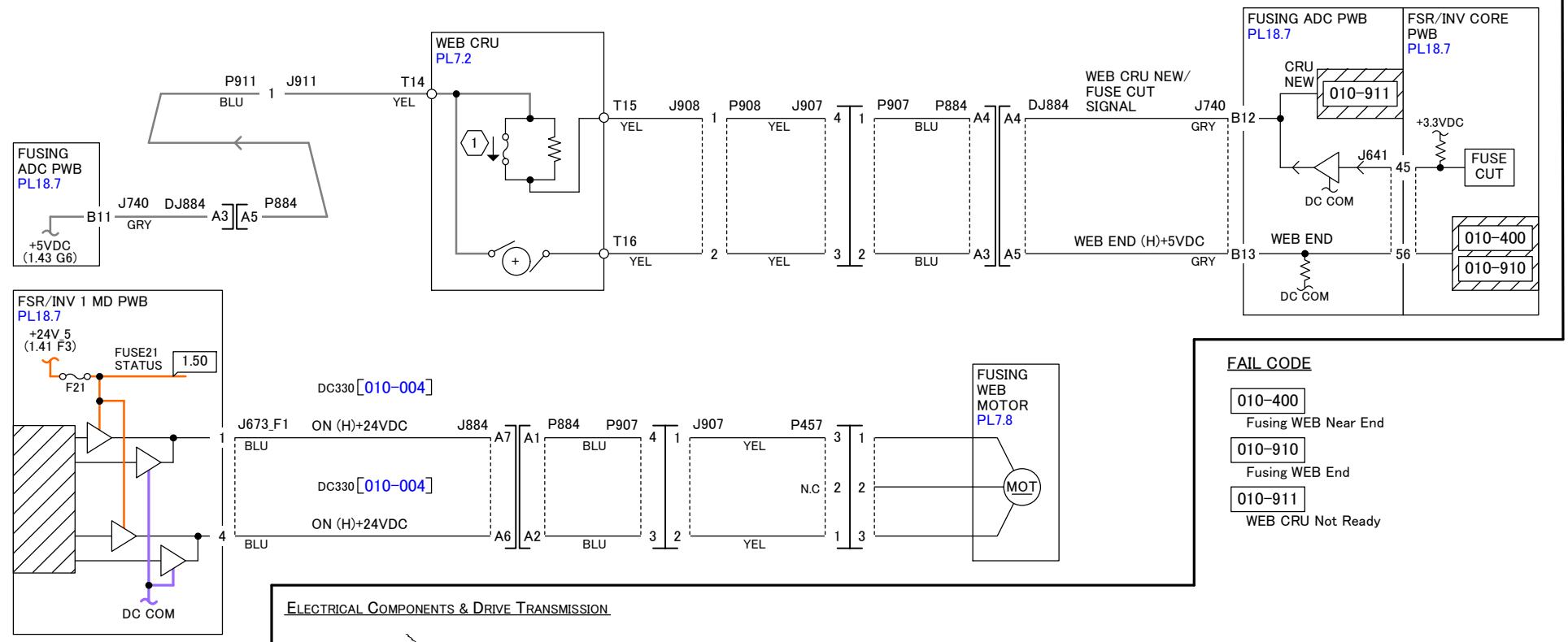
j0cx731018

10.19 FUSING EXIT PAPER TRANSPORTATION (2/2)



j0cx731019

10.20 FUSING BELT CLEANING



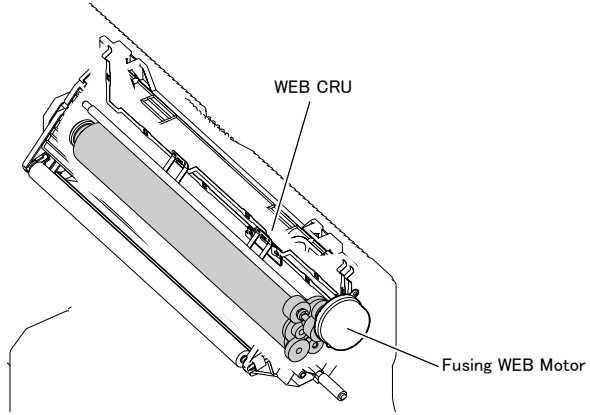
FAIL CODE

- 010-400 Fusing WEB Near End
- 010-910 Fusing WEB End
- 010-911 WEB CRU Not Ready

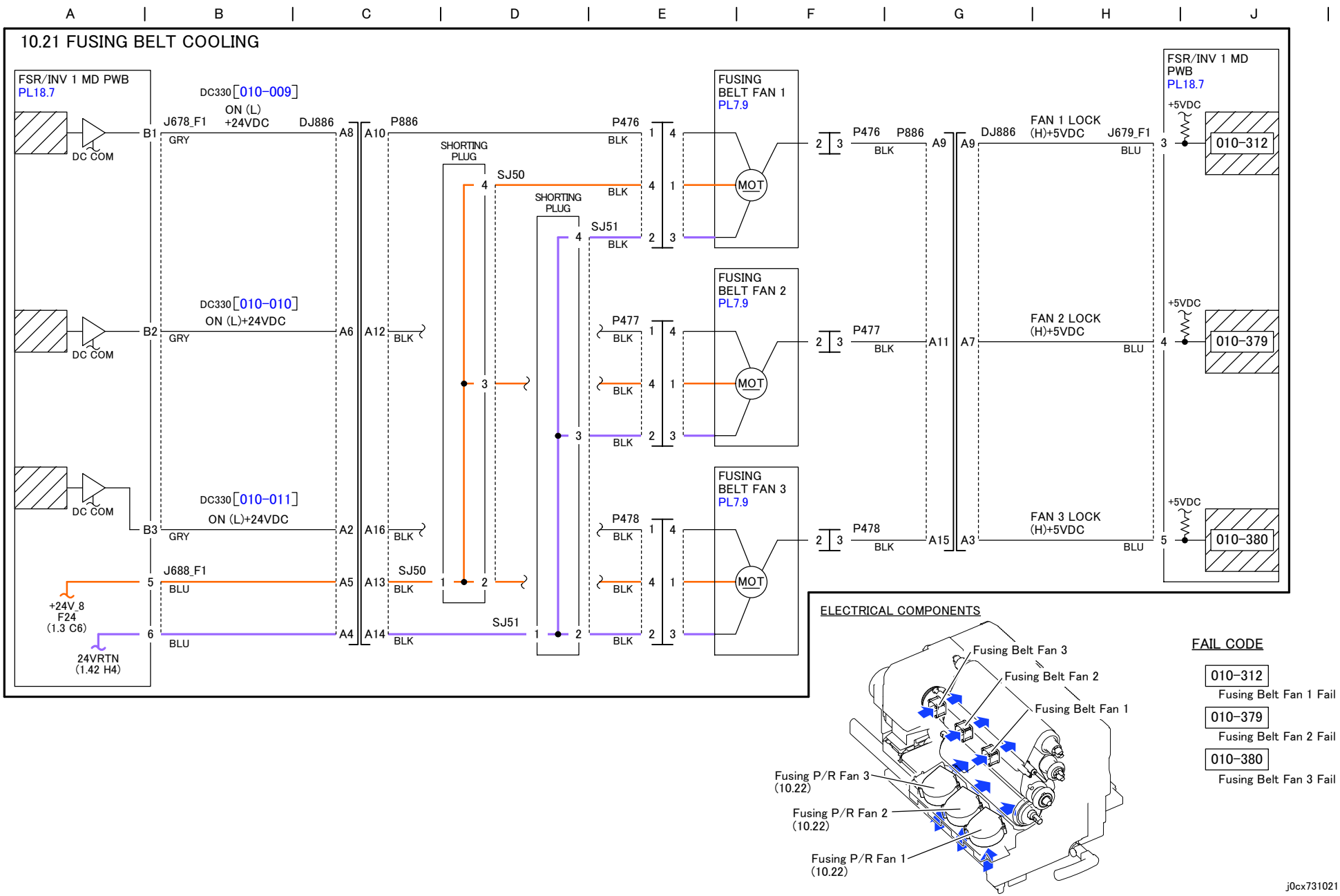
NOTE:

(1) 0.2A in a melted condition

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731020

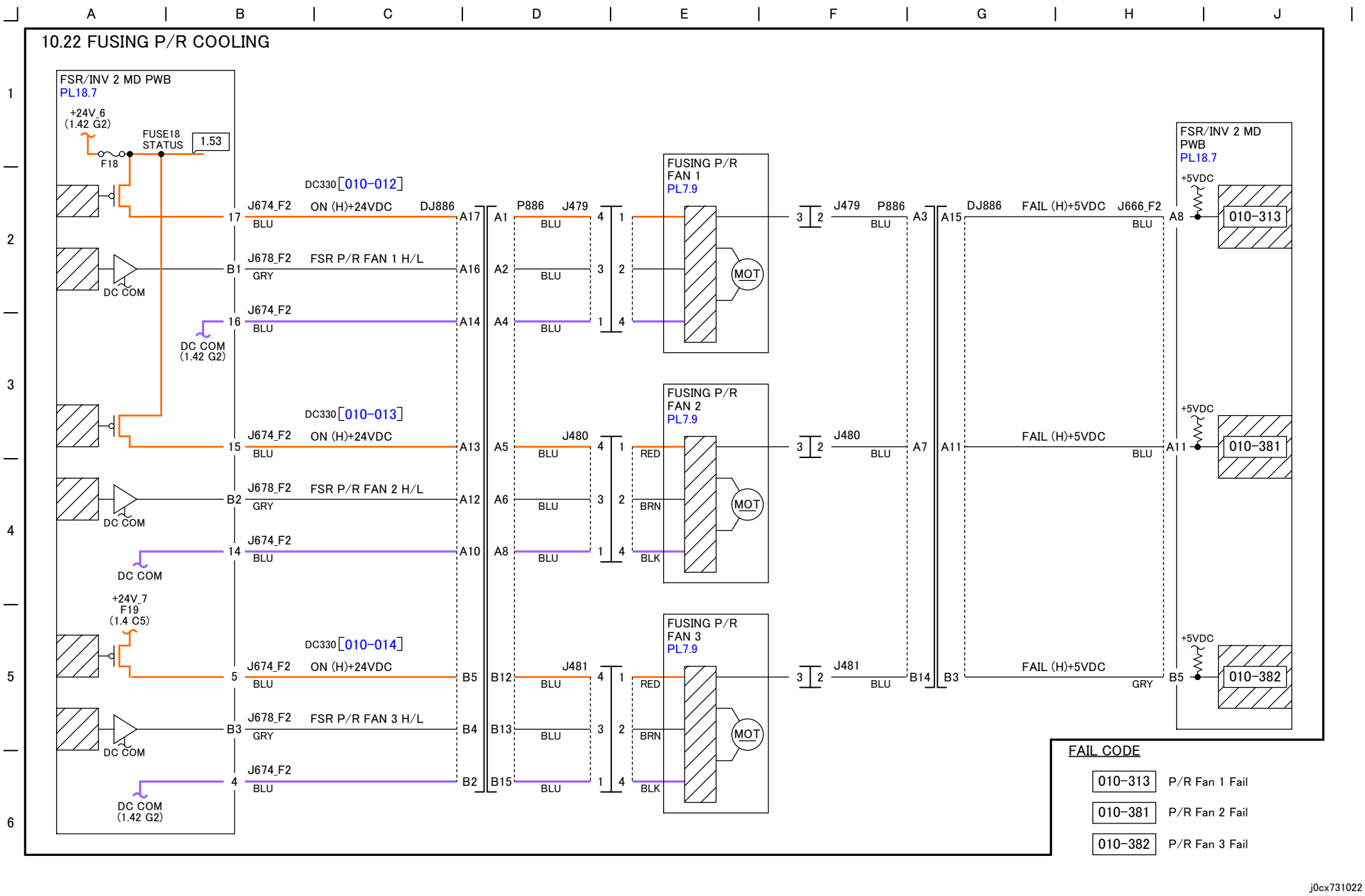


ELECTRICAL COMPONENTS

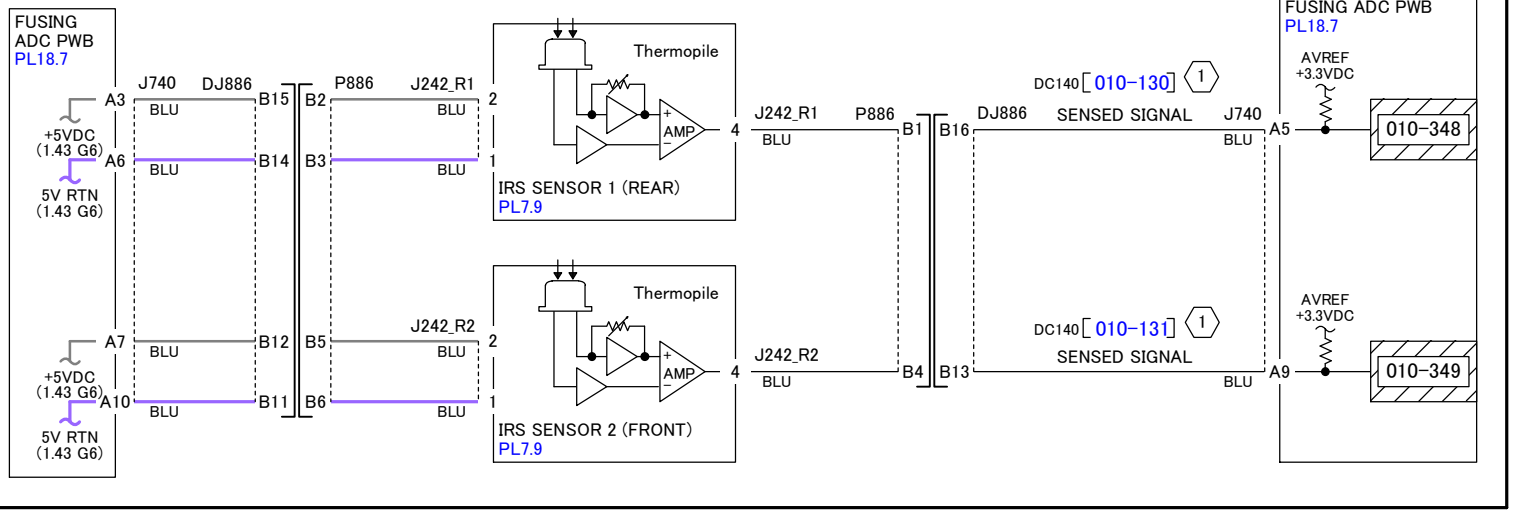
FAIL CODE

010-312	Fusing Belt Fan 1 Fail
010-379	Fusing Belt Fan 2 Fail
010-380	Fusing Belt Fan 3 Fail

j0cx731021


10.22 FUSING P/R COOLING
FSR/INV 2 MD PWB
PL18.7
+24V_6
(1.42 G2)
FUSE18
STATUS
1.53
F18
DC330[010-012]
J674_F2
ON (H)+24VDC
DJ886
17
BLU
A17
A1
P886
J479
FUSING P/R
FAN 1
PL7.9
MOT
J479
P886
A3
A15
DJ886
FAIL (H)+5VDC
J666_F2
A8
FSR/INV 2 MD
PWB
PL18.7
+5VDC
010-313
J678_F2
FSR P/R FAN 1 H/L
GRY
B1
A16
A2
DC COM
16
J674_F2
BLU
A14
A4
DC COM
(1.42 G2)
DC330[010-013]
J674_F2
ON (H)+24VDC
15
BLU
A13
A5
J480
FUSING P/R
FAN 2
PL7.9
RED
BRN
BLK
MOT
J480
A7
A11
FAIL (H)+5VDC
A11
+5VDC
010-381
J678_F2
FSR P/R FAN 2 H/L
GRY
B2
A12
A6
DC COM
14
J674_F2
BLU
A10
A8
DC COM
+24V_7
F19
(1.4 C5)
DC330[010-014]
J674_F2
ON (H)+24VDC
5
BLU
B5
B12
J481
FUSING P/R
FAN 3
PL7.9
J481
B14
B3
FAIL (H)+5VDC
GRY
B5
+5VDC
010-382
J678_F2
FSR P/R FAN 3 H/L
GRY
B3
B4
B13
DC COM
4
J674_F2
BLU
B2
B15
DC COM
(1.42 G2)
FAIL CODE
010-313
P/R Fan 1 Fail
010-381
P/R Fan 2 Fail
010-382
P/R Fan 3 Fail
j0cx731022

10.23 P/R COOLING



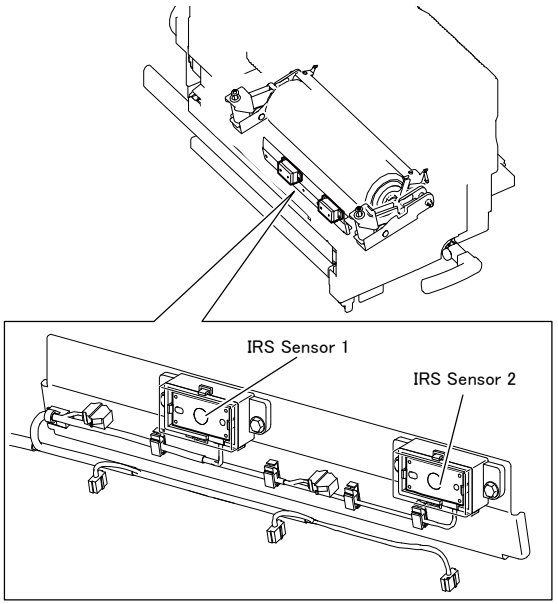
FAIL CODE

010-348	P/R IRS 1 Disconnection Fail
010-349	P/R IRS 2 Disconnection Fail

NOTE:

(1) These diag codes show temperature (℃).

ELECTRICAL COMPONENTS



j0cx731023

10.24 FUSING FAN CONTROL

FSR/INV 1 MD PWB PL18.7

DC330 [004-083] Fan 1&2 High
DC330 [004-084] Fan 1&2 Low
DC330 [004-085] Fan 1 High
DC330 [004-086] Fan 1 Low

FUSING EXHAUST FAN 1 PL4.6

A9 — J678_F1 BLU — PWM — J946 27 — P946 — J445 GRY — 3 2 4 1 1 4 — MOT

P933 5 BLU — J933 28 BLU — GRY

FAN 1 PWR (J107R-5) (1.3 J5)

2 — J688_F1 BLU — 25 — GRY

DC COM

DC330 [004-087] Fan 2 High
DC330 [004-088] Fan 2 Low

FUSING EXHAUST FAN 2 PL4.6

A10 — J678_F1 BLU — PWM — J946 31 — P946 — J446 GRY — 3 2 4 1 1 4 — MOT

P933 6 BLU — J933 32 BLU — GRY

FAN 2 PWR (J107R-6) (1.3 J6)

4 — J688_F1 BLU — 29 — GRY

DC COM

+24V_7 (1.42 H4) — F19 — FUSE19 STATUS 1.51

1.49

DC330 [004-093] High
DC330 [004-097] Low

FUSING WASTE FAN PL4.6

9 — J674_F1 BLU — PWM — J448 4 1 3 2 1 4 — MOT — N.C

8 — BLU — BLU

DC COM

DC330 [004-095]

FUSING LOWER FAN PL4.6

A13 — J678_F1 BLU — PWM — J859 3 2 4 1 1 4 — MOT

FSR/INV 2 MD PWB PL18.7

1 — J676_F2 BLU — BLU — 2

FUSE 22 STTS 1.53 — F22

+24V_6 (1.42 G2)

DC COM (1.42 G2)

3 2 — J445 GRY — P946 — 26 — J946 — FAIL (H)+5VDC — J679_F1 BLU — 8

3 2 — J446 GRY — 30 — FAIL (H)+5VDC — BLU — 9

3 2 — J448 BLU — FAIL (H)+5VDC — J679_F1 BLU — 10

3 2 — J859 BLU — FAIL (H)+5VDC — BLU — 11

FSR/INV 1 MD PWB PL18.7

+5VDC — 042-338

+5VDC — 042-339

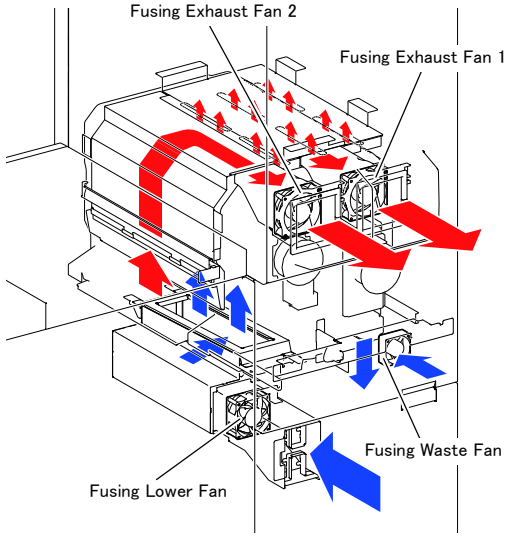
+5VDC — 042-343

+5VDC — 042-344

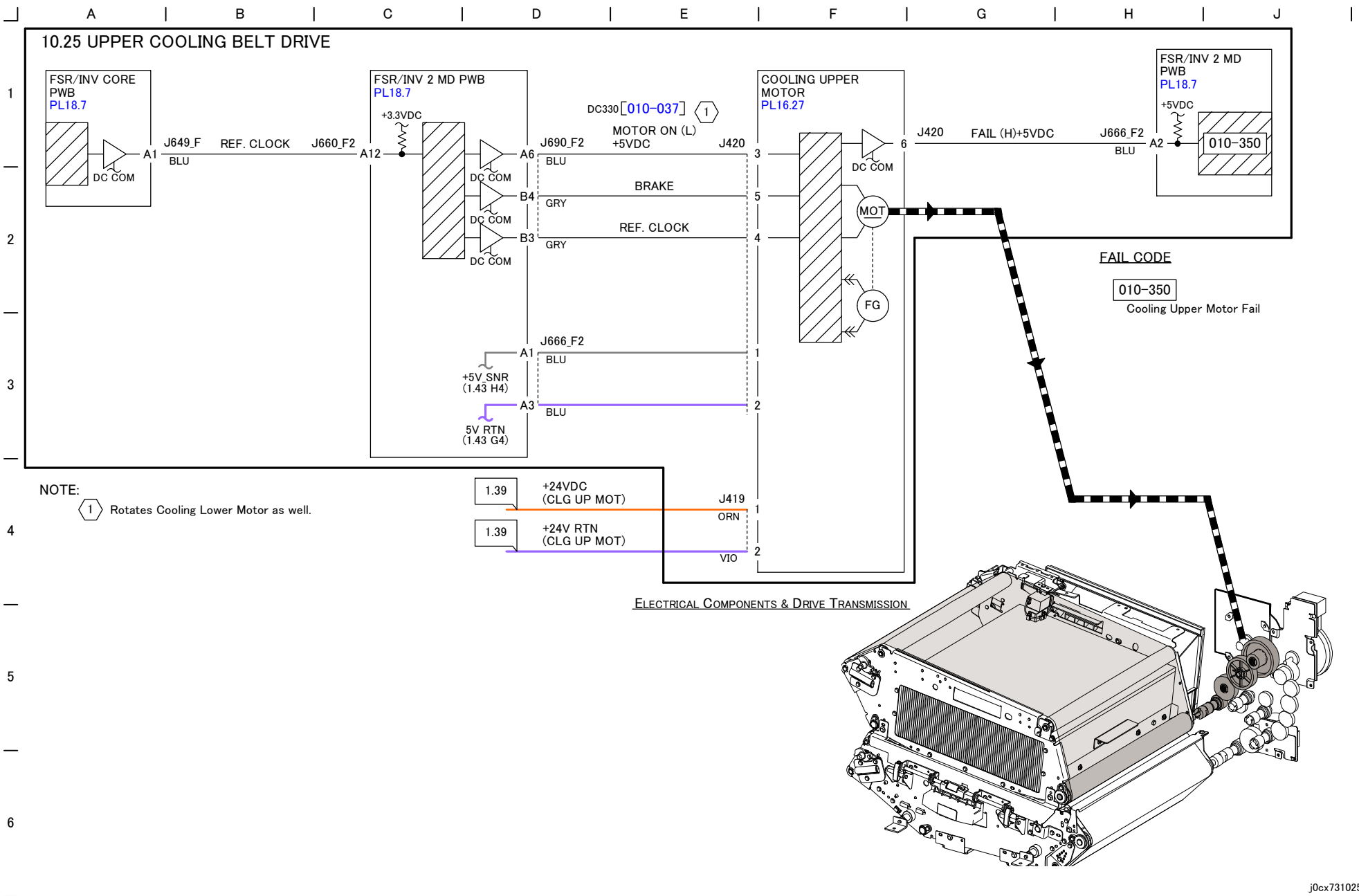
FAIL CODE

042-338	Fusing Exhaust Fan Fail 1
042-339	Fusing Exhaust Fan Fail 2
042-343	Fusing Waste Fan Fail
042-344	Fusing Lower Fan Fail

ELECTRICAL COMPONENTS

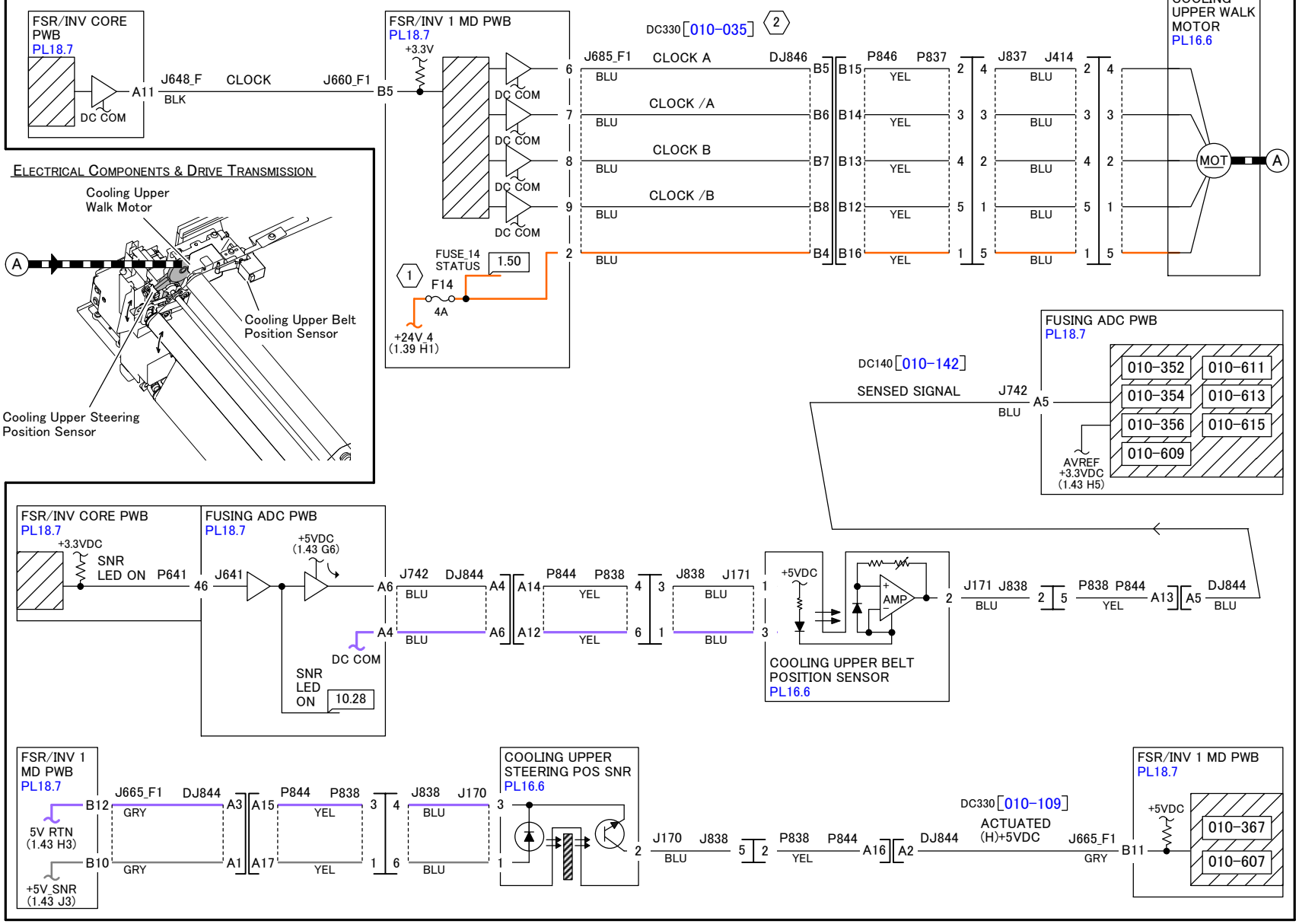


j0cx731024


10.25 UPPER COOLING BELT DRIVE
FSR/INV CORE PWB
PL18.7
DC COM
A1
J649_F
BLU
REF. CLOCK
J660_F2
FSR/INV 2 MD PWB
PL18.7
+3.3VDC
A12
DC COM
B4
DC COM
B3
DC COM
A6
J690_F2
BLU
DC330 [010-037] 1
MOTOR ON (L)
+5VDC
J420
3
BRAKE
GRY
5
REF. CLOCK
GRY
4
COOLING UPPER MOTOR
PL16.27
DC COM
6
MOT
FG
J420
FAIL (H)+5VDC
J666_F2
BLU
A2
FSR/INV 2 MD PWB
PL18.7
+5VDC
010-350
A1
J666_F2
BLU
1
+5V_SNR
(1.43 H4)
A3
BLU
2
5V RTN
(1.43 G4)
FAIL CODE
010-350
Cooling Upper Motor Fail
NOTE:
1 Rotates Cooling Lower Motor as well.
1.39
+24VDC
(CLG UP MOT)
J419
ORN
1
1.39
+24V RTN
(CLG UP MOT)
VIO
2
ELECTRICAL COMPONENTS & DRIVE TRANSMISSION
j0cx731025

10.26 UPPER COOLING BELT STEERING

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION
Cooling Upper Walk Motor
A
Cooling Upper Belt Position Sensor
Cooling Upper Steering Position Sensor



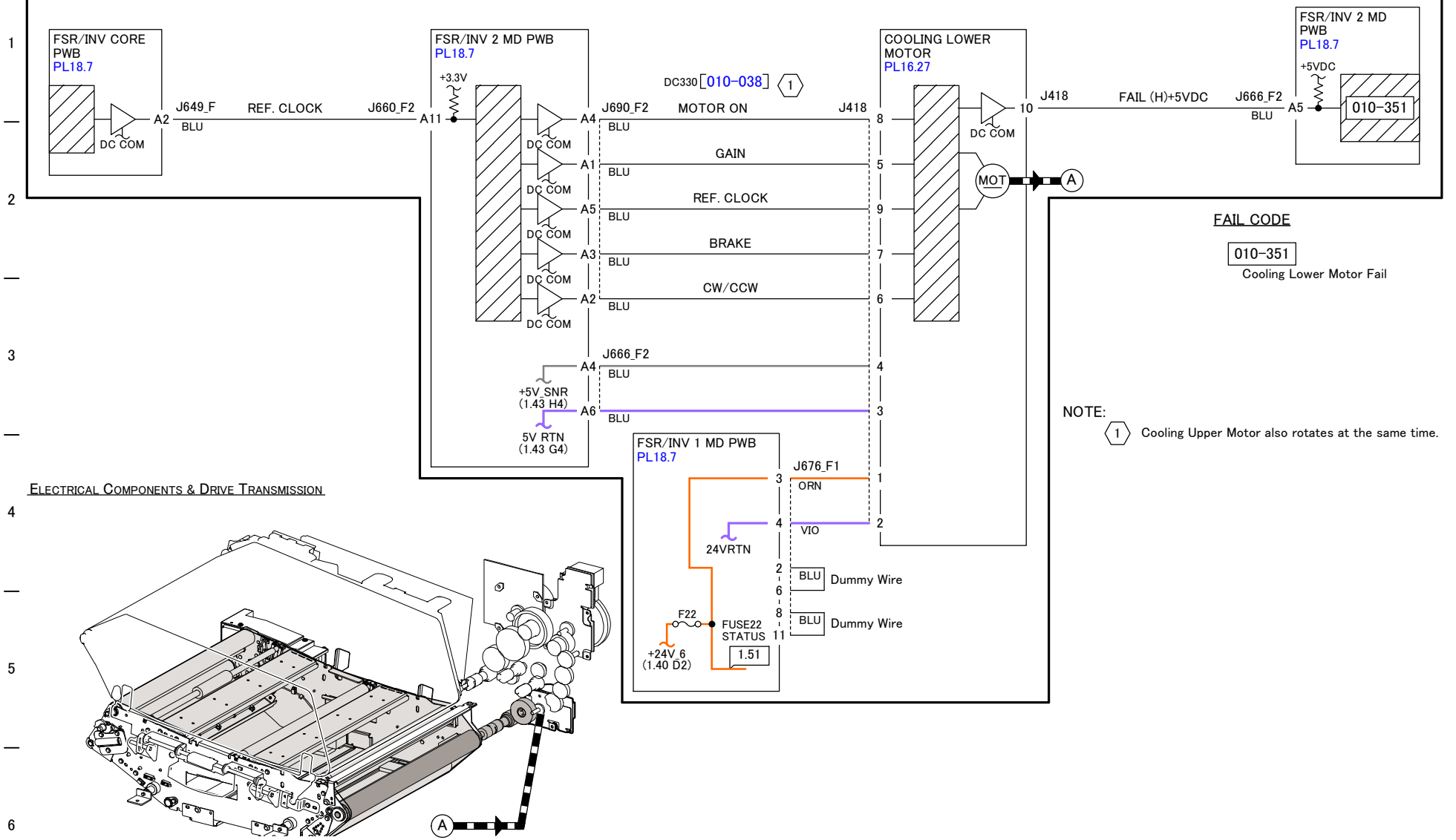
NOTE:
1. Chip Fuse
2. Cooling Lower Motorも回転する。

FAIL CODE

- 010-352 Cooling Upper Position SNR In Limit Fail
- 010-354 Cooling Upper Position SNR Out Limit Fail
- 010-356 Cooling Upper Belt Position Sensor Fail
- 010-367 Cooling Upper Steering Position Sensor Fail
- 010-607 Cooling Upper Walk Motor Initial Position Fail
- 010-609 Cooling Upper Belt Position Sensor In Limit Edge Info
- 010-611 Cooling Upper Belt Position Sensor In Limit Center Info
- 010-613 Cooling Upper Belt Position Sensor Out Limit Edge Info
- 010-615 Cooling Upper Belt Position Sensor Out Limit Center Info

j0cx731026

10.27 LOWER COOLING BELT DRIVE



FAIL CODE

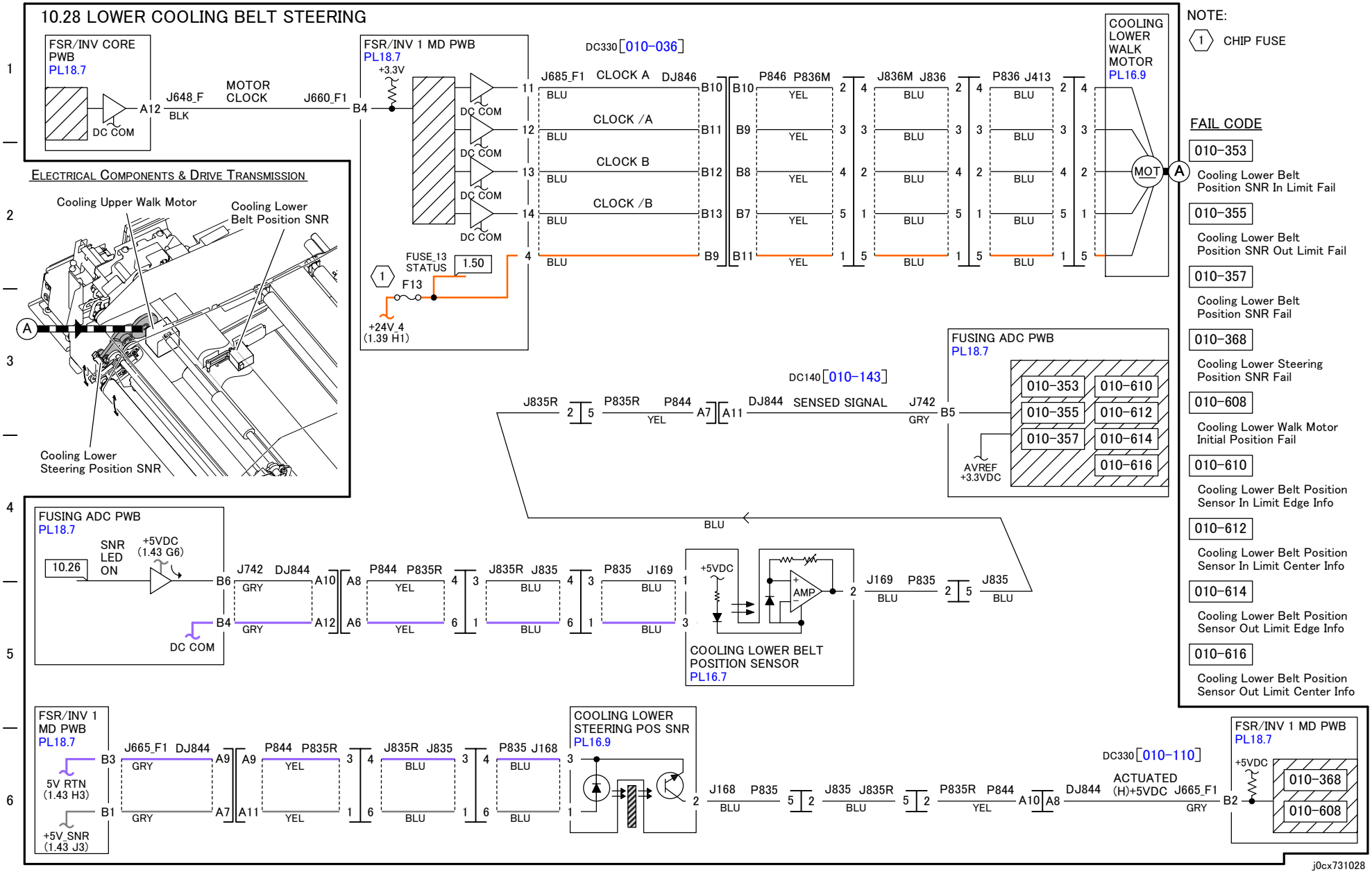
010-351
Cooling Lower Motor Fail

NOTE:
1 Cooling Upper Motor also rotates at the same time.

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

j0cx731027

10.28 LOWER COOLING BELT STEERING



NOTE:
1 CHIP FUSE

FAIL CODE

- 010-353 Cooling Lower Belt Position SNR In Limit Fail
- 010-355 Cooling Lower Belt Position SNR Out Limit Fail
- 010-357 Cooling Lower Belt Position SNR Fail
- 010-368 Cooling Lower Steering Position SNR Fail
- 010-608 Cooling Lower Walk Motor Initial Position Fail
- 010-610 Cooling Lower Belt Position Sensor In Limit Edge Info
- 010-612 Cooling Lower Belt Position Sensor In Limit Center Info
- 010-614 Cooling Lower Belt Position Sensor Out Limit Edge Info
- 010-616 Cooling Lower Belt Position Sensor Out Limit Center Info

j0cx731028

10.29 DECURLER BELT DRIVE

FSR/INV CORE PWB PL18.7

FSR/INV 1 MD PWB PL18.7

DECURLER BELT DRIVE MOTOR PL16.27

FSR/INV 1 MD PWB PL18.7

DC330[010-044] 5s

+3.3VDC

+5VDC

DC COM

A2 J648_F BLU REF. CLOCK J660_F1 A10

A6 J690_F1 BLU MOT ON (L)+5VDC J422 3

4 J422 FAIL (H)+5VDC J666_F1 GRY B2

010-363

B1 GRY CLOCK 7

B2 GRY GAIN 1 5

B3 GRY GAIN 2 6

MOT

FG

B1 J666_F1 GRY 1

+5V_SNR (1.43 J3)

B3 GRY 2

5V RTN (1.43 H3)

1.40 +24VDC (DCR BLT DRV MOT) J421 1 ORN

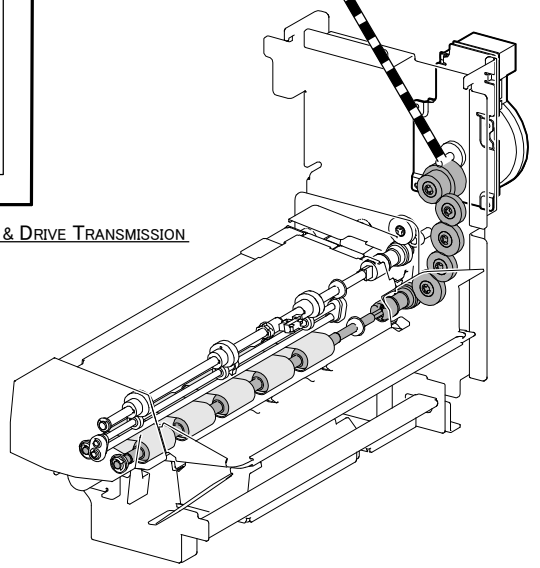
1.40 24V RTN (DCR BLT DRV MOT) 2 VIO

FAIL CODE

010-363

Decurler Belt Drive Motor Fail

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731029

10.30 DECURLER ROLL DRIVE

FSR/INV CORE PWB PL18.7

FSR/INV 1 MD PWB PL18.7

DECURLER ROLL DRIVE MOTOR PL16.25

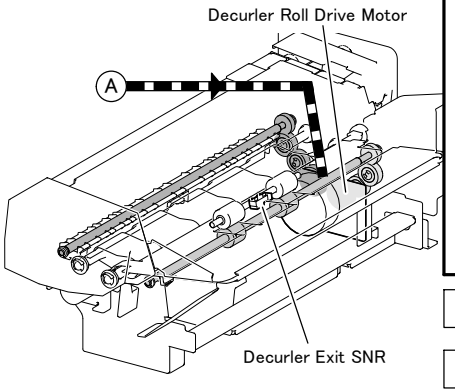
DC330 [010-043] 5s
MOT ON (L)+5VDC

CLOCK
GAIN
DIR
BRAKE

+5V_SNR (1.43 J3)
5V RTN (1.43 H3)

1.39 +24VDC (DCR R DRV MOT)
1.39 24V RTN (DCR R DRV MOT)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FSR/INV 1 SNR PWB PL18.7

5V RTN (1.43 F4)
+5VDC (1.43 F4)

SHORTING PLUG
5VRTN ALL
+5VDC ALL

FSR/INV 1 MD PWB PL18.7

DECURLER EXIT SENSOR PL16.22

FSR/INV 1 SNR PWB PL18.7

DC330 [010-115]
PAPER SENSED (L) +5VDC

FSR/INV CORE PWB PL18.7

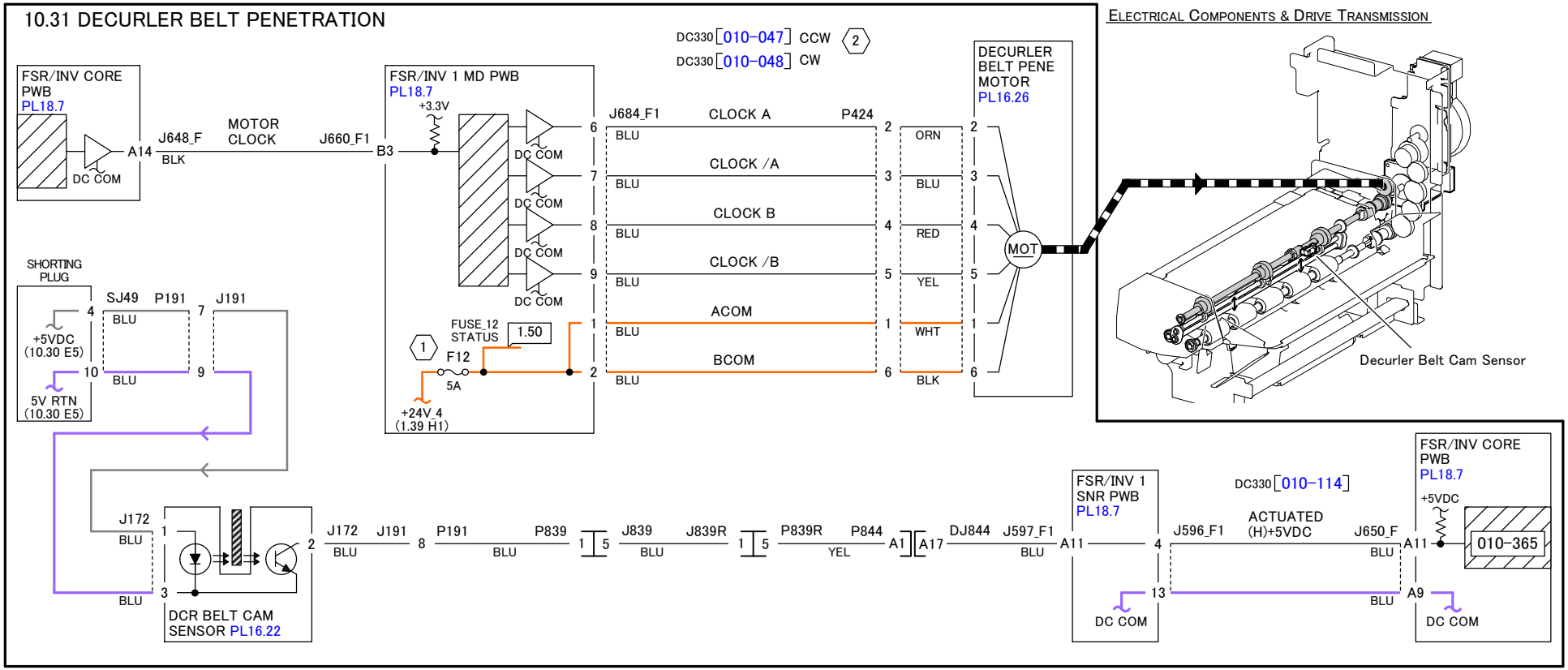
DCLR EXIT SNR

FAIL CODE

- 010-362 Decurler Roll Drive Motor Fail
- 010-413 Roll Assy-Lever Pen Life Limit
- 077-119 Decurler Exit SNR On Jam
- 077-120 Decurler Exit Sensor Off Jam
- 077-182 Decurler Exit SNR On Jam (UpPurge)
- 077-926 Decurler Exit SNR Static Jam

j0cx731030

10.31 DECURLER BELT PENETRATION

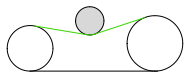
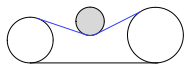
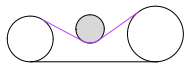


NOTE:

1 CHIP FUSE

2 The following shows the relation between penetration position and diag operation.

DC330	Operation Description
010-051	Operates Decurler Belt Cam CCW in steps from P1 to P2 to P3 to P1.
010-052	Operates Decurler Belt Cam CW in steps from P1 to P3 to P2 to P1.
010-053	Sets to Correction of Large Up Curl. (Roll: P5/Belt: P1)
010-054	Sets to Correction of Med. Up Curl. (Roll: P4/Belt: P1)
010-055	Sets to Correction of Small Up Curl. (Roll: P3/Belt: P1)
010-056	Sets to Correction of Extra Small Up Curl. (Roll: P2/Belt: P1)
010-057	Sets to No Correction of Curl. (Roll: P1/Belt: P1)
010-058	Sets to Correction of Med. Down Curl. (Roll: P2/Belt: P2)
010-059	Sets to Correction of Large Down Curl. (Roll: P2/Belt: P3)

Decurler Belt Position	Plan View	Remarks
Position 1 Pen. Amount 2mm		No Correction of Curl
Position 2 Pen. Amount 6mm		for Med. Down Curl
Position 3 Pen. Amount 8mm		for Large Down Curl

FAIL CODE

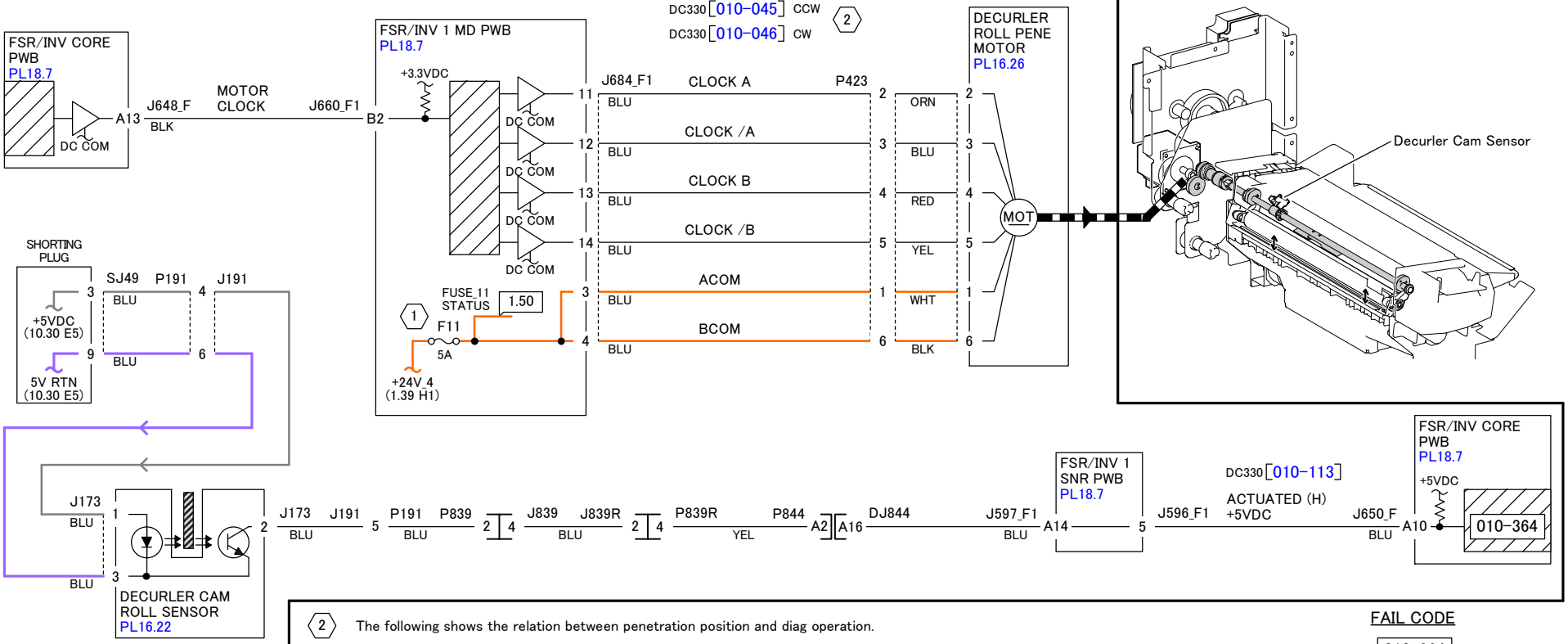
010-365

Decurler Belt Initialize Fail

j0cx731031

10.32 DECURLER ROLL PENETRATION

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



NOTE:

1 CHIP FUSE

2 The following shows the relation between penetration position and diag operation.

DC330	Operation Description
010-049	Operates Decurler Roll Cam CCW in steps from P2 to P3 to P4 to P5 to P2.
010-050	Operates Decurler Roll Cam CW in steps from P2 to P5 to P4 to P3 to P2.
010-053	Sets to Correction of Large Up Curl. (Roll: P5/Belt: P1)
010-054	Sets to Correction of Med. Up Curl. (Roll: P4/Belt: P1)
010-055	Sets to Correction of Small Up Curl. (Roll: P3/Belt: P1)
010-056	Sets to Correction of Extra Small Up Curl. (Roll: P2/Belt: P1)
010-057	Sets to No Correction of Curl. (Roll: P1/Belt: P1)
010-058	Sets to Correction of Med. Down Curl. (Roll: P2/Belt: P2)
010-059	Sets to Correction of Large Down Curl. (Roll: P2/Belt: P3)
010-064	Operates Decurler Roll Cam in steps from P2 to P3 to P5 to P4 to P2 to P4 to P5 to P3.

Decurler Roll Position	Plan View	Remarks
Position 1 Pen. Amount 0.00mm		No Correction of Curl
Position 2 Pen. Amount 0.75mm		for Extra Small Up Curl
Position 3 Pen. Amount 1.50mm		for Small Up Curl

Decurler Roll Position	Plan View	Remarks
Position 4 Pen. Amount 2.25mm		for Med. Up Curl
Position 5 Pen. Amount 3.00mm		for Large Up Curl

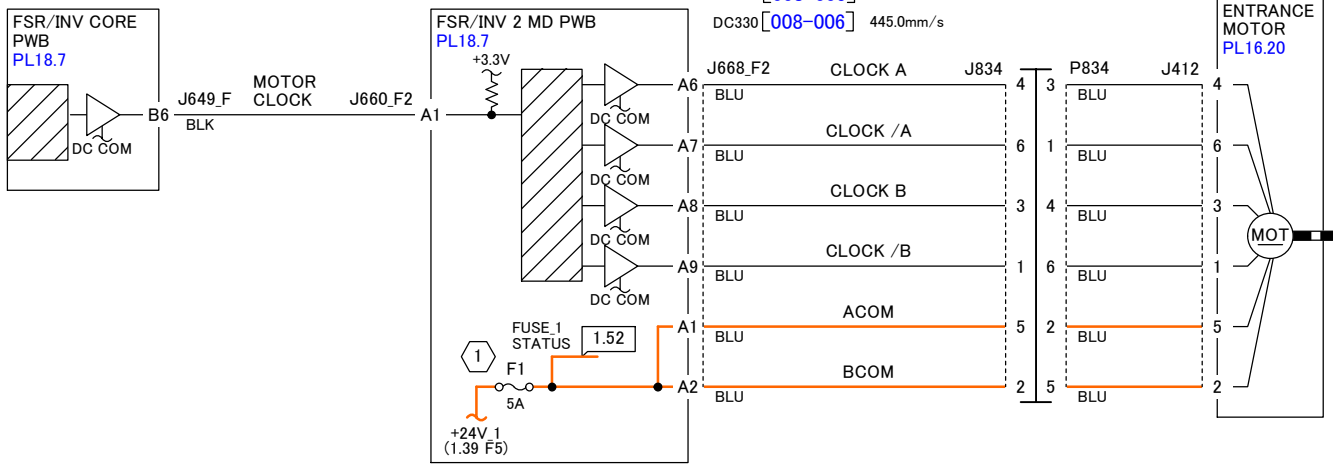
FAIL CODE

010-364
Decurler Roll Initialize Fail

j0cx731032

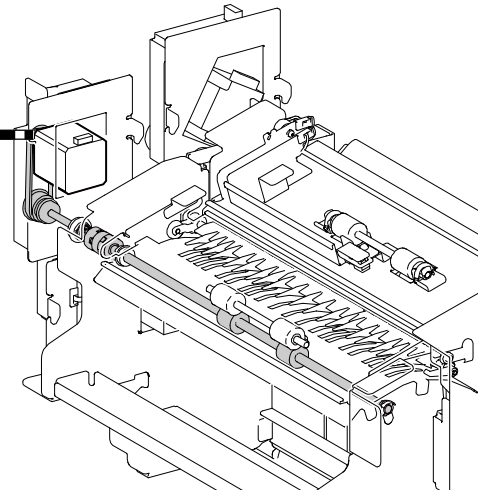
10.33 INVERT/EXIT PAPER TRANSPORTATION (1/8)

DC330 [008-003] 204mm/s
DC330 [008-004] 326mm/s
DC330 [008-005] 544mm/s
DC330 [008-006] 445.0mm/s
DC330 [008-007] 1000mm/s
DC330 [008-008] 1100mm/s
DC330 [008-424] 1200mm/s



NOTE: (1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731033

10.34 INVERT/EXIT PAPER TRANSPORTATION (2/8)

DC330 [008-009] 204mm/s
DC330 [008-010] 326mm/s
DC330 [008-011] 544mm/s
DC330 [008-012] 445.0mm/s
DC330 [008-013] 1000mm/s
DC330 [008-038] RVS. 1000mm/s

FSR/INV CORE PWB PL18.7
B11 — J648_F — MOTOR CLOCK — J660_F1 — B1
DC COM

FSR/INV 1 MD PWB PL18.7
+3.3V
DC COM ×4
FUSE_10 STATUS 1.50
1 F10 5A
+24V_3 (1.40 D2)

4 CLOCK A BLU J682_F1 — J832_1 — P832_1 — J410_1
3 CLOCK /A BLU
2 CLOCK B BLU
1 CLOCK /B BLU
15 ACOM BLU
16 BCOM BLU

INVERT UPPER MOTOR PL16.20
2 MOT

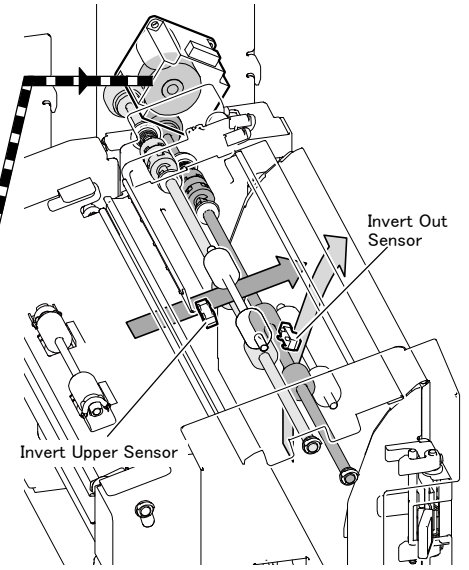
FAIL CODE

077-123
Invert Out Sensor On Jam

077-928
Invert Upper Sensor Static Jam

077-930
Invert Out Sensor Static Jam

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FSR/INV 2 SNR PWB PL18.7
B9 — J597_F2 — DJ844 — B14 / B7 — B12
B3 — P844 — J824 — B5
12 — P824 — P825 — 10
3 — BLU — 5
3 — J825 — SJ44 — 1
5V RTN (1.43 D4)
+5VDC (1.43 D4)

SHORTING PLUG
8 — SJ44 — P826 — J826 — J162 — INVERT UPPER SENSOR PL16.14
2 — BLU
9 — BLU
7 — 1 — 3
10.36
10.36

J162 — J826 — P826 — J825 — P825 — A
J163 — INVERT OUT SENSOR PL16.14 — J163 — B

NOTE: 1 CHIP FUSE

A — P824 — J824 — P844 — B4 — B13 — DJ844 — J597_F2 — FSR/INV 2 SNR PWB PL18.7 — B8 — J596_F2 — J651_F — B12
B — P824 — J824 — P844 — B2 — B15 — DJ844 — J597_F2 — FSR/INV 2 SNR PWB PL18.7 — B2 — J596_F2 — J651_F — B10

DC330 [008-104]
PAPER SENSED (L)+5VDC
DC330 [008-110]
PAPER SENSED (L)+5VDC

FSR/INV CORE PWB PL18.7
+5VDC — 077-928
+5VDC — 077-123
077-930

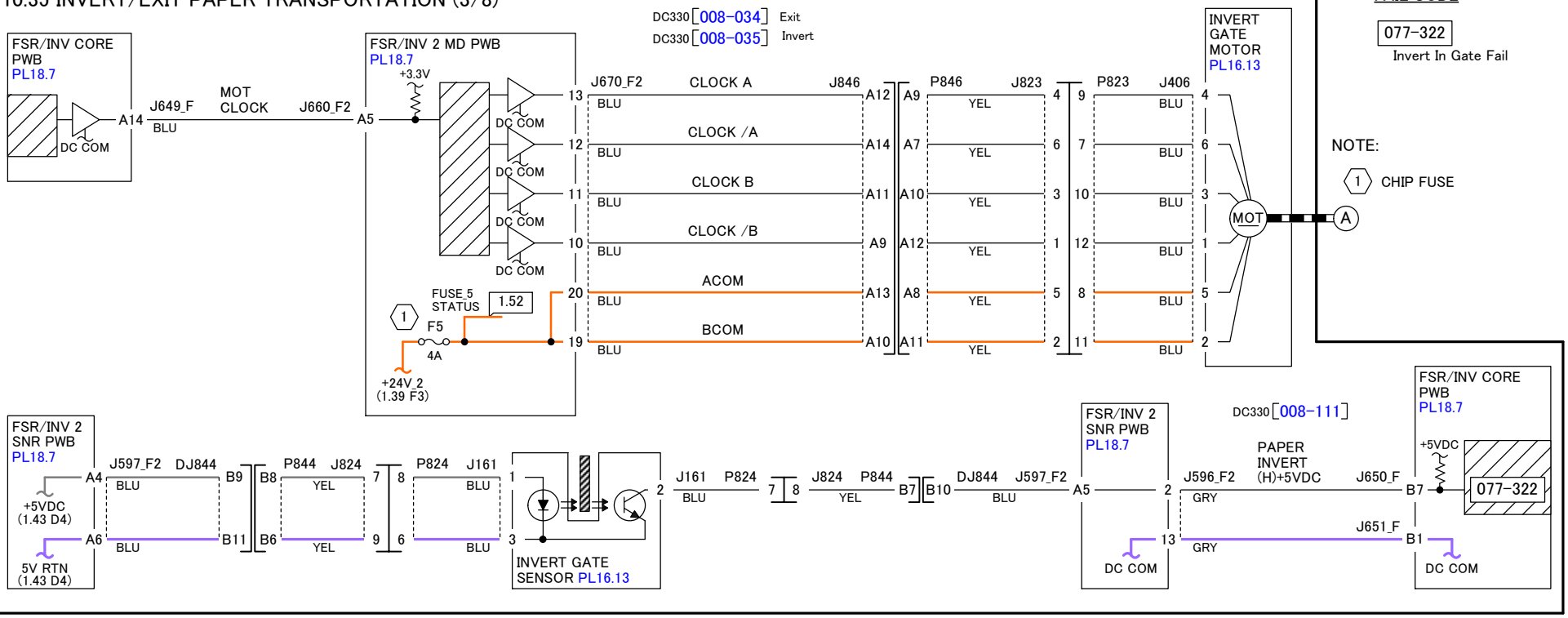
j0cx731034

10.35 INVERT/EXIT PAPER TRANSPORTATION (3/8)

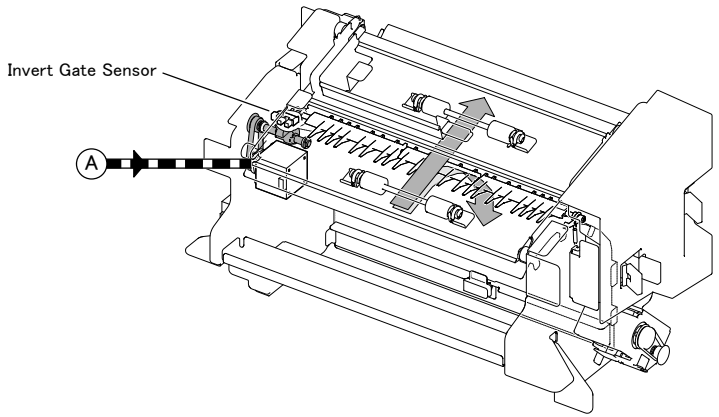
DC330 [008-034] Exit
DC330 [008-035] Invert

FAIL CODE
077-322
Invert In Gate Fail

NOTE:
1 CHIP FUSE



ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731035

10.36 INVERT/EXIT PAPER TRANSPORTATION (4/8)

DC330 [008-020] 326mm/s
DC330 [008-021] 544mm/s
DC330 [008-022] 445mm/s
DC330 [008-023] 1100mm/s
DC330 [008-421] 1200mm/s
DC330 [008-425] 204mm/s

FAIL CODE
077-121
Invert In Sensor On Jam
077-929
Invert In Sensor Static Jam

FSR/INV CORE PWB PL18.7
B10 J649_F GRY MOT CLOCK J660_F1 B6
DC COM

FSR/INV 1 MD PWB PL18.7
+3.3V
DC COM ×4
FUSE_15 STATUS 1.50
1 F15 5A
+24V_9 (1.39 H5)

18 J681_F1 BLU CLOCK A BLU J832_2 6 P832 J410 1 BLU
17 BLU CLOCK /A BLU 4 3 BLU
16 BLU CLOCK B BLU 3 4 BLU
15 BLU CLOCK /B BLU 1 6 BLU
20 BLU ACOM BLU 5 2 BLU
19 BLU BCOM BLU 2 5 BLU

INVERT IN MOTOR PL16.20
MOT
A

SHORTING PLUG
10 SJ44 BLU J164 3
4 BLU 1
5V RTN (10.34 E5)
+5VDC (10.34 E5)

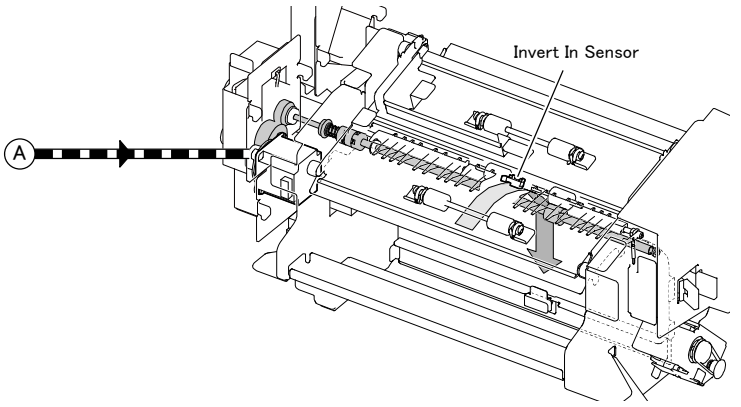
INVERT IN SENSOR PL16.15
2 J164 BLU J825 1 5 P825 P824 BLU 1 14 J824 P844 YEL B1 B16 DJ844 J597_F2 BLU A8 3

FSR/INV 2 SNR PWB PL18.7
DC330 [008-106]
PAPER SENSED (L)+5VDC
J596_F2 J651_F GRY B9

FSR/INV CORE PWB PL18.7
+5VDC
077-121
077-929

NOTE: 1 CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION

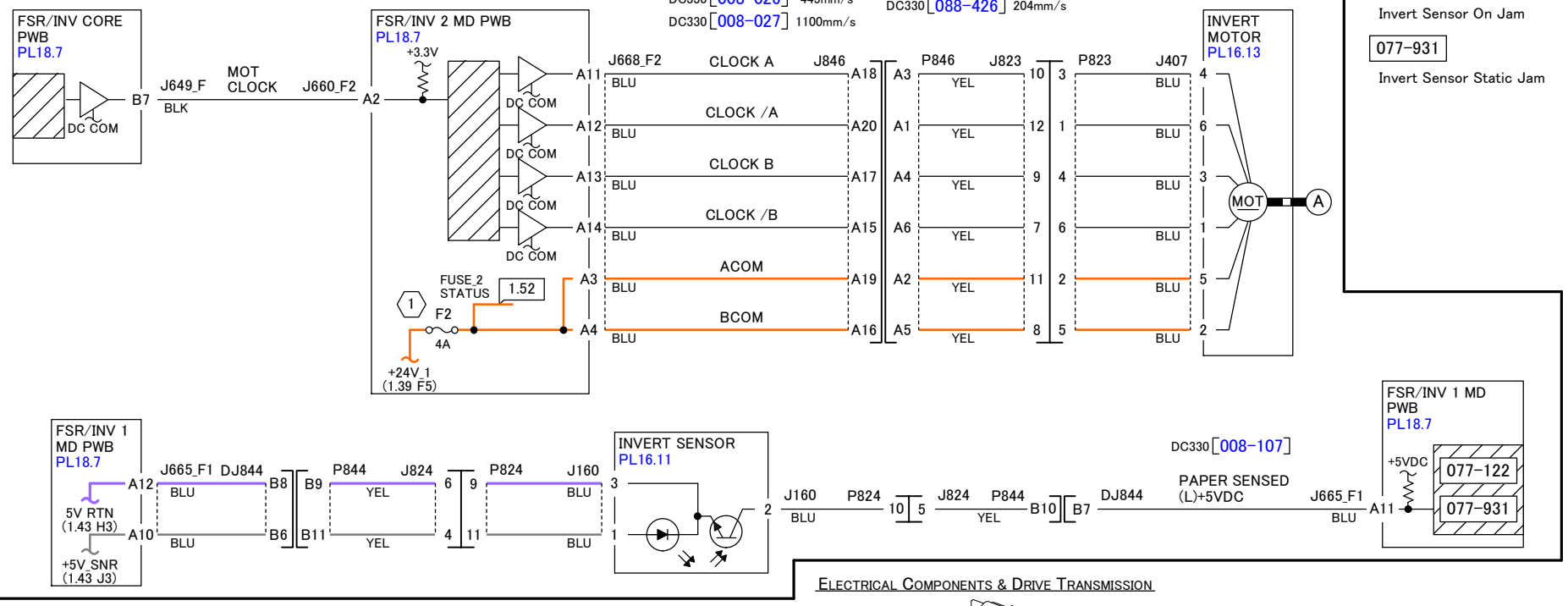


j0cx731036

10.37 INVERT/EXIT PAPER TRANSPORTATION (5/8)

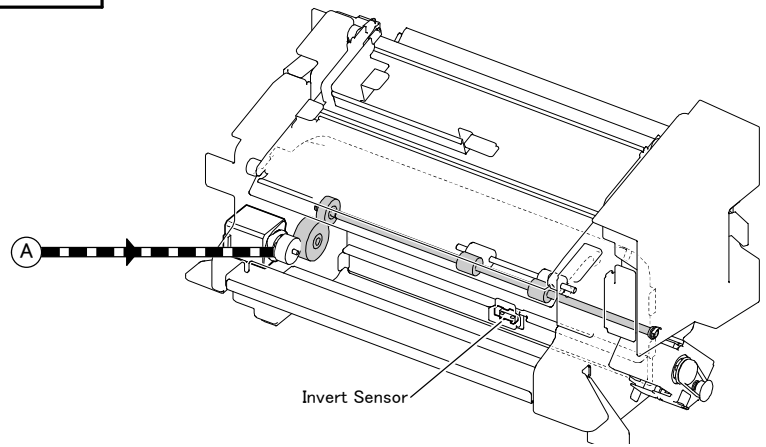
DC330 [008-024] 326mm/s
DC330 [008-025] 544mm/s
DC330 [008-026] 445mm/s
DC330 [008-027] 1100mm/s
DC330 [008-028] RVS. 1000mm/s
DC330 [088-422] 1200mm/s
DC330 [088-426] 204mm/s

FAIL CODE
077-122
Invert Sensor On Jam
077-931
Invert Sensor Static Jam



NOTE: (1) Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731037

10.38 INVERT/EXIT PAPER TRANSPORTATION (6/8)

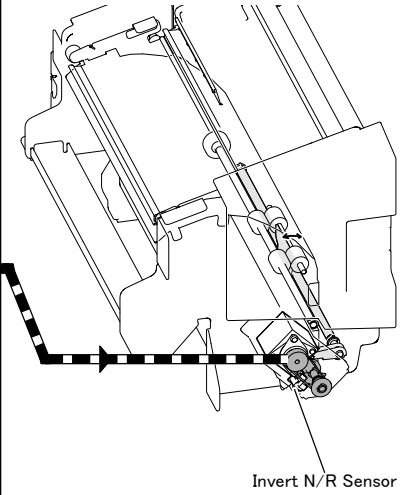
DC330 [008-036] NIP
DC330 [008-037] RLS

FSR/INV CORE PWB PL18.7
A13 — J649_F BLU — MOT CLOCK — J660_F2 A6
DC COM

FSR/INV 2 MD PWB PL18.7
+3.3VDC
DC COM
FUSE_6 STATUS 1.52
1 F6 4A
+24V_2 (1.39 F3)

J670_F2		CLOCK A	J846	A6	A15	P846	J822	P822	J405		INVERT N/R MOTOR PL16.12
9	BLU					YEL		BLU		4	
8	BLU	CLOCK /A		A8	A13	YEL		BLU		6	
7	BLU	CLOCK B		A5	A16	YEL		BLU		3	MOT
6	BLU	CLOCK /B		A3	A18	YEL		BLU		1	
18	BLU	ACOM		A7	A14	YEL		BLU		5	
17	BLU	BCOM		A4	A17	YEL		BLU		2	

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FSR/INV 2 SNR PWB PL18.7
A10 — J597_F2 BLU — DJ844 B3
A12 — BLU — B5
+5VDC (1.43 D4)
5V RTN (1.43 D4)

B14 — P844 YEL — J824 1
B12 — YEL — 3

14 — P824 BLU — J159 1
12 — BLU — 3

INVERT N/R SENSOR PL16.12

J159 BLU — P824 13 — 2
J824 YEL — P844 B13 — B4
DJ844 BLU — J597_F2 A11 — 4

FSR/INV 2 SNR PWB PL18.7

DC330 [008-112]
J596_F2 — RELEASE (H)+5VDC — J650_F GRY — B8

FSR/INV CORE PWB PL18.7
+5VDC
077-321

NOTE: 1 CHIP FUSE

FAIL CODE

077-321
Invert Roll Release Fail

j0cx731038

10.39 INVERT/EXIT PAPER TRANSPORTATION (IOT EXIT) (7/8)

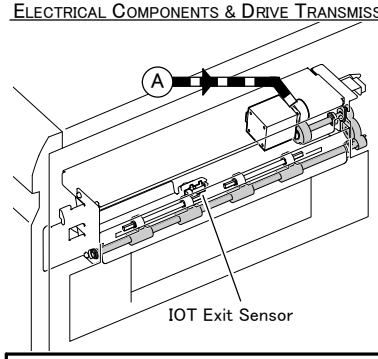
DC330[008-014] 204mm/s
DC330[008-015] 326mm/s
DC330[008-016] 350.0mm/s
DC330[008-017] 544mm/s
DC330[008-018] 445.0mm/s
DC330[008-019] 1000mm/s

FSR/INV CORE PWB PL18.7
B12 J648_F BLK MOT CLOCK J660_F1 A8
DC COM

FSR/INV 1 MD PWB PL18.7
+3.3VDC
DC COM
FUSE_8 STATUS 1.50
1 F8 4A
+24V_3 (1.40 D2)

J682_F1 CLOCK A P961M J961M J830 P830 J409 IOT EXIT MOTOR PL17.1
13 BLU CLOCK A
12 BLU CLOCK /A
11 BLU CLOCK B
10 BLU CLOCK /B
19 BLU ACOM
20 BLU BCOM
MOT A

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FSR/INV 2 SNR PWB PL18.7
B12 J597_F2 P961 J961 J831 P831 J167 IOT EXIT SENSOR PL17.1
5V RTN (1.43 D4)
+5VDC (1.43 D4)
B10
GRY
BLU
J167 P831 J831 J961 P961 J597_F2 FSR/INV 2 SNR PWB PL18.7 B11 J596_F2 10 GRY

NOTE: 1 CHIP FUSE

DC330[008-105]
PAPER SENSED (L)+5VDC J651_F GRY B13
FSR/INV CORE PWB PL18.7
+5VDC
077-124
077-125
077-183
077-184
077-932
DC COM
B15 J649_F GRY IOT EXIT SNR SIGNAL 3.4

FAIL CODE
077-124 IOT Exit Sensor On Jam
077-125 IOT Exit Sensor Off Jam
077-183 IOT Exit Sensor On Jam (UpPurge)
077-184 IOT Exit Sensor Off Jam (UpPurge)
077-932 IOT Exit Sensor Static Jam

j0cx731039

10.40 INVERT/EXIT PAPER TRANSPORTATION (DUP) (8/8)

DC330 [008-029] 326mm/s
DC330 [008-030] 544mm/s
DC330 [008-031] 445mm/s
DC330 [008-032] 1100mm/s
DC330 [008-033] RVS.1100mm/s
DC330 [008-423] 1200mm/s
DC330 [008-427] 204mm/s

FSR/INV CORE PWB PL18.7 — B9 — J648_F — MOT CLOCK — GRY — J660_F1 — B8 — FSR/INV 1 MD PWB PL18.7

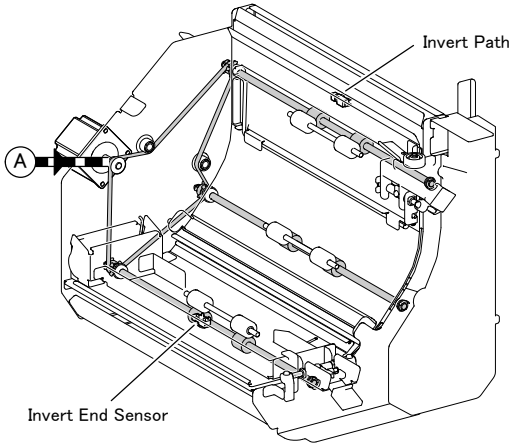
+3.3VDC, DC COM

J681_F1 — CLOCK A — J827 — P827 — J408 — INVERT PATH MOTOR PL16.19

CLOCK /A
CLOCK B
CLOCK /B
ACOM
BCOM

FUSE_17 STATUS 1.50
1 F17 5A
+24V_10 (1.39 H2)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FSR/INV 2 SNR PWB PL18.7 — B4 — J597_F2 — J828 — P828 — J166 — INVERT PATH SENSOR PL16.17

+5VDC (1.43 D4)
B6
5V RTN (1.43 D4)

FSR/INV 1 MD PWB PL18.7 — A1 — J665_F1 — P828 — J165 — INVERT END SENSOR PL16.17

+5V_SNR (1.43 F4)
A3
5V RTN (1.43 F4)

J166 P828 J828 J597_F2 — FSR/INV 2 SNR PWB PL18.7 — B5 — J596_F2

DC330 [008-108] PAPER SENSED (L)+5VDC

J651_F — B11 — FSR/INV CORE PWB PL18.7 — +5VDC — 077-933

J165 J828 J597_F2 — FSR/INV 2 SNR PWB PL18.7 — B5 — J596_F2

DC330 [008-109] PAPER SENSED (L)+5VDC

J665_F1 — A2 — FSR/INV 1 MD PWB PL18.7 — +5VDC — 077-934

FAIL CODE

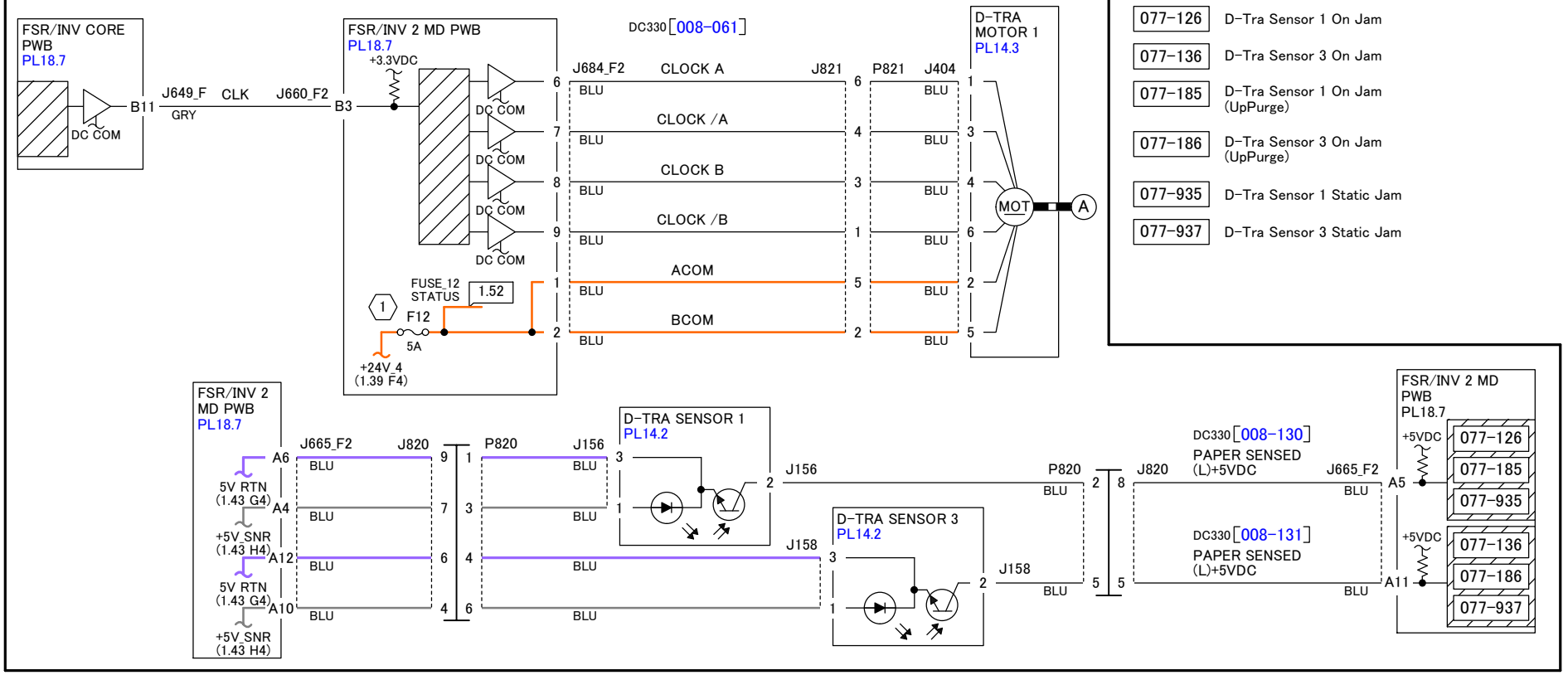
077-933
Invert Path SNR Static Jam

077-934
Invert End SNR Static Jam

NOTE:
1 CHIP FUSE

j0cx731040

10.41 D-TRA PAPER TRANSPORTATION (1/2)

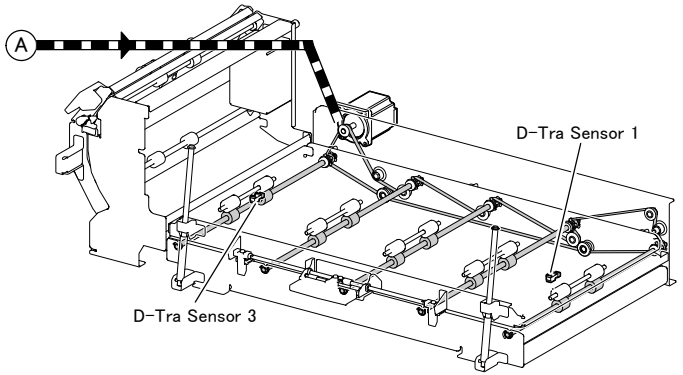


FAIL CODE

077-126	D-Tra Sensor 1 On Jam
077-136	D-Tra Sensor 3 On Jam
077-185	D-Tra Sensor 1 On Jam (UpPurge)
077-186	D-Tra Sensor 3 On Jam (UpPurge)
077-935	D-Tra Sensor 1 Static Jam
077-937	D-Tra Sensor 3 Static Jam

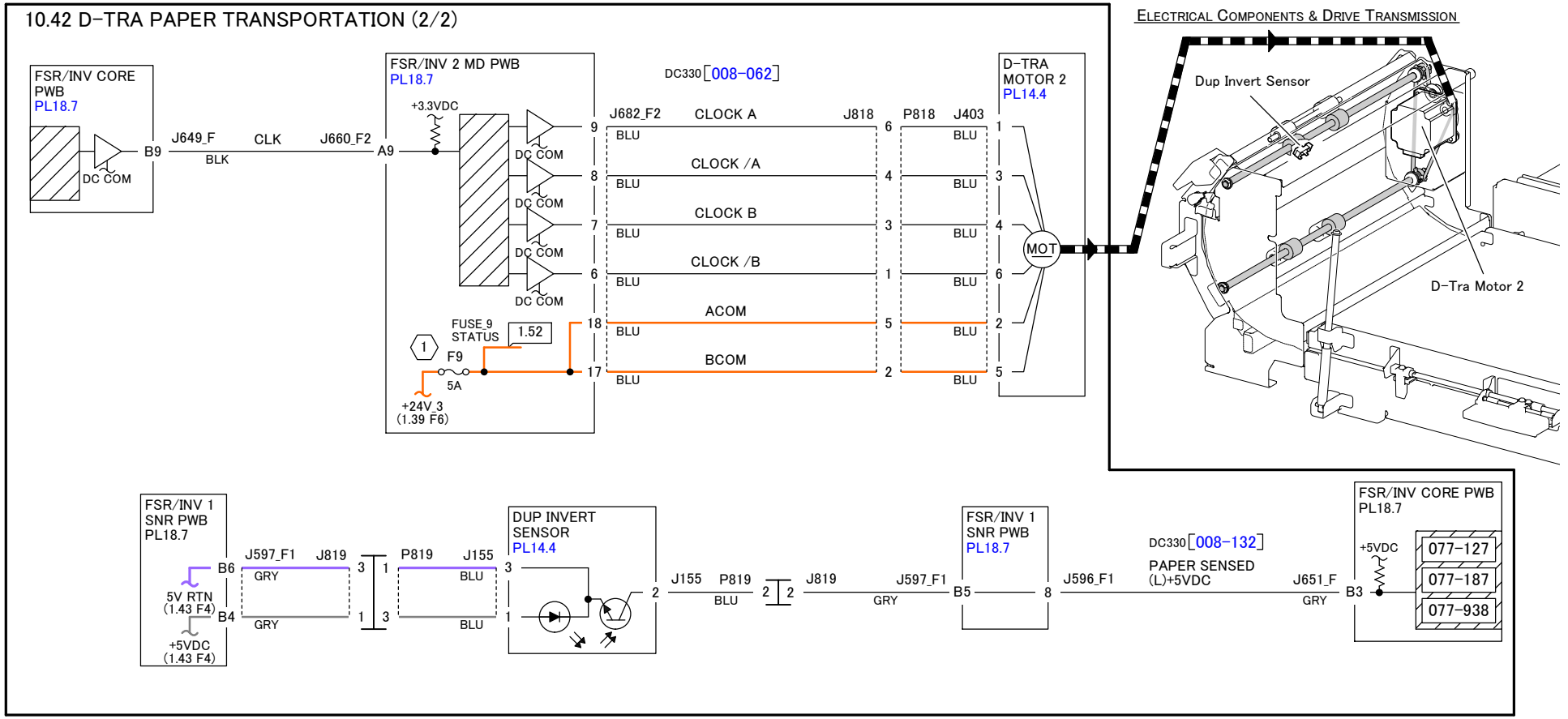
NOTE: (1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731041

10.42 D-TRA PAPER TRANSPORTATION (2/2)



NOTE: (1) CHIP FUSE

FAIL CODE

077-127
Dup Invert Sensor On Jam

077-187
Dup Invert Sensor On Jam (UpPurge)

077-938
Dup Invert Sensor Static Jam

j0cx731042

10.43 DUPLEX INVERT

DC330 [008-063] 1100mm/s
DC330 [008-064] RVS. 1000mm/s
DC330 [008-065] 300mm/s

FSR/INV CORE PWB PL18.7
B12 — J649_F — MOTOR CLK — J660_F2 — A8
DC COM
BLK

FSR/INV 2 MD PWB PL18.7
+3.3VDC
DC COM
FUSE_8 STATUS 1.52
1 F8 4A
+24V_3 (1.39 F6)

J682_F2 — CLOCK A — J817M — P817M — P817 — J817 — J402 — DUP INVERT MOTOR PL14.6
13 BLU CLOCK A BLU
12 BLU CLOCK /A BLU
11 BLU CLOCK B BLU
10 BLU CLOCK /B BLU
20 BLU ACOM BLU
19 BLU BCOM BLU
MOT — A

FSR/INV 2 MD PWB PL18.7
B3 — J665_F2 GRY — P817 11 — J817 1 — J154 BLU — 3
5V RTN (1.43 G4)
B1 — GRY — 9 — 3 — BLU — 1
+5V_SNR (1.43 H4)

DUP PATH SENSOR PL14.6
2 — J154 BLU — J817 2 — 10 P817 — PAPER SENSED (L)+5VDC — J665_F2 GRY — B2

DC330 [008-133]

FSR/INV 2 MD PWB PL18.7
+5VDC
077-128
077-188
077-939

FAIL CODE

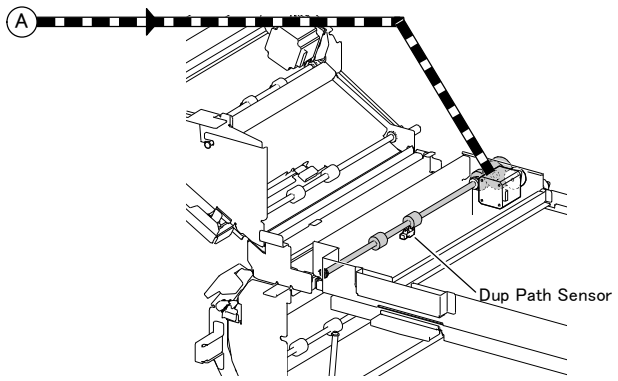
077-128
Dup Path Sensor On Jam

077-188
Dup Path Sensor On Jam (UpPurge)

077-939
Dup Path Sensor Static Jam

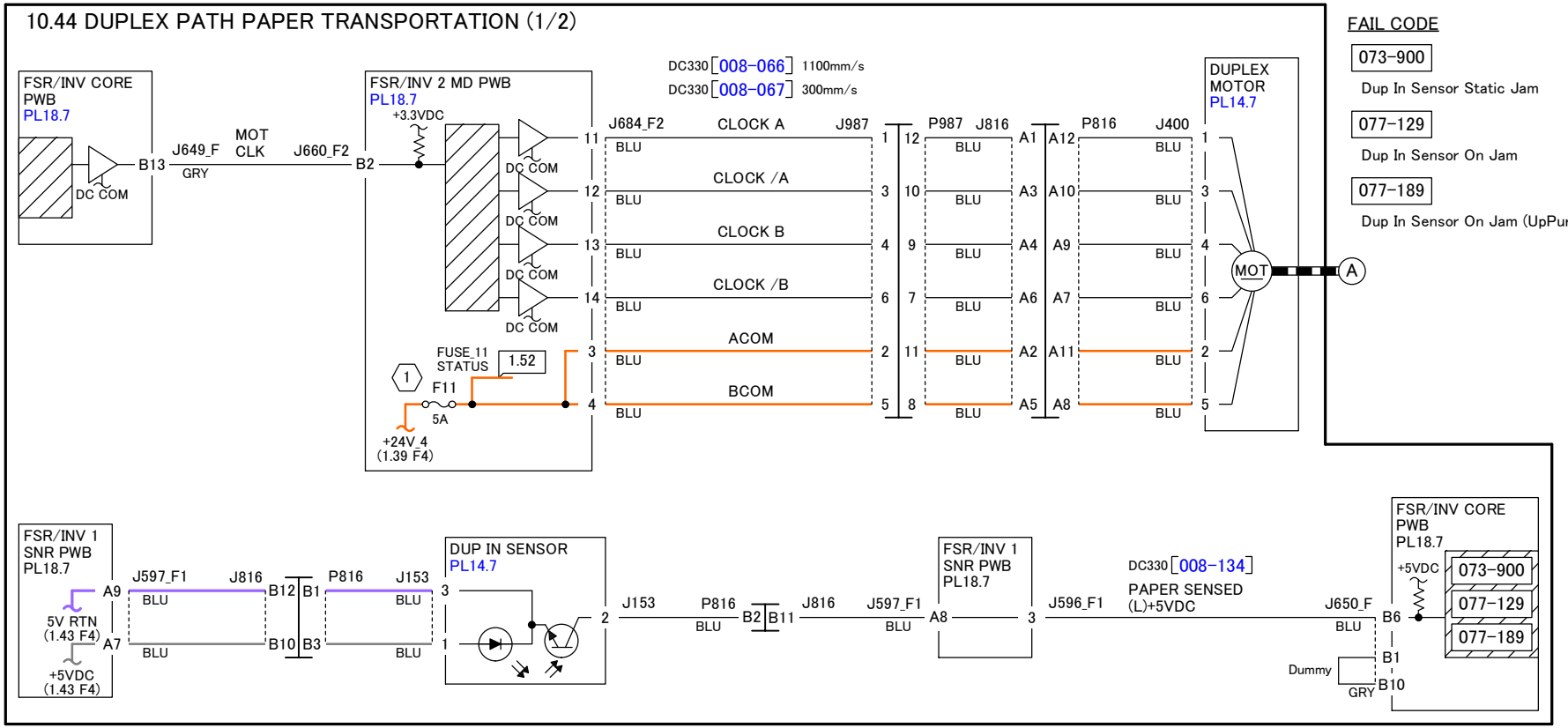
NOTE: (1) Chip Fuse

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



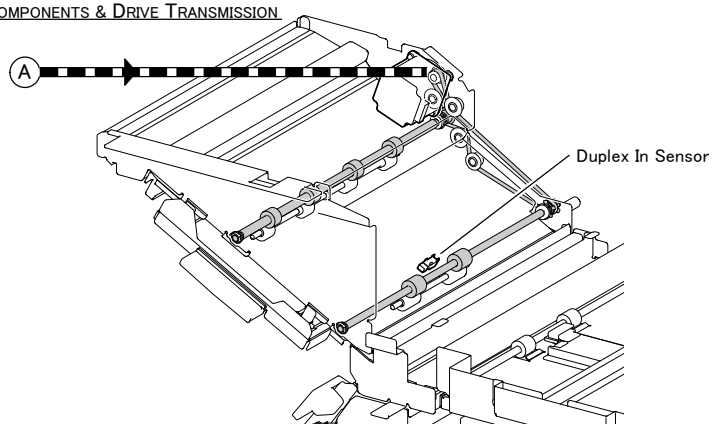
j0cx731043

10.44 DUPLEX PATH PAPER TRANSPORTATION (1/2)



NOTE: (1) CHIP FUSE

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



j0cx731044

10.45 DUPLEX OUT PATH PAPER TRANSPORTATION (2/2)

FSR/INV CORE PWB PL18.7
B10 — DC COM
J648_F — BLK
MOTOR CLK
J660_F1 — A9

FSR/INV 1 MD PWB PL18.7
+3.3VDC
DC COM ×4
9 CLOCK A
8 CLOCK /A
7 CLOCK B
6 CLOCK /B
17 ACOM
18 BCOM
FUSE_9 STATUS 1.50
1 F9 5A
+24V_3 (1.40 D2)

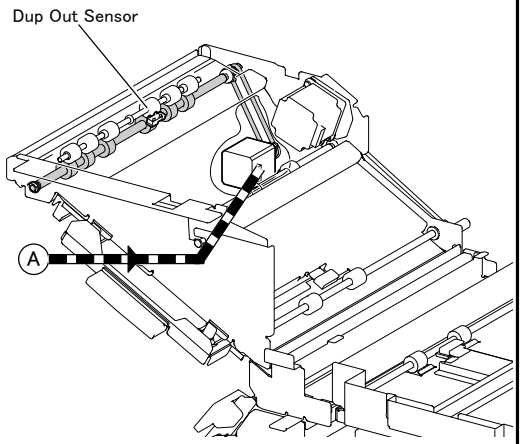
DC330[008-068] 1100mm/s
DC330[008-069] 300mm/s

J682_F1 — J987 — P987 J816 — P816 J401 — DUP OUT MOTOR PL14.7
CLOCK A: BLU — 10 3 — BLU — A10 A3 — BLU — 4
CLOCK /A: BLU — 12 1 — BLU — A12 A1 — BLU — 6
CLOCK B: BLU — 9 4 — BLU — A9 A4 — BLU — 3
CLOCK /B: BLU — 7 6 — BLU — A7 A6 — BLU — 1
ACOM: BLU — 11 2 — BLU — A11 A2 — BLU — 5
BCOM: BLU — 8 5 — BLU — A8 A5 — BLU — 2
MOT — A

FAIL CODE

073-901	Dup Out Sensor Static Jam
077-130	Dup Out Sensor On Jam
077-190	Dup Out Sensor On Jam (UpPurge)

ELECTRICAL COMPONENTS & DRIVE TRANSMISSION



FSR/INV 1 SNR PWB PL18.7
B9 — 5V RTN (1.43 F4)
B7 — +5VDC (1.43 F4)
J597_F1 — GRY — J816 — B9 B4 — P816 — BLU — J152
B7 B6 — GRY — BLU

DUP OUT SENSOR PL14.7
3 — 1 — 2

J152 — BLU — P816 B5 B8 — J816 — J597_F1 — GRY — B8 — FSR/INV 1 SNR PWB PL18.7

DC330[008-135] PAPER SENSED (L)+5VDC
9 — J596_F1 — J651_F — GRY — B4

FSR/INV CORE PWB PL18.7
+5VDC
073-901
077-130
077-190

NOTE: (1) CHIP FUSE

j0cx731045

10.46 HEAT SINK FAN & IOT-R REAR AIR FLOW

FSR/INV 2 MD PWB
PL18.7

DC330 [004-089] HIGH
DC330 [004-090] LOW

B6 J678_F2 GRY PWM J858 3 6 P858 J451 3 2 BLU
5 J688_F2 BLU 4 5 BLU 4 1
6 BLU 1 8 BLU 1 4

HEAT SINK FAN 1
PL4.5
MOT

3 2 J451 P858 BLU 7 2 J858 FAIL (H)+5VDC J665_F2 BLU A8

FSR/INV 2 MD PWB
PL18.7
+5VDC
042-340

DC COM
F24
+24V_8 (1.38 F1)
FUSE24 STTS 1.53
DC COM

FSR/INV 1 MD PWB
PL18.7

DC330 [004-089] HIGH
DC330 [004-090] LOW

A5 J678_F1 BLU ON PWM 7 2 J452 BLU 3 2
1 J687_F1 BLU 8 1 BLU 4 1
2 BLU 5 4 BLU 1 4
6 BLU Dummy
9

HEAT SINK FAN 2
PL4.5
MOT

3 2 J452 BLU 3 6 FAIL (H)+5VDC J679_F1 BLU 7

FSR/INV 1 MD PWB
PL18.7
+5VDC
042-341

DC COM
F23
+24V_7 (1.42 H4)
FUSE23 STTS 1.51
DC COM

3 2 J447 FAIL (H)+5VDC BLU 12

+5VDC
042-342

DC330 [004-091] HIGH
DC330 [004-092] LOW

A7 J678_F1 BLU PWM J447 3 2
11 J688_F1 BLU 4 1
12 BLU 1 4

IOT-R REAR COOLING FAN
PL4.5
MOT

DC COM
+24V_8 F24 (1.3 C6)
DC COM

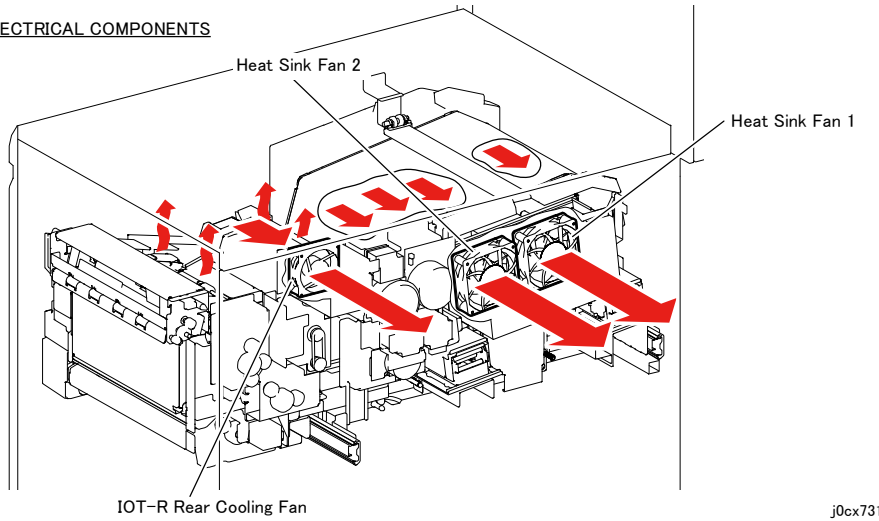
FAIL CODE

042-340
Heat Sink Fan 1 Fail

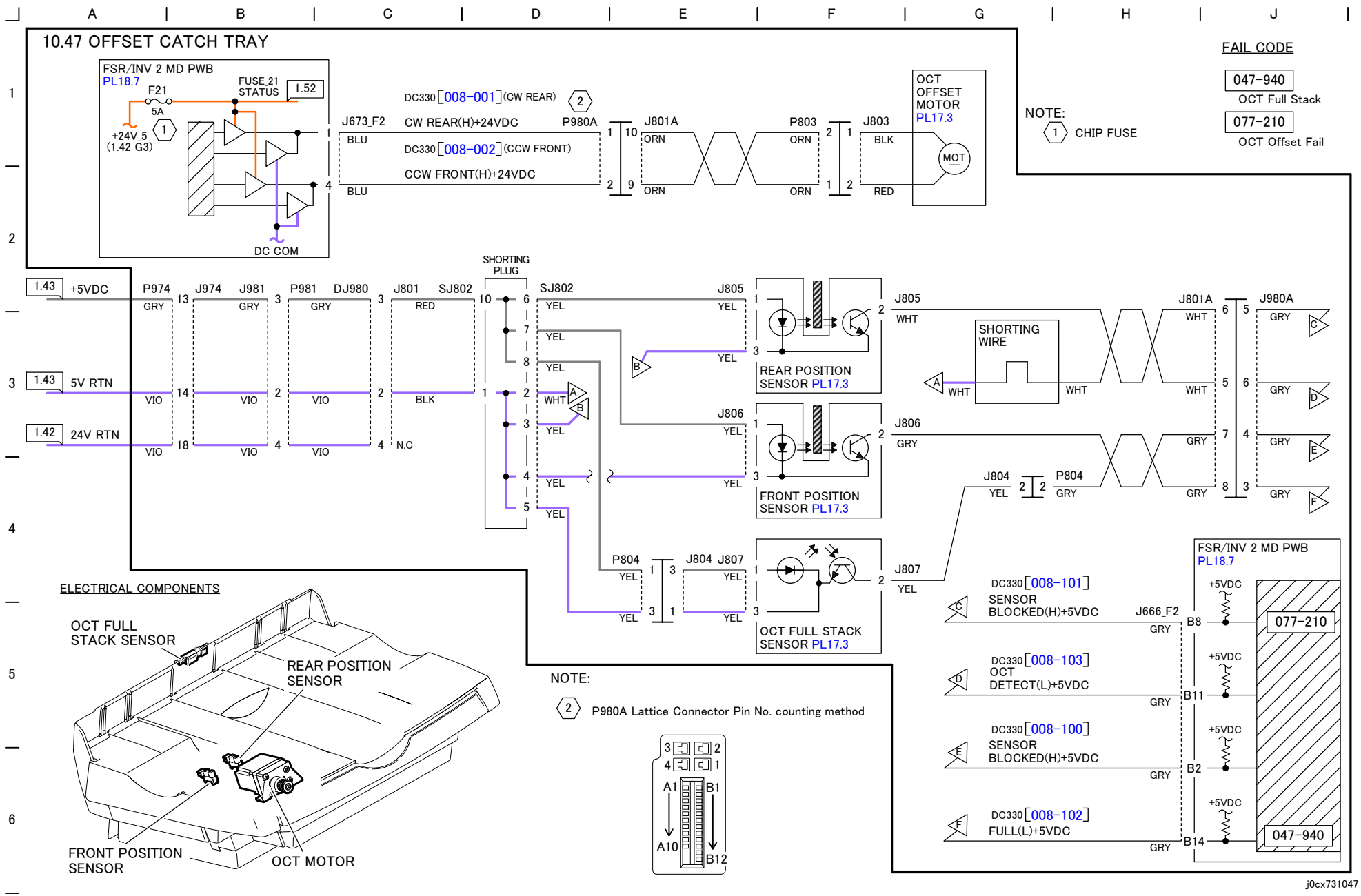
042-341
Heat Sink Fan 2 Fail

042-342
IOT-R Rear Fan Fail

ELECTRICAL COMPONENTS



j0cx731046


10.47 OFFSET CATCH TRAY
FSR/INV 2 MD PWB
PL18.7
F21
5A
FUSE_21
STATUS
1.52
+24V_5
(1.42 G3)
DC COM
DC330 [008-001] (CW REAR)
CW REAR(H)+24VDC
DC330 [008-002] (CCW FRONT)
CCW FRONT(H)+24VDC
J673_F2
P980A
J801A
P803
J803
OCT
OFFSET
MOTOR
PL17.3
MOT
NOTE:
CHIP FUSE
FAIL CODE
047-940
OCT Full Stack
077-210
OCT Offset Fail
SHORTING
PLUG
1.43 +5VDC
1.43 5V RTN
1.42 24V RTN
P974
J974
J981
P981
DJ980
J801
SJ802
SJ802
J805
REAR POSITION
SENSOR PL17.3
J806
FRONT POSITION
SENSOR PL17.3
SHORTING
WIRE
J801A
J980A
J804
P804
P804
J804 J807
J807
OCT FULL STACK
SENSOR PL17.3
FSR/INV 2 MD PWB
PL18.7
DC330 [008-101]
SENSOR
BLOCKED(H)+5VDC
J666_F2
DC330 [008-103]
OCT
DETECT(L)+5VDC
DC330 [008-100]
SENSOR
BLOCKED(H)+5VDC
DC330 [008-102]
FULL(L)+5VDC
+5VDC
077-210
047-940
ELECTRICAL COMPONENTS
OCT FULL
STACK SENSOR
REAR POSITION
SENSOR
FRONT POSITION
SENSOR
OCT MOTOR
NOTE:
P980A Lattice Connector Pin No. counting method
A1
A10
B1
B12
j0cx731047

7.4 Electrical Component Location

7.4 Electrical Component Location

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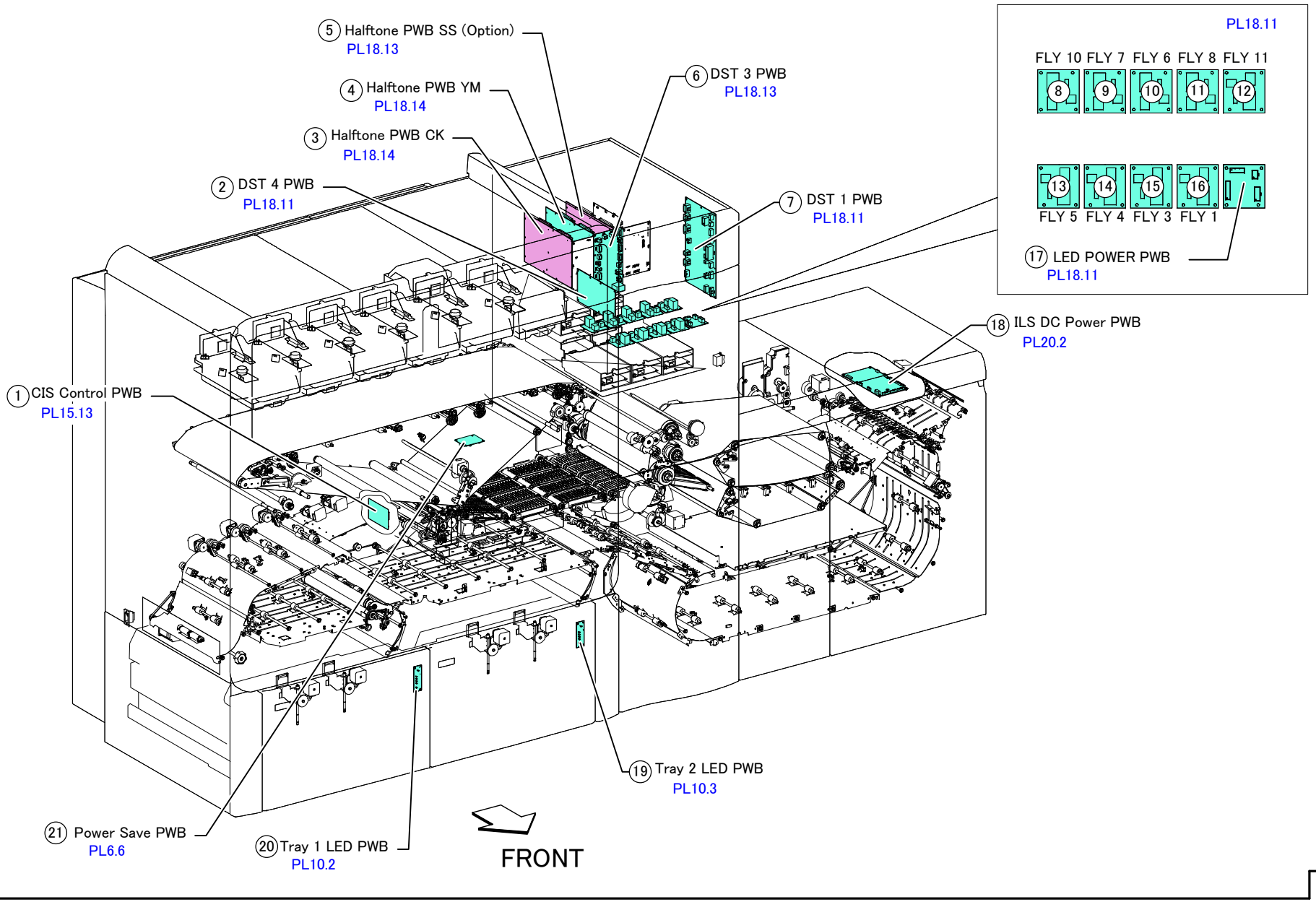
7.4.1 PWB LOCATION (FRONT)



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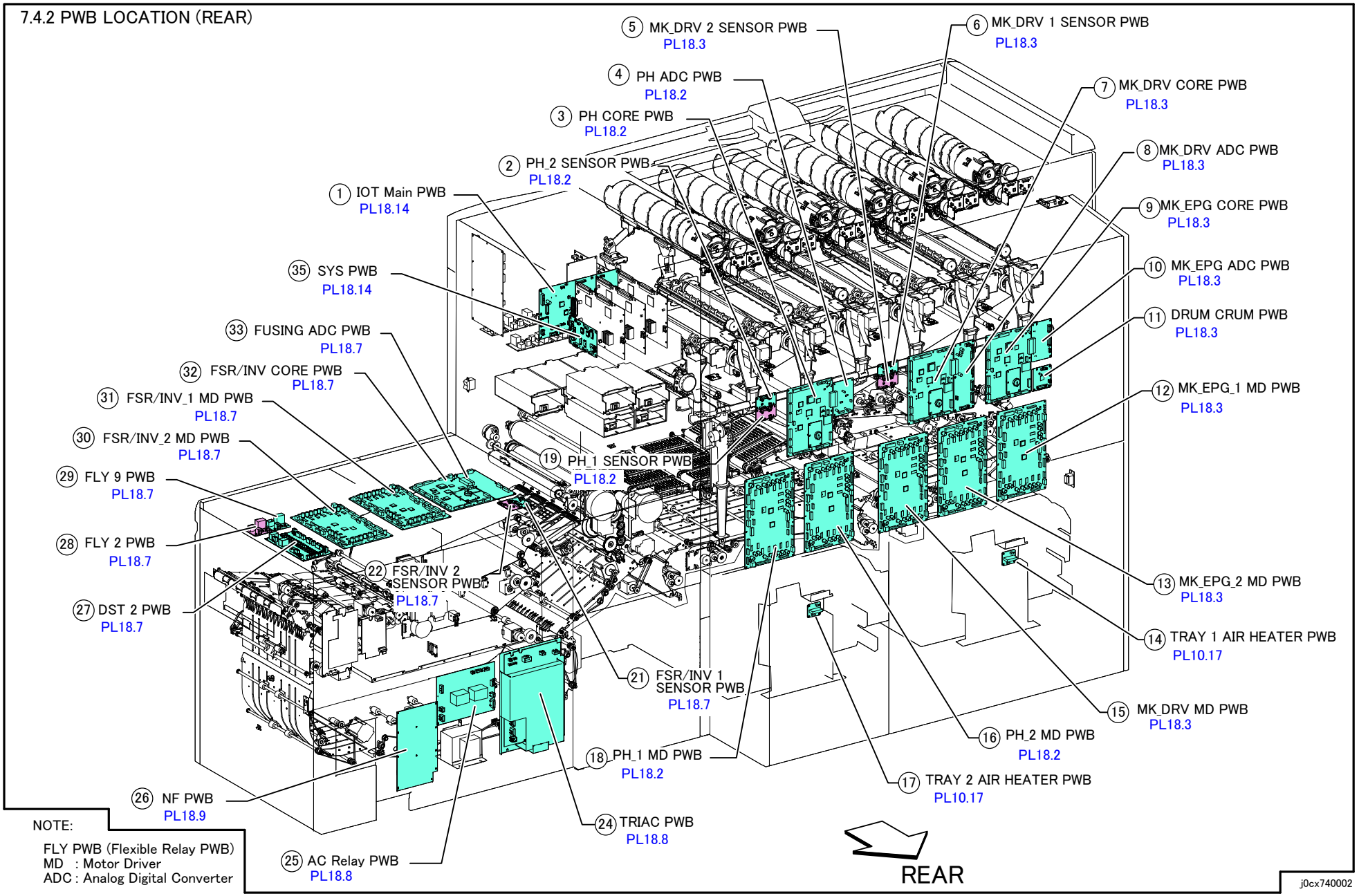
7.4.2 PWB LOCATION (REAR)

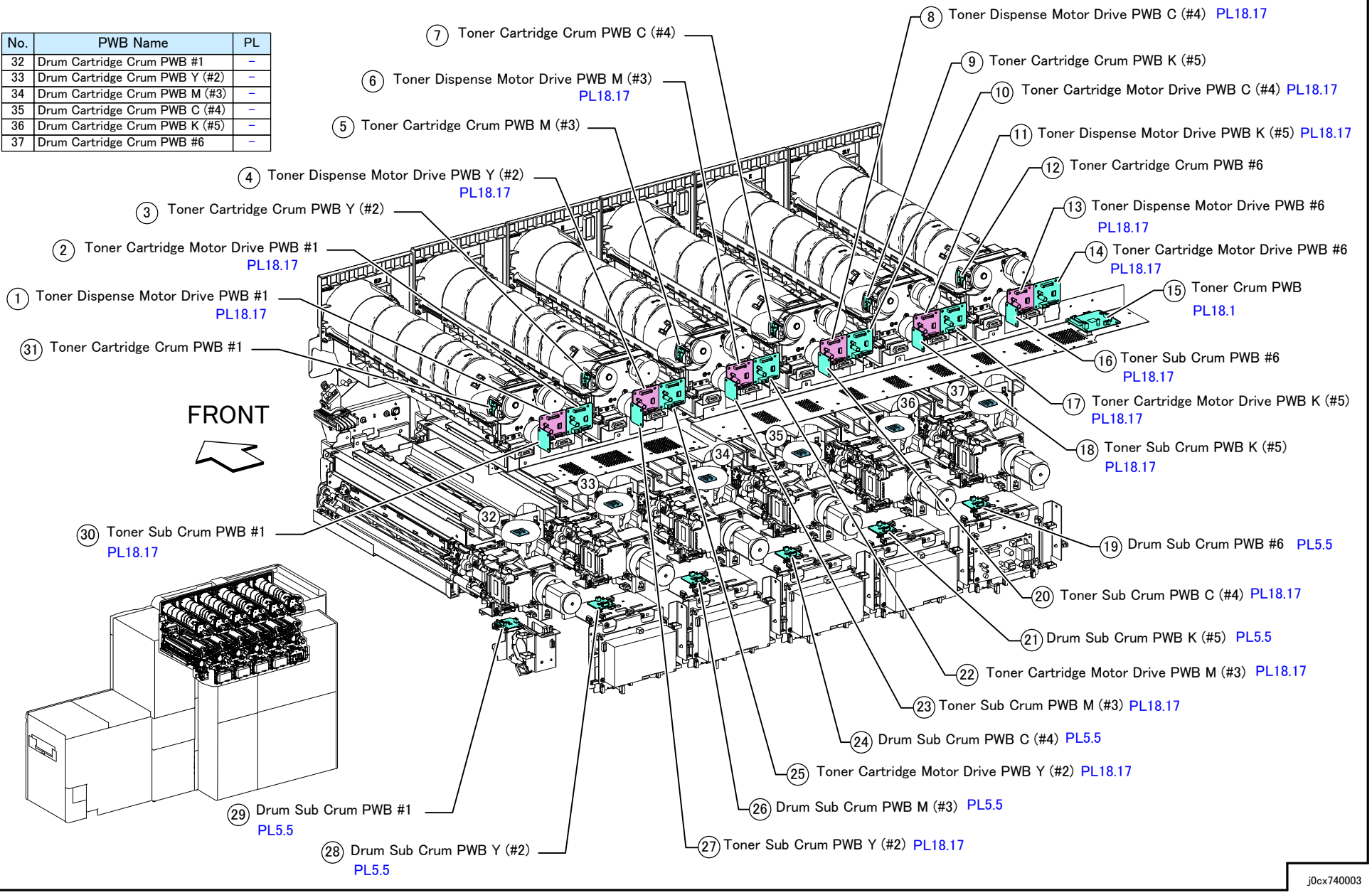


NOTE:

FLY PWB (Flexible Relay PWB)
MD : Motor Driver
ADC : Analog Digital Converter

7.4.3 PWB LOCATION (EPG, DEVE)

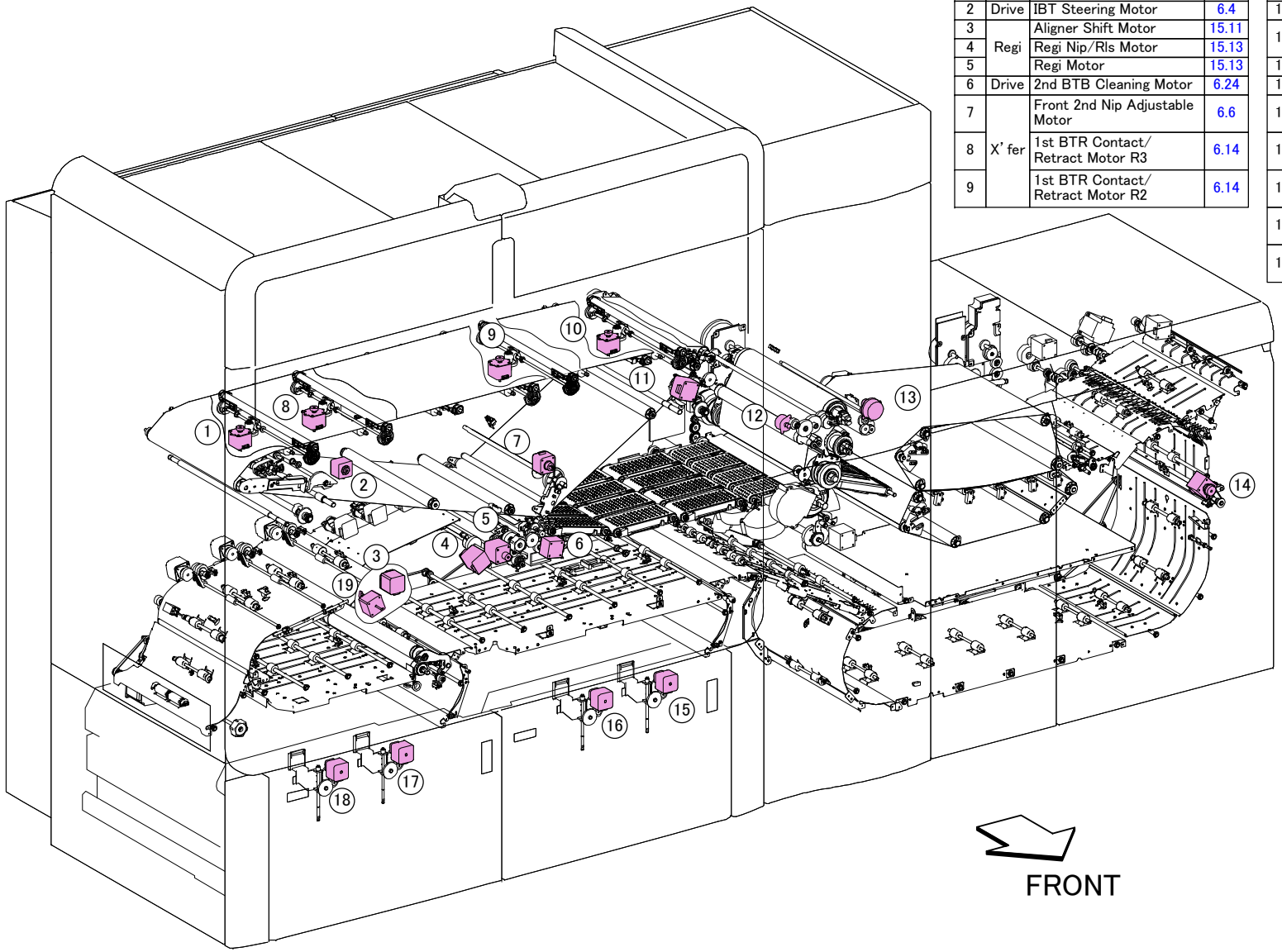
No.	PWB Name	PL
32	Drum Cartridge Crum PWB #1	–
33	Drum Cartridge Crum PWB Y (#2)	–
34	Drum Cartridge Crum PWB M (#3)	–
35	Drum Cartridge Crum PWB C (#4)	–
36	Drum Cartridge Crum PWB K (#5)	–
37	Drum Cartridge Crum PWB #6	–


FRONT
1 Toner Dispense Motor Drive PWB #1 PL18.17
2 Toner Cartridge Motor Drive PWB #1 PL18.17
3 Toner Cartridge Crum PWB Y (#2)
4 Toner Dispense Motor Drive PWB Y (#2) PL18.17
5 Toner Cartridge Crum PWB M (#3)
6 Toner Dispense Motor Drive PWB M (#3) PL18.17
7 Toner Cartridge Crum PWB C (#4)
8 Toner Dispense Motor Drive PWB C (#4) PL18.17
9 Toner Cartridge Crum PWB K (#5)
10 Toner Cartridge Motor Drive PWB C (#4) PL18.17
11 Toner Dispense Motor Drive PWB K (#5) PL18.17
12 Toner Cartridge Crum PWB #6
13 Toner Dispense Motor Drive PWB #6 PL18.17
14 Toner Cartridge Motor Drive PWB #6 PL18.17
15 Toner Crum PWB PL18.1
16 Toner Sub Crum PWB #6 PL18.17
17 Toner Cartridge Motor Drive PWB K (#5) PL18.17
18 Toner Sub Crum PWB K (#5) PL18.17
19 Drum Sub Crum PWB #6 PL5.5
20 Toner Sub Crum PWB C (#4) PL18.17
21 Drum Sub Crum PWB K (#5) PL5.5
22 Toner Cartridge Motor Drive PWB M (#3) PL18.17
23 Toner Sub Crum PWB M (#3) PL18.17
24 Drum Sub Crum PWB C (#4) PL5.5
25 Toner Cartridge Motor Drive PWB Y (#2) PL18.17
26 Drum Sub Crum PWB M (#3) PL5.5
27 Toner Sub Crum PWB Y (#2) PL18.17
28 Drum Sub Crum PWB Y (#2) PL5.5
29 Drum Sub Crum PWB #1 PL5.5
30 Toner Sub Crum PWB #1 PL18.17
31 Toner Cartridge Crum PWB #1
32
33
34
35
36
37
j0cx740003

7.4.4 IOT MOTOR (FRONT)

No.	Sub	Motor Name	PL
1	X' fer	1st BTR Contact/ Retract Motor R4	6.14
2	Drive	IBT Steering Motor	6.4
3	Regi	Aligner Shift Motor	15.11
4		Regi Nip/Rls Motor	15.13
5		Regi Motor	15.13
6	Drive	2nd BTB Cleaning Motor	6.24
7	X' fer	Front 2nd Nip Adjustable Motor	6.6
8		1st BTR Contact/ Retract Motor R3	6.14
9		1st BTR Contact/ Retract Motor R2	6.14

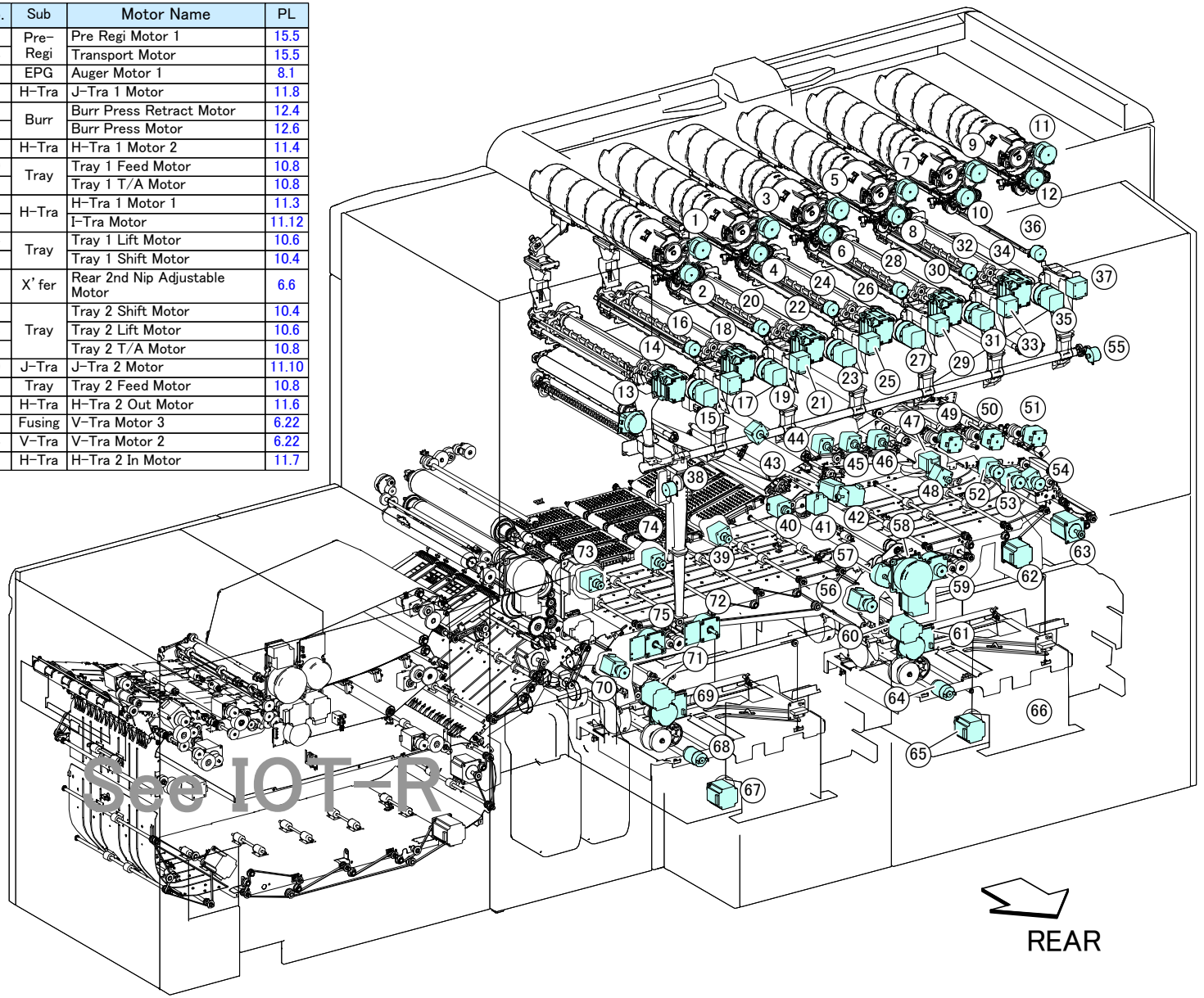
No.	Sub	Motor Name	PL
10	X' fer	1st BTR Contact/ Retract Motor R1	6.14
11		IBT Cleaner Motor	6.5
12	Fusing	Refresh Roll Retract Motor	7.10
13		Fusing Web Motor	7.8
14	Inv	Invert N/R Motor	16.12
15	Tray	Tray 2 Lead Shutter Motor	10.11
16		Tray 2 End Shutter Motor	10.11
17		Tray 1 Lead Shutter Motor	10.11
18		Tray 1 End Shutter Motor	10.11
19	Regi	Pre Aligner Drive Motor Front	15.9



j0cx740004

7.4.5 IOT MOTOR (IOT-L)

No.	Sub	Motor Name	PL
53	Pre-Regi	Pre Regi Motor 1	15.5
54		Transport Motor	15.5
55	EPG	Auger Motor 1	8.1
56	H-Tra	J-Tra 1 Motor	11.8
57	Burr	Burr Press Retract Motor	12.4
58		Burr Press Motor	12.6
59	H-Tra	H-Tra 1 Motor 2	11.4
60	Tray	Tray 1 Feed Motor	10.8
61		Tray 1 T/A Motor	10.8
62	H-Tra	H-Tra 1 Motor 1	11.3
63		I-Tra Motor	11.12
64	Tray	Tray 1 Lift Motor	10.6
65		Tray 1 Shift Motor	10.4
66	X'fer	Rear 2nd Nip Adjustable Motor	6.6
67	Tray	Tray 2 Shift Motor	10.4
68		Tray 2 Lift Motor	10.6
69		Tray 2 T/A Motor	10.8
70	J-Tra	J-Tra 2 Motor	11.10
71	Tray	Tray 2 Feed Motor	10.8
72	H-Tra	H-Tra 2 Out Motor	11.6
73	Fusing	V-Tra Motor 3	6.22
74	V-Tra	V-Tra Motor 2	6.22
75	H-Tra	H-Tra 2 In Motor	11.7

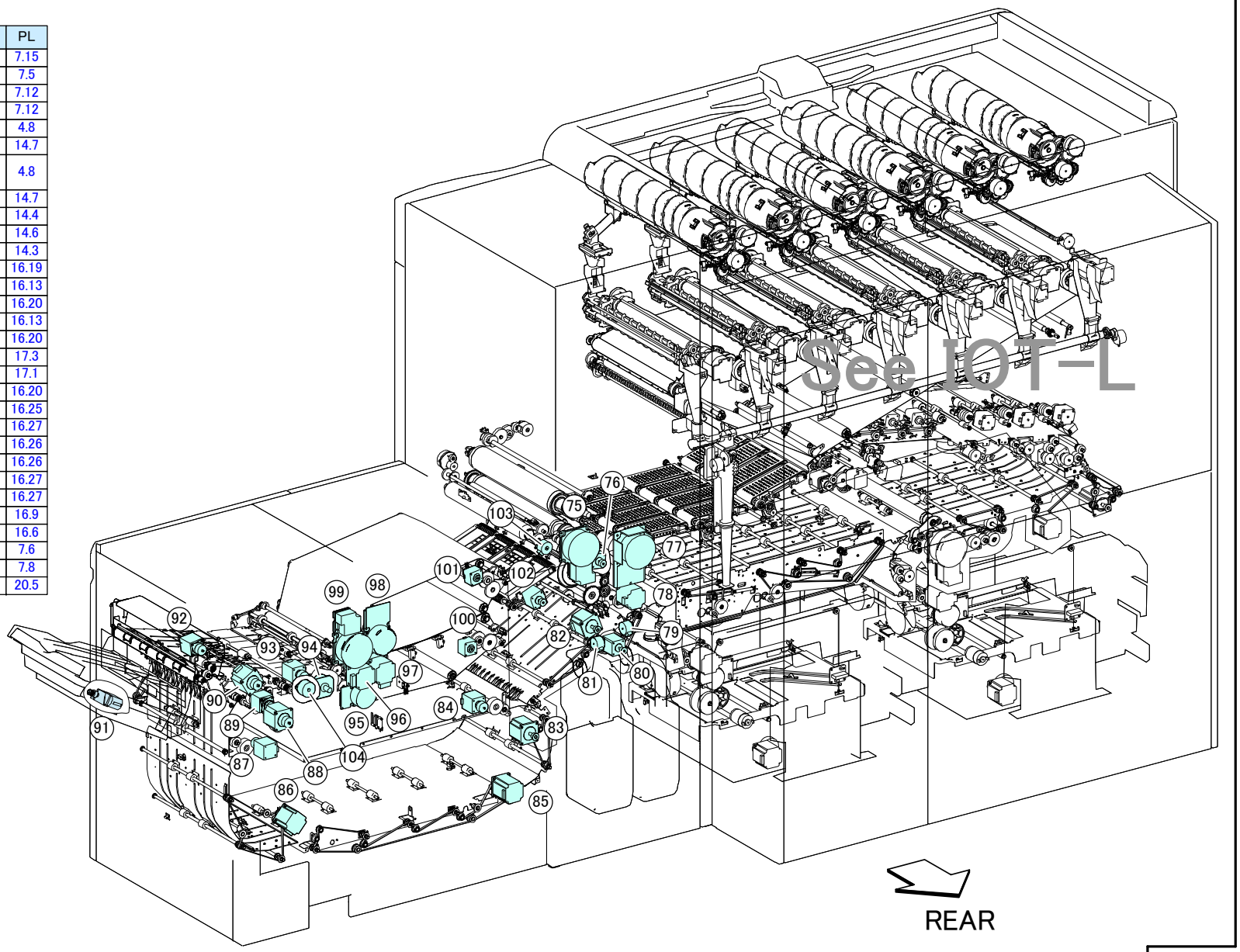


No.	Sub	Motor Name	PL
1	Deve	Toner Cartridge Motor #1	5.18
2		Toner Dispense Motor #1	5.18
3		Toner Cartridge Motor Y (#2)	5.18
4		Toner Dispense Motor Y (#2)	5.18
5		Toner Cartridge Motor M (#3)	5.18
6		Toner Dispense Motor M (#3)	5.18
7		Toner Cartridge Motor C (#4)	5.18
8		Toner Dispense Motor C (#4)	5.18
9		Toner Cartridge Motor K (#5)	5.18
10		Toner Dispense Motor K (#5)	5.18
11		Toner Cartridge Motor #6	5.18
12		Toner Dispense Motor #6	5.18
13	Drive	IBT Drive Motor	6.5
14	Deve	Deve Motor #1	5.8
15	Drive	Drum Motor #1	3.2
16	EPG	CC Cleaner Motor #1	8.5
17		Cleaner Motor #1	8.2
18	Deve	Deve Motor Y (#2)	5.8
19	Drive	Drum Motor Y (#2)	3.2
20	EPG	CC Cleaner Motor Y (#2)	8.5
21		Cleaner Motor Y (#2)	8.6
22	Deve	Deve Motor M (#3)	5.8
23	Drive	Drum Motor M (#3)	3.2
24	EPG	CC Cleaner Motor M (#3)	8.5
25		Cleaner Motor M (#3)	8.6
26	Deve	Deve Motor C (#4)	5.8
27	Drive	Drum Motor C (#4)	3.2
28	EPG	CC Cleaner Motor C (#4)	8.5
29		Cleaner Motor C (#4)	8.6
30	Deve	Deve Motor K (#5)	5.8
31	Drive	Drum Motor K (#5)	3.2
32	EPG	CC Cleaner Motor K (#5)	8.5
33		Cleaner Motor K (#5)	8.6
34	Deve	Deve Motor #6	5.8
35	Drive	Drum Motor #6	3.2
36	EPG	CC Cleaner Motor #6	8.5
37		Cleaner Motor #6	8.2
38		Toner Collect Motor	8.4
39	V-Tra	V-Tra Motor 1	6.22
40		2nd BTB Motor	6.24
41	X'fer	2nd BTB CNT/RET Motor	6.23
42	Regi	Regi Side Shift Motor	15.14
43		Aligner Drive Motor	15.12
44		Aligner Crossed N/R Motor 3	15.16
45		Aligner Crossed N/R Motor 2	15.16
46		Aligner Crossed N/R Motor 1	15.16
47		Aligner Unit Skew Motor	15.9
48		Pre Aligner Drive Motor Rear	15.9
49		Pre Aligner N/R Motor	15.8
50	H-Tra	P-Regi Roll 2 N/R Motor	15.3
51		P-Regi Roll 1 N/R Motor	15.3
52		Pre Regi Motor 2	15.5

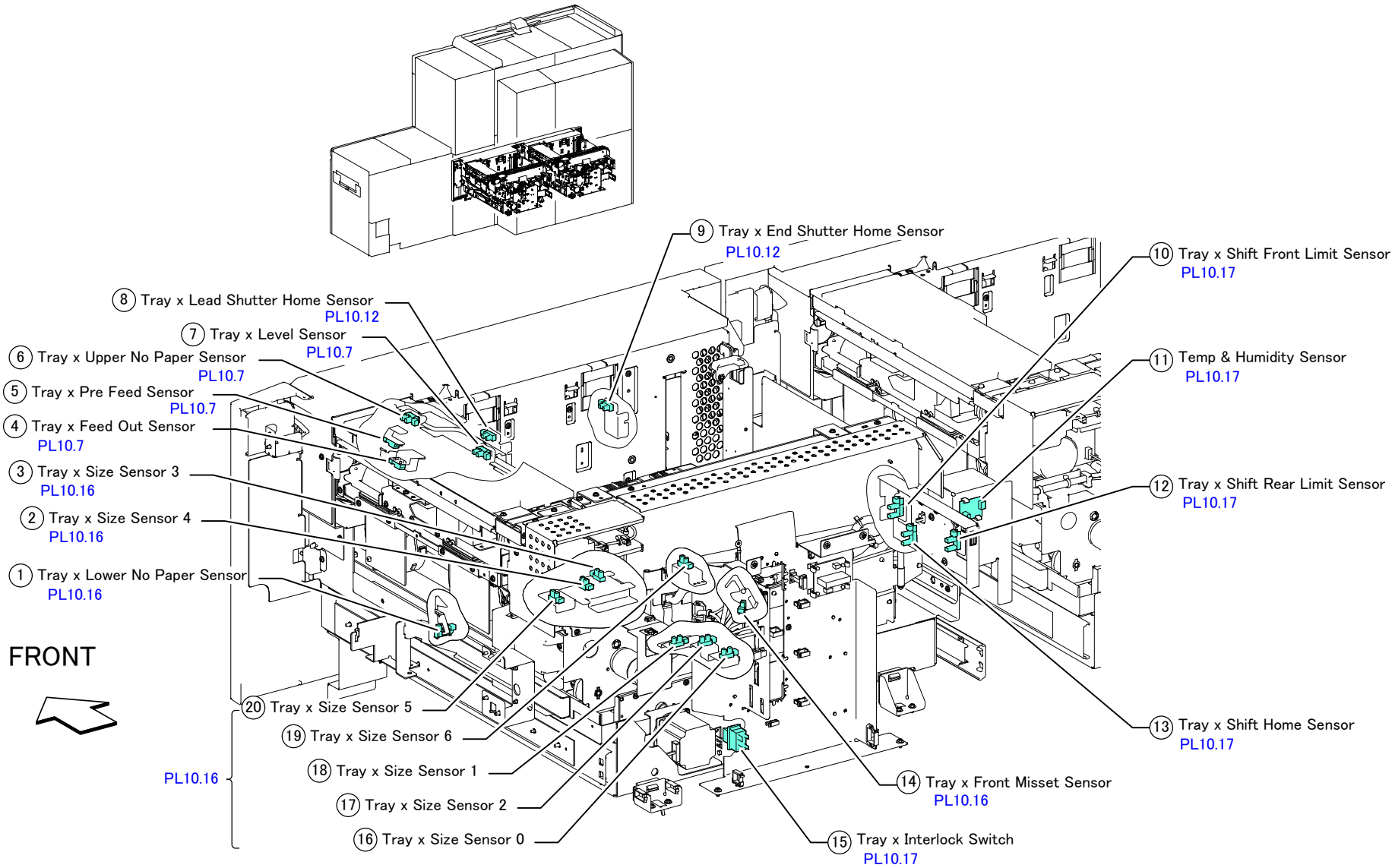
j0cx740005

7.4.6 IOT MOTOR (IOT-R)

No.	Sub	Motor Name	PL
75	Fusing	E/R Motor	7.15
76		V-Tra Motor 4	7.5
77		Fusing Motor	7.12
78		P/R Latch Motor	7.12
79	EPG	Auger Motor 2	4.8
80	Dup	Dup Out Motor	14.7
81	EPG	Active Bottle Switching Motor	4.8
82	Dup	Duplex Motor	14.7
83		D-Tra Motor 2	14.4
84		Dup Invert Motor	14.6
85		D-Tra Motor 1	14.3
86	Inv	Invert Path Motor	16.19
87		Invert Motor	16.13
88		Invert In Motor	16.20
89		Invert Gate Motor	16.13
90		Invert Upper Motor	16.20
91	OCT	OCT Offset Motor	17.3
92	Exit	IOT Exit Motor	17.1
93	Inv	Invert Entrance Motor	16.20
94	DCR	Decurler Roll Drive Motor	16.25
95	CLG	Cooling Lower Motor	16.27
96	DCR	Decurler Belt Pene Motor	16.26
97		Decurler Roll Pene Motor	16.26
98	CLG	Cooling Upper Motor	16.27
99		Decurler Belt Drive Motor	16.27
100		Cooling Lower Walk Motor	16.9
101		Cooling Upper Walk Motor	16.6
102	Fusing	Exit V-Tra Motor	7.6
103		Fusing Belt Walk Motor	7.8
104	ILS	White Ref. Drive Motor	20.5



7.4.7 SENSOR LOCATION (TRAY)



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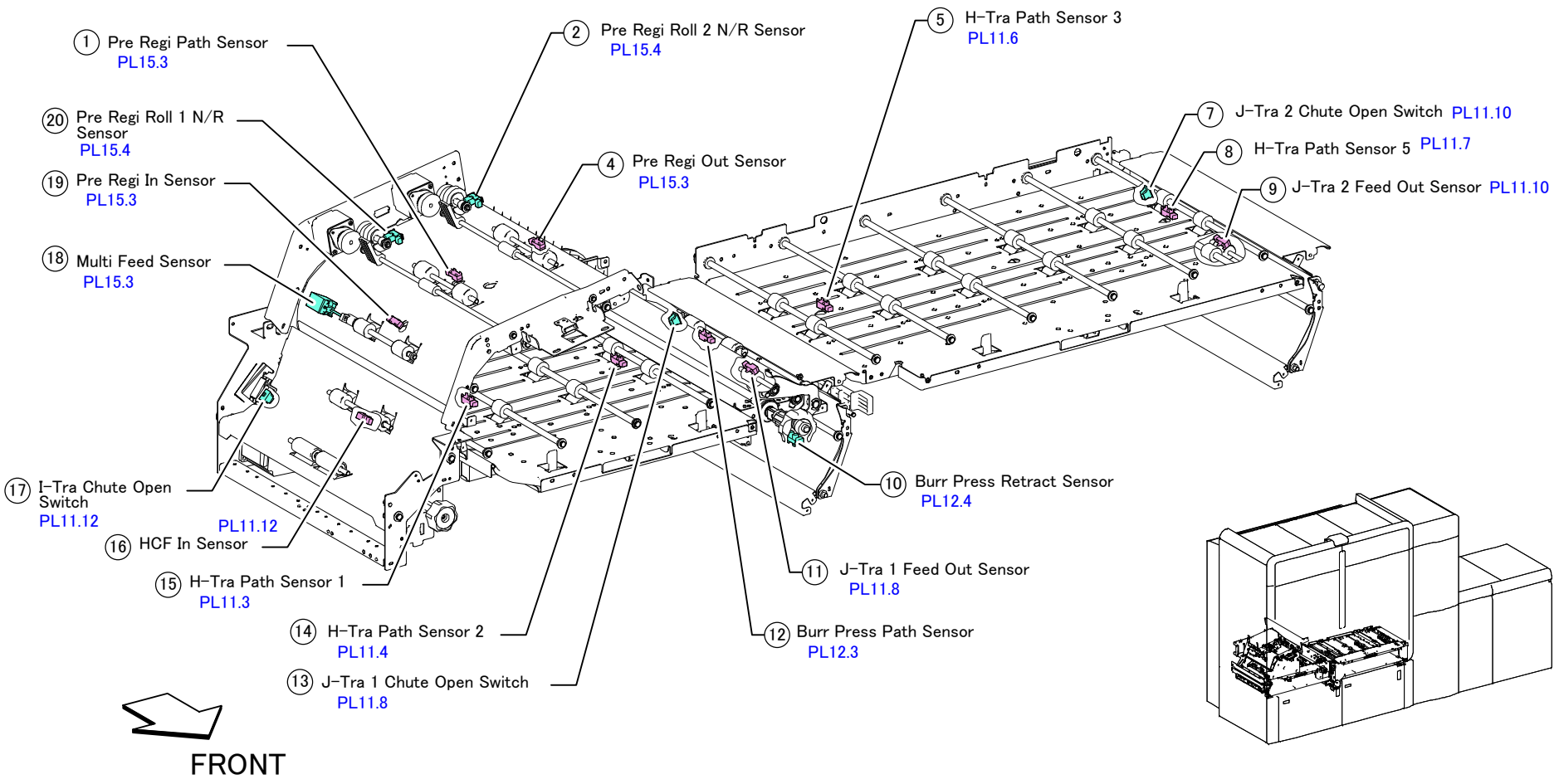
7.4.8 SENSOR LOCATION (H/I/J-TRA)



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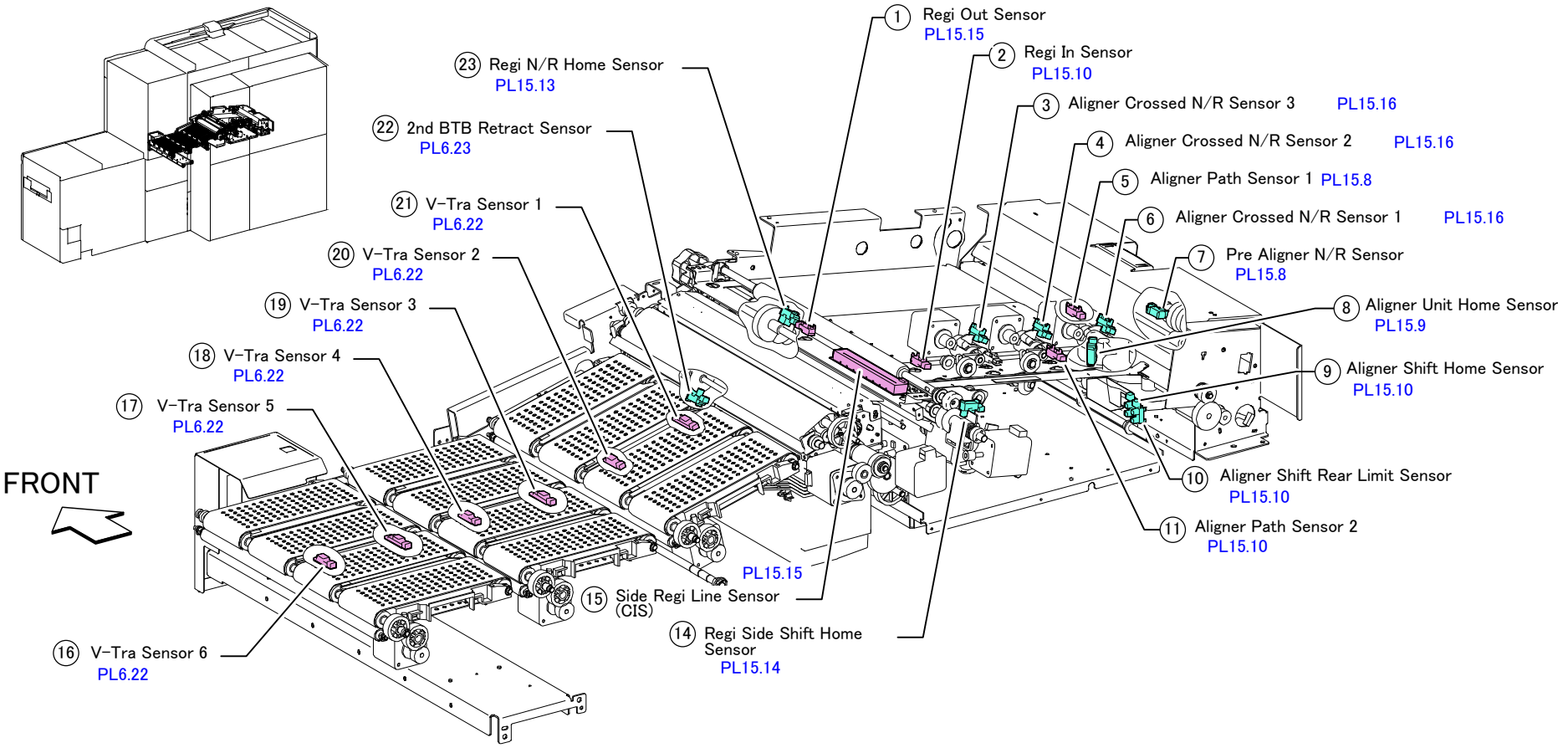
7.4.9 SENSOR LOCATION (REGI, V-TRA)



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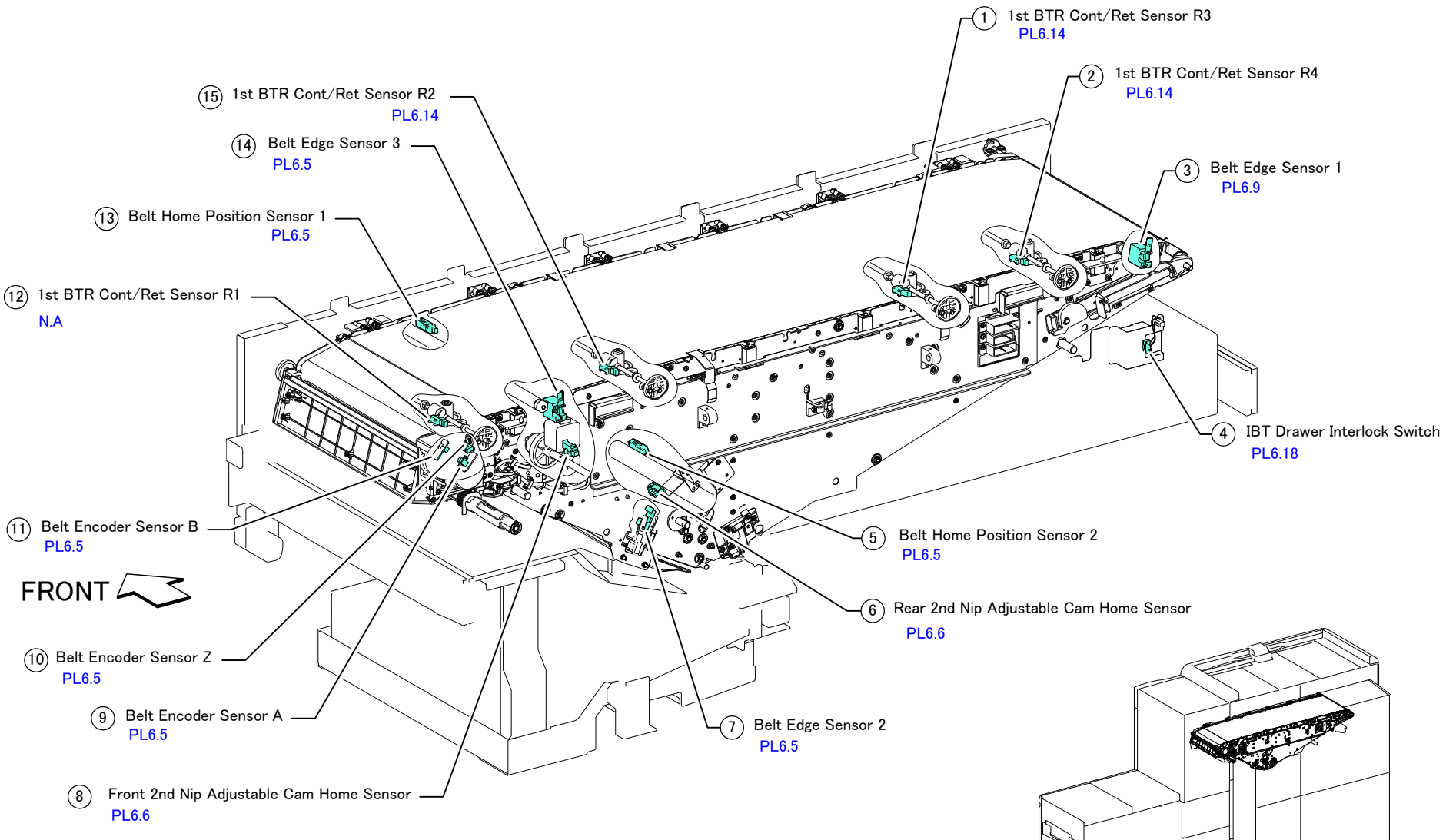
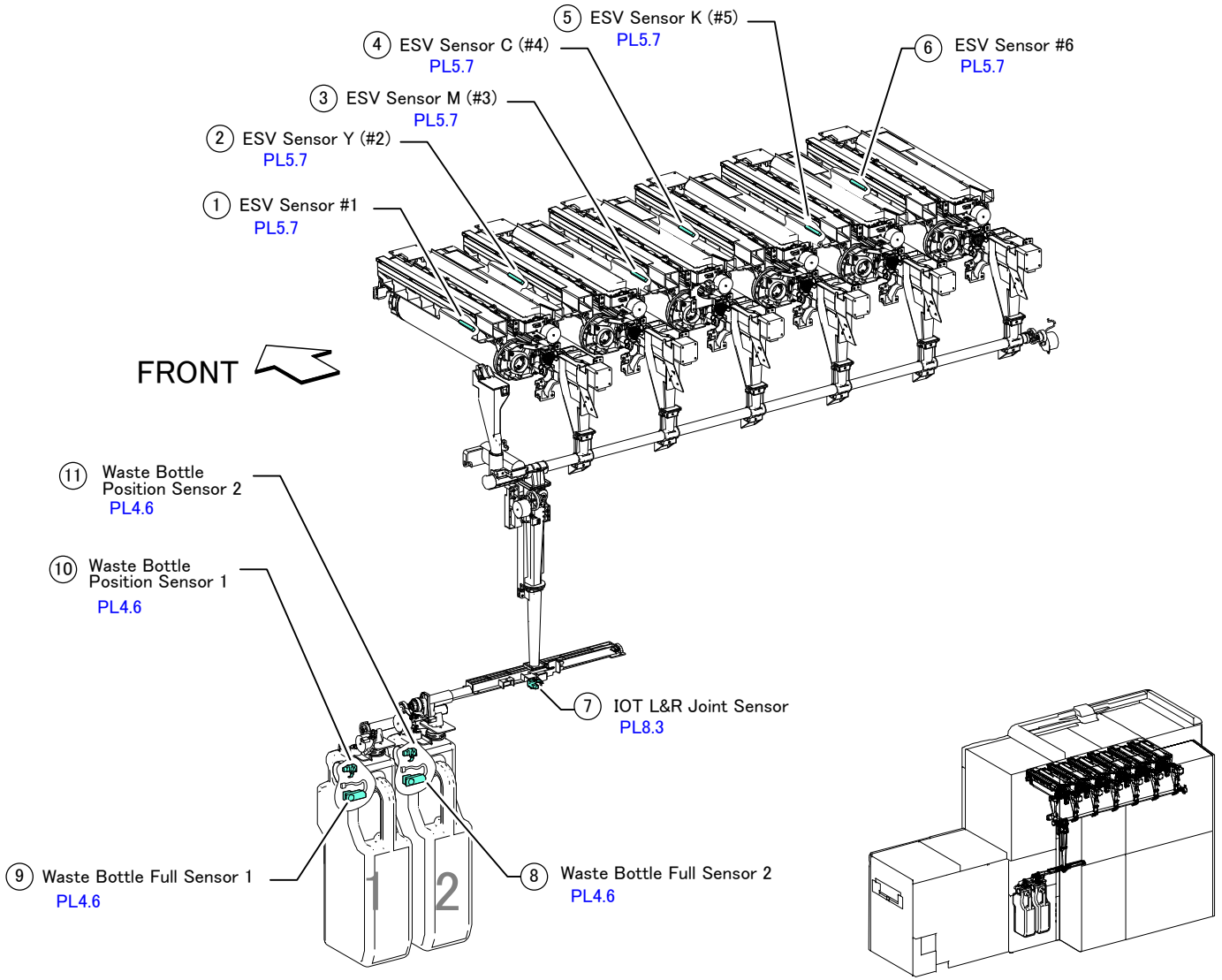
7.4.10 SENSOR LOCATION (XFER)



7.4.11 SENSOR LOCATION (EPG)



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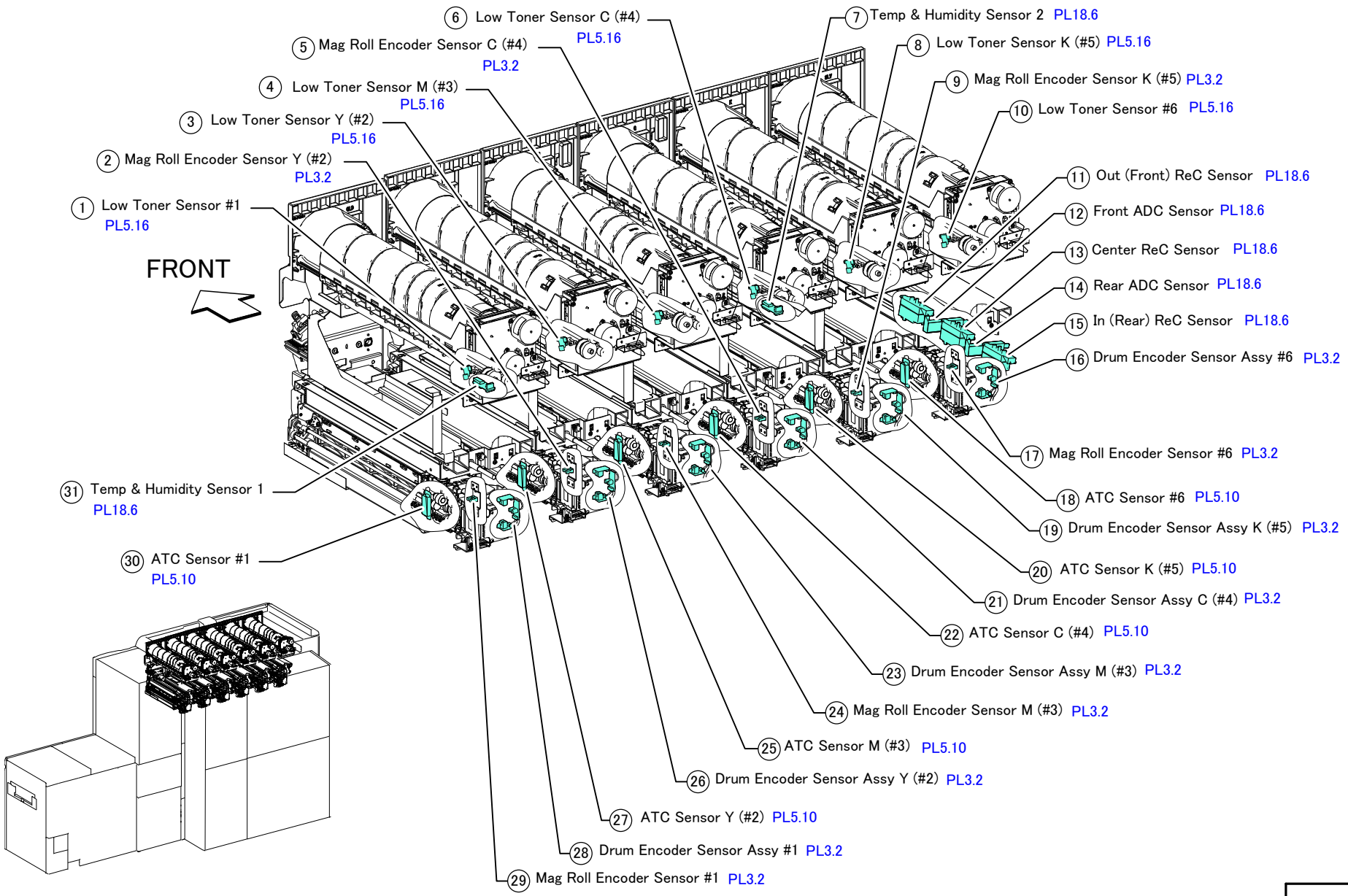
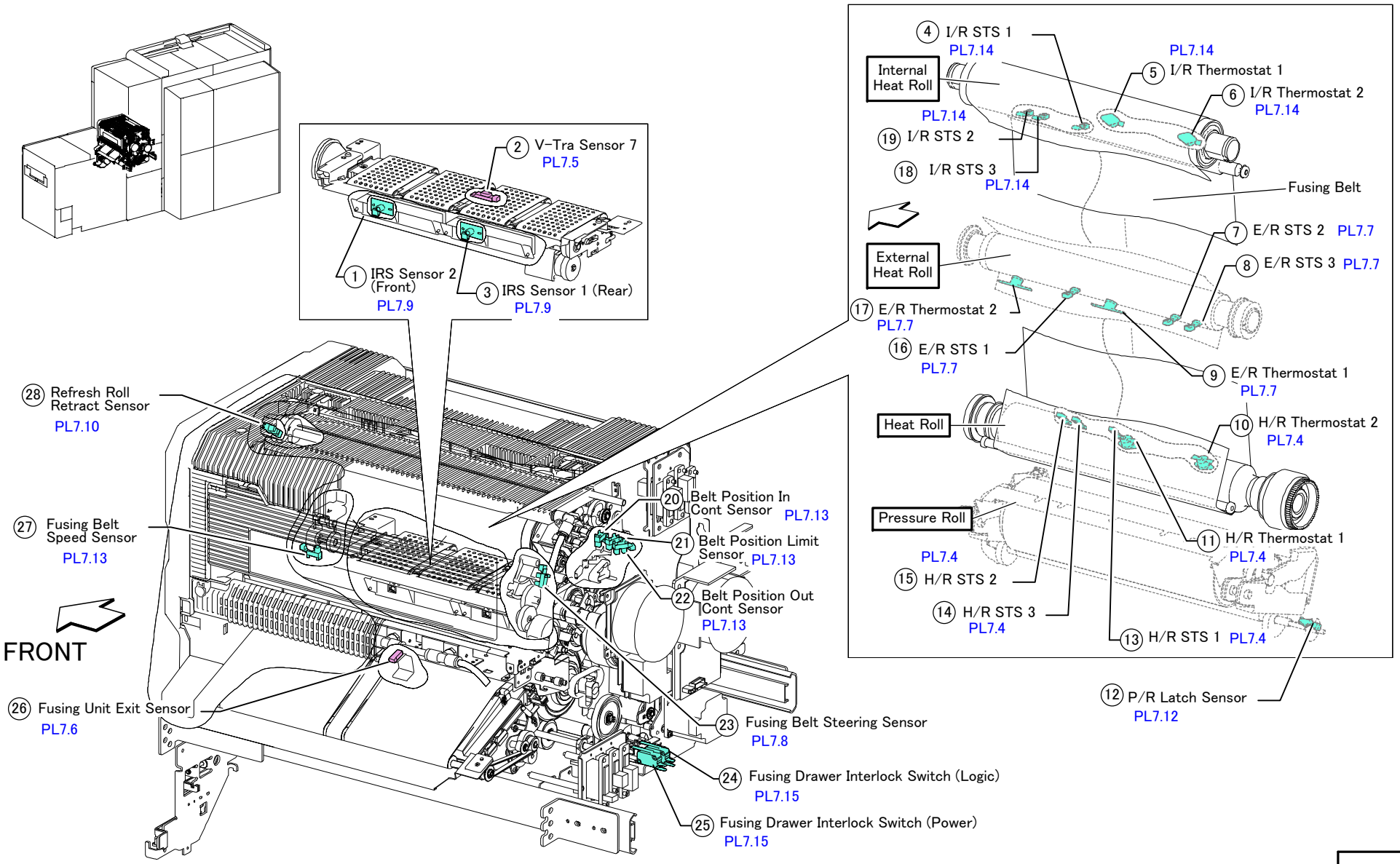
7.4.12 SENSOR LOCATION (DEVE, ROS)

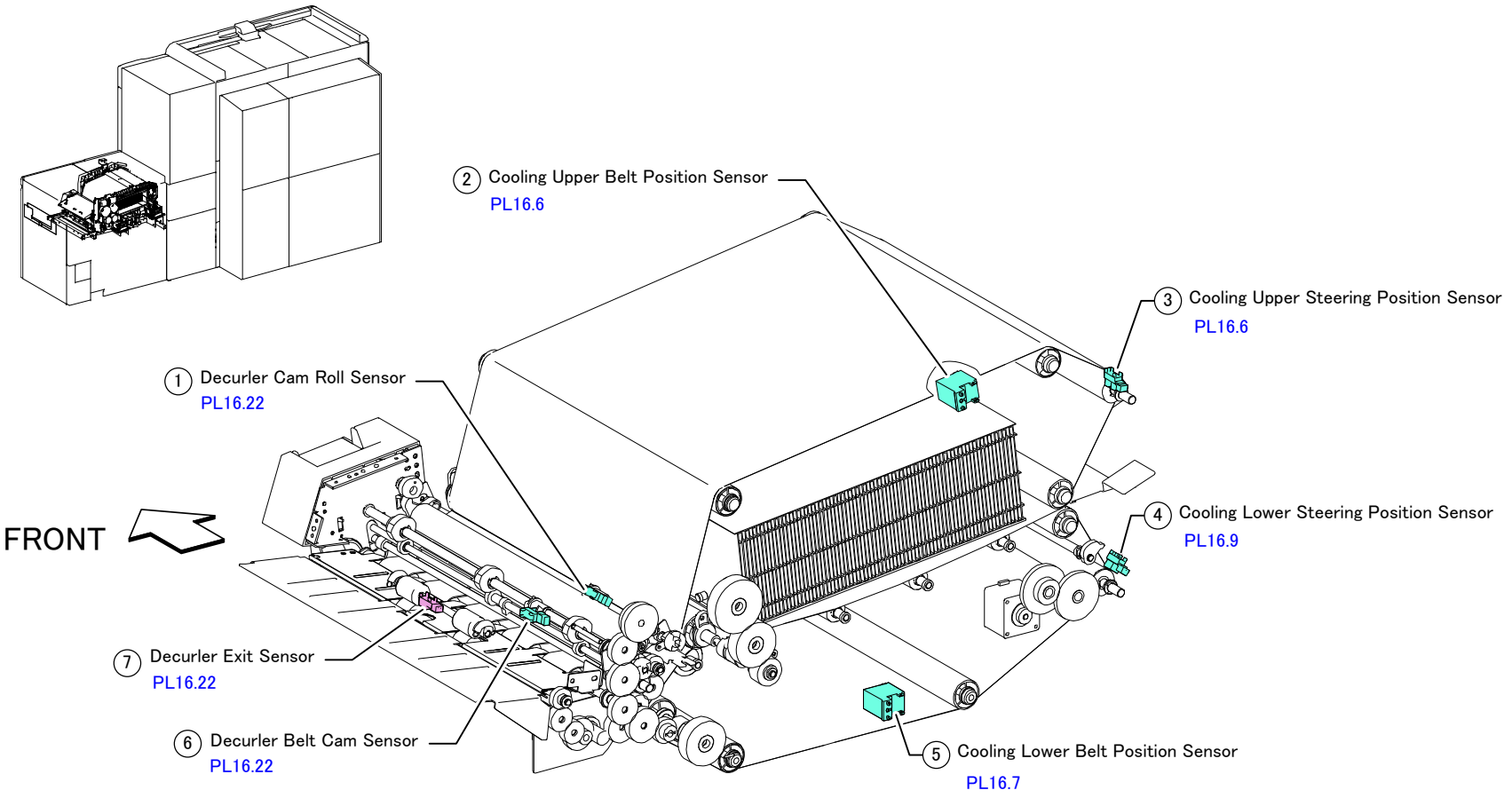

6 Low Toner Sensor C (#4) PL5.16
5 Mag Roll Encoder Sensor C (#4) PL3.2
4 Low Toner Sensor M (#3) PL5.16
3 Low Toner Sensor Y (#2) PL5.16
2 Mag Roll Encoder Sensor Y (#2) PL3.2
1 Low Toner Sensor #1 PL5.16
FRONT
31 Temp & Humidity Sensor 1 PL18.6
30 ATC Sensor #1 PL5.10
7 Temp & Humidity Sensor 2 PL18.6
8 Low Toner Sensor K (#5) PL5.16
9 Mag Roll Encoder Sensor K (#5) PL3.2
10 Low Toner Sensor #6 PL5.16
11 Out (Front) ReC Sensor PL18.6
12 Front ADC Sensor PL18.6
13 Center ReC Sensor PL18.6
14 Rear ADC Sensor PL18.6
15 In (Rear) ReC Sensor PL18.6
16 Drum Encoder Sensor Assy #6 PL3.2
17 Mag Roll Encoder Sensor #6 PL3.2
18 ATC Sensor #6 PL5.10
19 Drum Encoder Sensor Assy K (#5) PL3.2
20 ATC Sensor K (#5) PL5.10
21 Drum Encoder Sensor Assy C (#4) PL3.2
22 ATC Sensor C (#4) PL5.10
23 Drum Encoder Sensor Assy M (#3) PL3.2
24 Mag Roll Encoder Sensor M (#3) PL3.2
25 ATC Sensor M (#3) PL5.10
26 Drum Encoder Sensor Assy Y (#2) PL3.2
27 ATC Sensor Y (#2) PL5.10
28 Drum Encoder Sensor Assy #1 PL3.2
29 Mag Roll Encoder Sensor #1 PL3.2
j0cx740012

7.4.13 SENSOR LOCATION (FUSING)


1 IRS Sensor 2 (Front) PL7.9
2 V-Tra Sensor 7 PL7.5
3 IRS Sensor 1 (Rear) PL7.9
4 I/R STS 1 PL7.14
5 I/R Thermostat 1 PL7.14
6 I/R Thermostat 2 PL7.14
7 E/R STS 2 PL7.7
8 E/R STS 3 PL7.7
9 E/R Thermostat 1 PL7.7
10 H/R Thermostat 2 PL7.4
11 H/R Thermostat 1 PL7.4
12 P/R Latch Sensor PL7.12
13 H/R STS 1 PL7.4
14 H/R STS 3 PL7.4
15 H/R STS 2 PL7.4
16 E/R STS 1 PL7.7
17 E/R Thermostat 2 PL7.7
18 I/R STS 3 PL7.14
19 I/R STS 2 PL7.14
20 Belt Position In Cont Sensor PL7.13
21 Belt Position Limit Sensor PL7.13
22 Belt Position Out Cont Sensor PL7.13
23 Fusing Belt Steering Sensor PL7.8
24 Fusing Drawer Interlock Switch (Logic) PL7.15
25 Fusing Drawer Interlock Switch (Power) PL7.15
26 Fusing Unit Exit Sensor PL7.6
27 Fusing Belt Speed Sensor PL7.13
28 Refresh Roll Retract Sensor PL7.10
Internal Heat Roll
External Heat Roll
Heat Roll
Pressure Roll
Fusing Belt
FRONT

j0cx740013

7.4.14 SENSOR LOCATION (COOLING)



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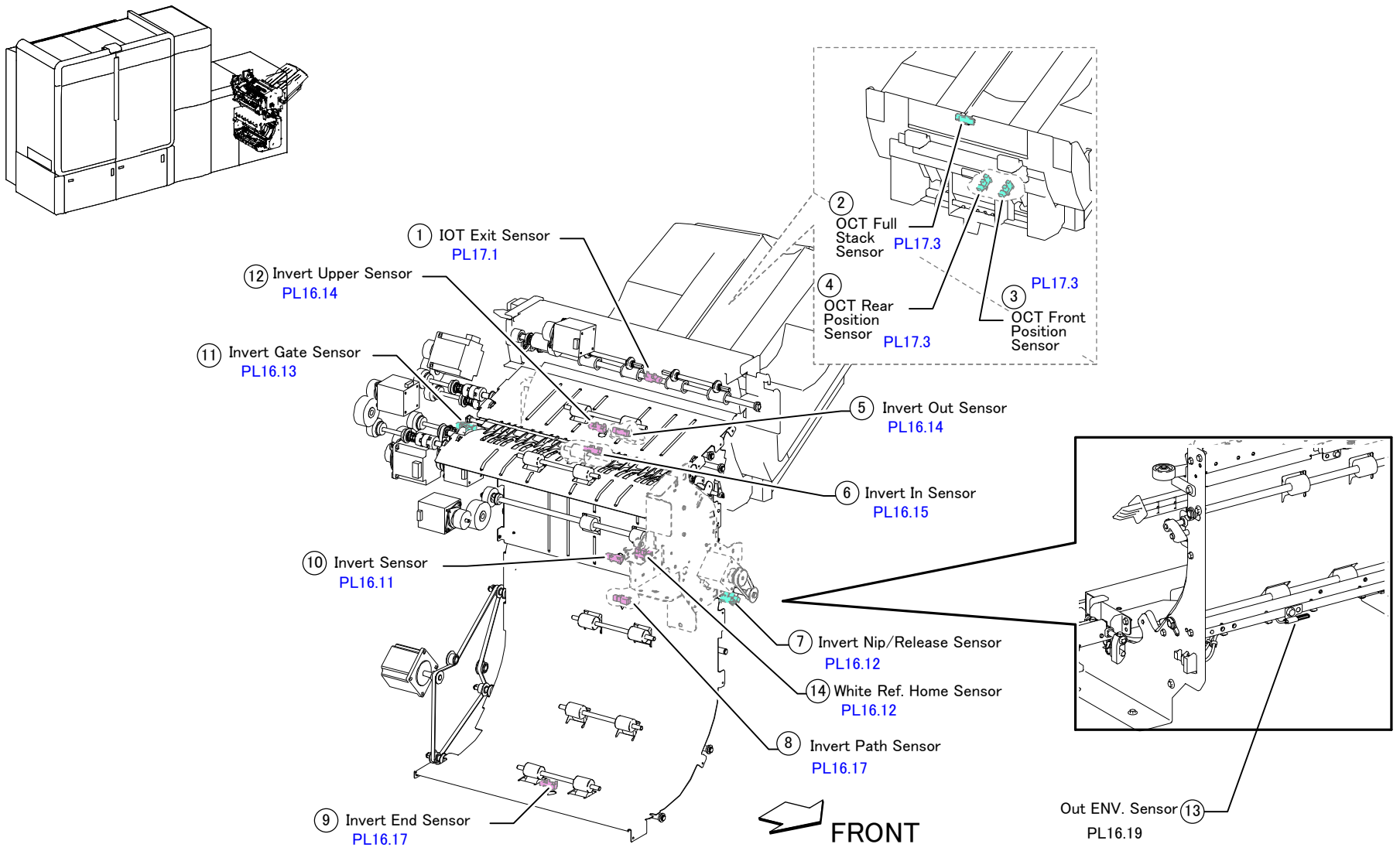
7.4.15 SENSOR LOCATION (INV, EXIT, OCT, ILS)



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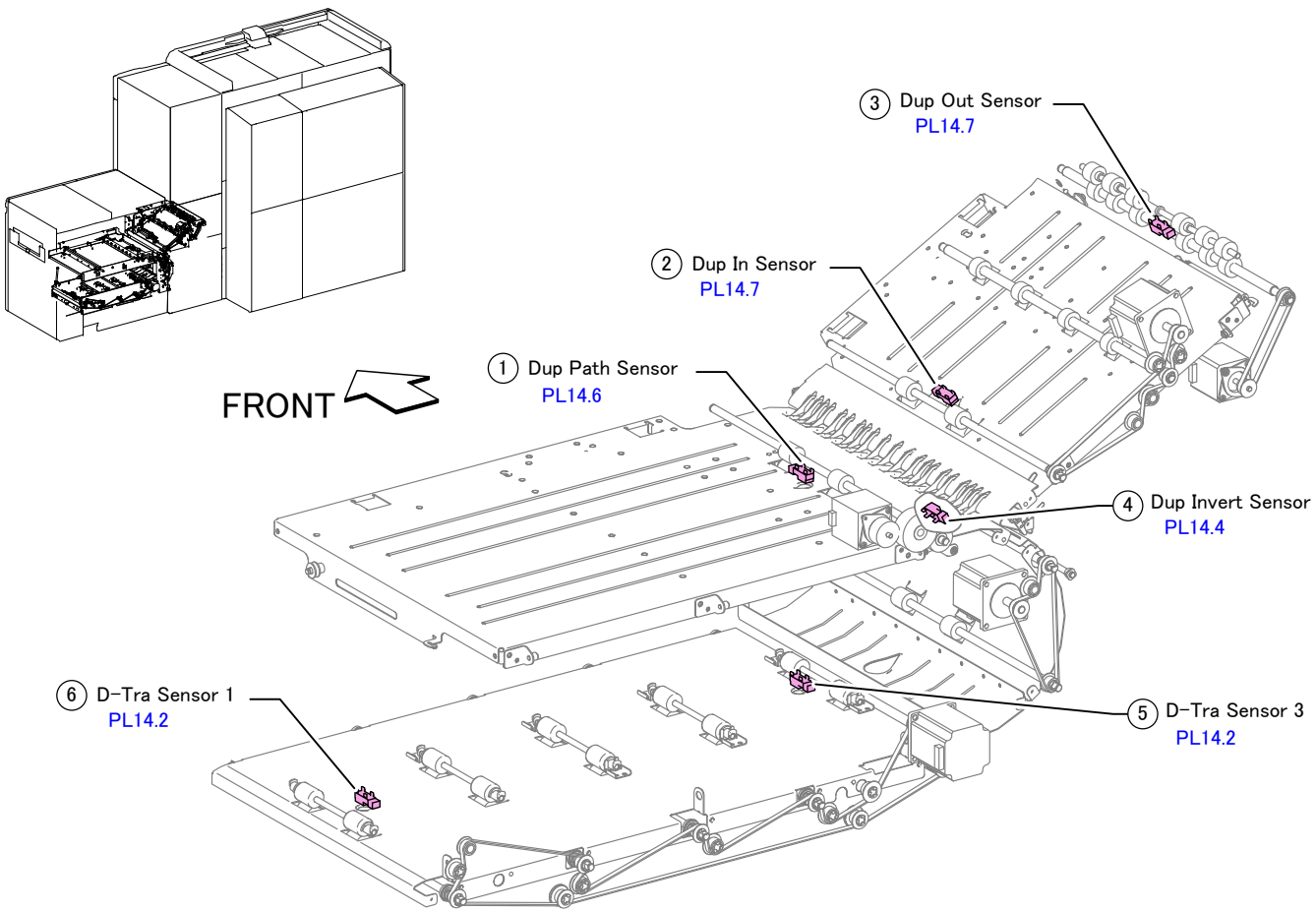
7.4.16 SENSOR LOCATION (DUP)



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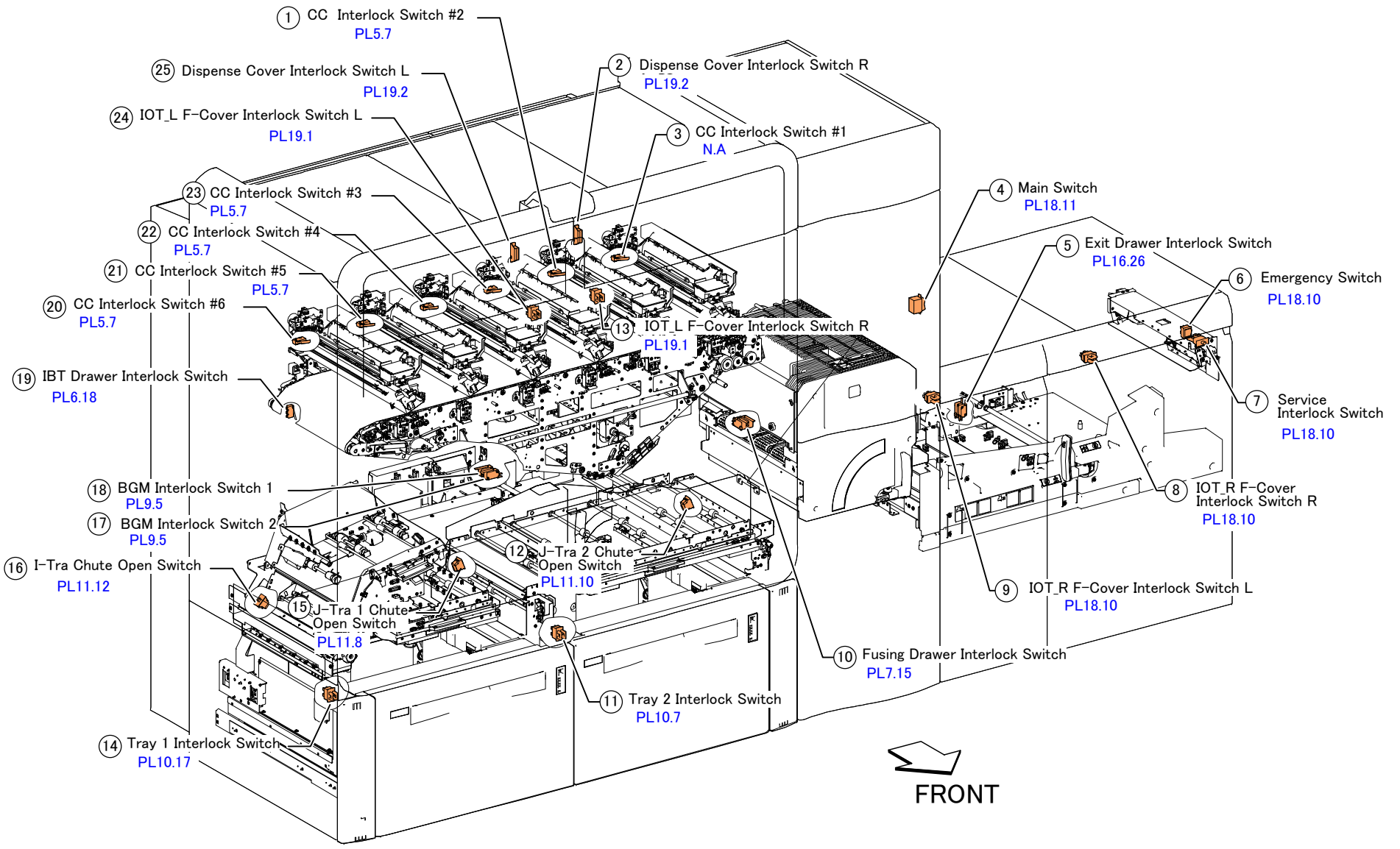
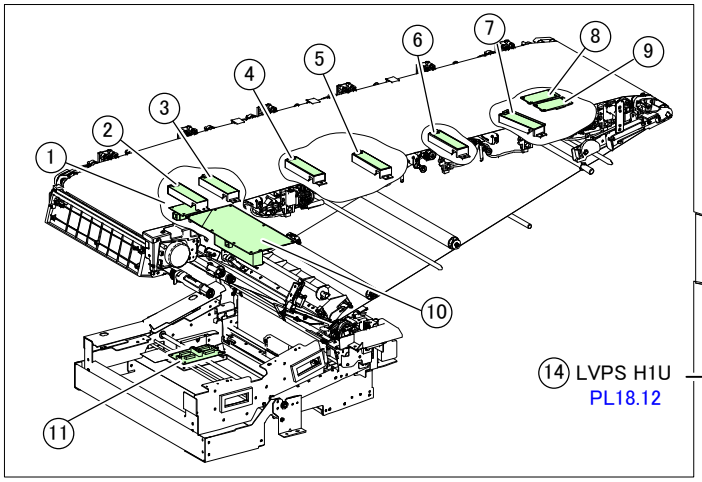
7.4.17 INTERLOCK SWITCH LOCATION



7.4.18 LVPS, HVPS LOCATION



No.	HVPS Name	PL
1	IBT Cleaner Brush HVPS	6.12
2	1ST BTR HVPS #1	–
3	1ST BTR HVPS Y (#2)	6.11
4	1ST BTR HVPS M (#3)	6.11
5	1ST BTR HVPS C (#4)	6.11
6	1ST BTR HVPS K (#5)	6.11
7	1ST BTR HVPS #6	6.11
8	ReC Roll HVPS	6.12
9	Retract Roll #5 HVPS	6.12
10	2ND BTB HVPS	6.12
11	2ND BTB DTR/ESB HVPS	6.20

No.	HVPS Name	No.
25	PCC HVPS K (#5)	18.4
26	PCC HVPS C (#4)	18.4
27	PCC HVPS M (#3)	18.4
28	PCC HVPS Y (#2)	18.5
29	PCC HVPS #1	18.5

j0cx740018

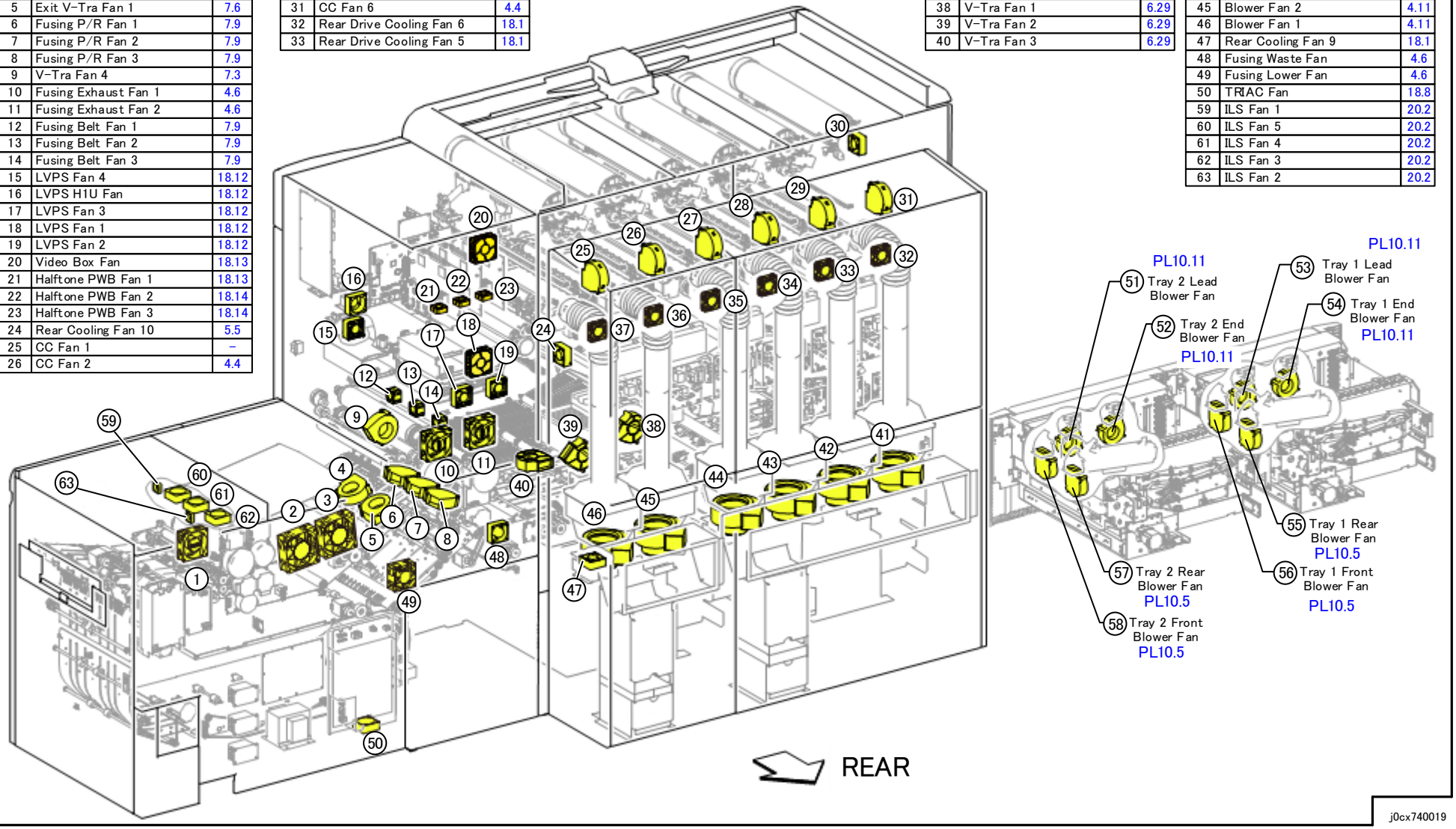
7.4.19 FAN LOCATION

No.	Fan Name	PL
1	IOT-R Rear Cooling Fan	4.5
2	Heat Sink Fan 2	4.5
3	Heat Sink Fan 1	4.5
4	Exit V-Tra Fan 2	7.6
5	Exit V-Tra Fan 1	7.6
6	Fusing P/R Fan 1	7.9
7	Fusing P/R Fan 2	7.9
8	Fusing P/R Fan 3	7.9
9	V-Tra Fan 4	7.3
10	Fusing Exhaust Fan 1	4.6
11	Fusing Exhaust Fan 2	4.6
12	Fusing Belt Fan 1	7.9
13	Fusing Belt Fan 2	7.9
14	Fusing Belt Fan 3	7.9
15	LVPS Fan 4	18.12
16	LVPS H1U Fan	18.12
17	LVPS Fan 3	18.12
18	LVPS Fan 1	18.12
19	LVPS Fan 2	18.12
20	Video Box Fan	18.13
21	Halftone PWB Fan 1	18.13
22	Halftone PWB Fan 2	18.14
23	Halftone PWB Fan 3	18.14
24	Rear Cooling Fan 10	5.5
25	CC Fan 1	–
26	CC Fan 2	4.4

No.	Fan Name	PL
27	CC Fan 3	4.4
28	CC Fan 4	4.4
29	CC Fan 5	4.4
30	ROS Fan 1	4.3
31	CC Fan 6	4.4
32	Rear Drive Cooling Fan 6	18.1
33	Rear Drive Cooling Fan 5	18.1

No.	Fan Name	PL
34	Rear Drive Cooling Fan 4	18.1
35	Rear Drive Cooling Fan 3	18.1
36	Rear Drive Cooling Fan 2	18.1
37	Rear Drive Cooling Fan 1	18.1
38	V-Tra Fan 1	6.29
39	V-Tra Fan 2	6.29
40	V-Tra Fan 3	6.29

No.	Fan Name	PL
41	Blower Fan 6	4.10
42	Blower Fan 5	4.10
43	Blower Fan 4	4.10
44	Blower Fan 3	4.10
45	Blower Fan 2	4.11
46	Blower Fan 1	4.11
47	Rear Cooling Fan 9	18.1
48	Fusing Waste Fan	4.6
49	Fusing Lower Fan	4.6
50	TRIAC Fan	18.8
59	ILS Fan 1	20.2
60	ILS Fan 5	20.2
61	ILS Fan 4	20.2
62	ILS Fan 3	20.2
63	ILS Fan 2	20.2



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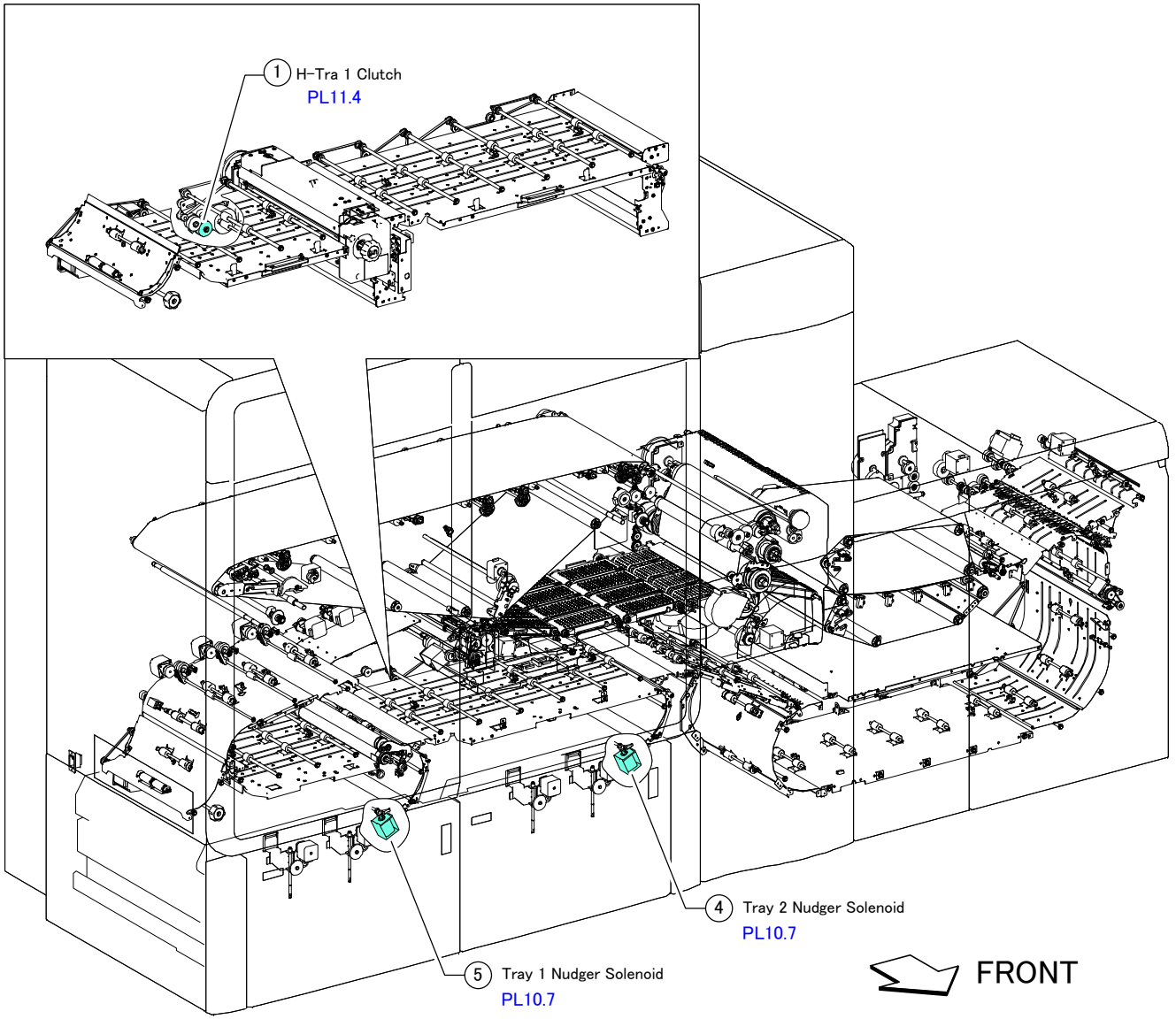
7.4.20 CLUTCH SOLENOID LOCATION



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Chapter 9 Installation/Removal

9 Installation / Removal

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9.1.1.1 Installation of Main Unit (1 of 14)

Before Starting

- This procedure manual is created for 6 Color Type. Skip the steps for servicing the parts that are not fitted and proceed.
- For installation on this machine, the Print Server related Option is required. Prepare and install as a series of tasks.

  NOTE: *Although the physical installation of Print Server is described in the installation guide of this manual, refer to the Print Server service manual for settings, etc.*

- When installing the Mobility Plate, refer to the following.
  - 9.1.6.1 Installation of Mobility Plate
- When installing Option at the same time, refer to the following for more efficient servicing.
  - Finisher/HCS (Supplement)
  - HCF A3 & 2nd HCF A3 (Supplement)
  - Air Suction Feeder (Supplement)
  - For other options, refer to the various items in Chapter 9.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

CAUTION

When connecting to an outlet, do not overload the electrical circuit.

CAUTION

Before turning ON the power, check the power supply voltage supplied to the machine body and change the power connector. (Refer to Step 18 in 9.1.1.13)

Installation Procedure

1. Open the package and check the Bundled Items.
   - IOT-L-Related Supplied Items (Figure 1)

Table 1

No	Name	Qty
1	IOT-L Left Cover Assembly/(Machine Screw M4 x8)	1/(6)
2	IOT-L Left Low Cover/(Machine Screw M4 x8)	1/(4)
3	ECO BOX Unit	1
4	Hose	4
5	Duct Hose	4
6	Hose Hook	4
7	ROS Window Tool	1
8	Machine Screw M4 x8	3
9	Size Label (in Tray 1 Assembly)	1

Table 1

No	Name	Qty
10	Service Log (in IOT-L Front Left Door inner pocket)	1
11	Factory Shipment Samples (in IOT-L Front Left Door inner pocket)	1
12	Bag (in IOT-L Front Right Door inner pocket)	1
13	NVM Sheet (in IOT-L Front Right Door inner pocket)	1

NOTE: *No illustrations for No. 9 to 13.*

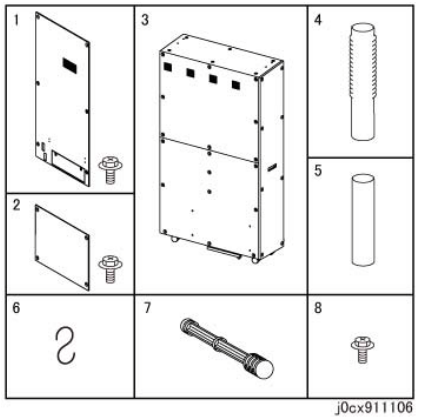


Figure 1 j0cx911106

- ECO Box Unit 2-Related Supplied Items (6 Color Type) (Figure 2)

Table 2

No	Name	Qty
1	ECO Box Unit2	1
2	Joint Bracket	1
3	Joint	4
4	Hose Hook	2
5	Hose	2
6	Duct Hose	2
7	Machine Screw (M4 x8)	8

NOTE: *No illustrations for No. 7.*

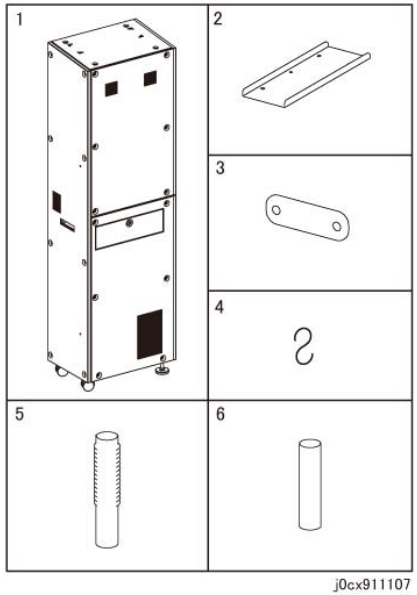


Figure 2 j0cx911107

- Feeder Tray Cover-Related Supplied Items (Figure 3)

Table 3

No	Name	Qty
1	Right Tray Cover Assembly	1
2	Left Tray Cover Assembly	1
3	Harness Cover	2
4	DEL Screw (M3 x6)	12
5	Machine Screw (M3 x8)	2

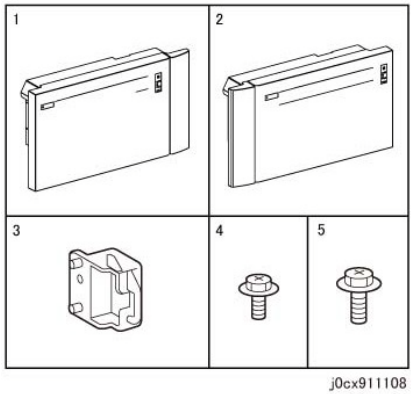


Figure 3 j0cx911108

- IOT-L/R-Related Supplied items (Figure 4) (Figure 5) (Figure 6)

Table 4

No	Name	Qty
1	Fusing Tool Kit	1
2	Allen Key	1
3	Plate Spanner	1
4	Wrench	1
5	Inner Frame Cover	1
6	CLG Upper Front Cover/(HEXALOBULAR Screw M4 x8)	1/(3)
7	Safety Plate/(DEL Screw M3 x6)	2/(4)
8	CC Assembly	2
9	Latch Assembly/(HEXALOBULAR Screw M4 x8)	1/(4)
10	Drawer Handle Assembly-3	1
11	Fusing Handle Assembly-5/(Machine Screw M4 x12, Machine Screw M3 x8)	1/(3, 3)
12	Exit Drawer Handle Assembly-6	1
13	Stopper Assembly/(Machine Screw M4 x8)	1/(2)
14	Clamp	7
15	Allen Key	1
16	Docking Screw	2
17	Cap	4
18	Sems Screw (Unused)	1
19	Inner Left Upper Cover / Switch Guard (#545256-) / (Machine Screw M4x8)	1 / 1 / (2)
20	Wheel Assembly	1
21	Fly Wheel	1
22	Inner Left Lower Cover	1
23	2nd Belt Assembly	1

Table 4

No	Name	Qty
24	V-Transport Front Cover	2
25	V-Transport Rear Cover Assembly/(HEXALOBULAR Screw M3 x6)	1/(5)
26	Safety Guide	1

NOTE: *No illustrations for No. 26.*

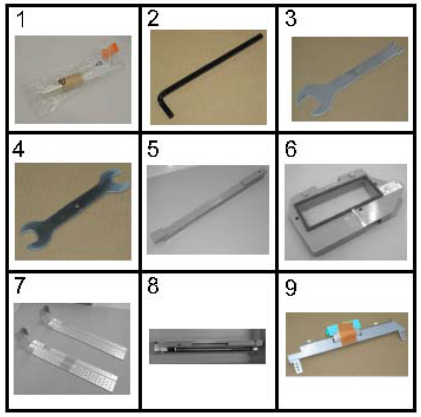


Figure 4 j0kol911001

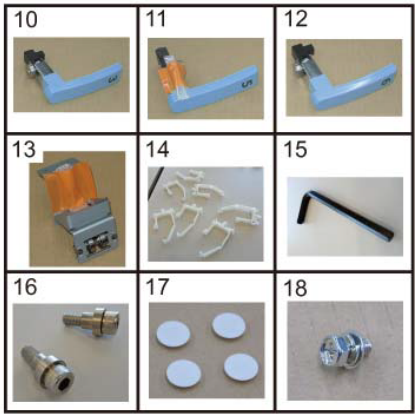


Figure 5 j0kol911002

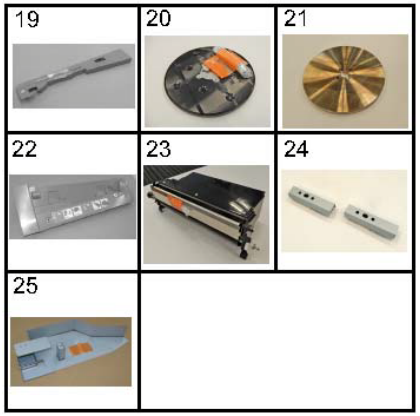


Figure 6 j0kol911084

- LVPS-Related Supplied Items (Figure 7)

Table 5

No	Name	Qty
1	LVPS S24 Chassis Assembly	1
2	LVPS H1U Chassis Assembly	1
3	Machine Screw (M3 x6)	8

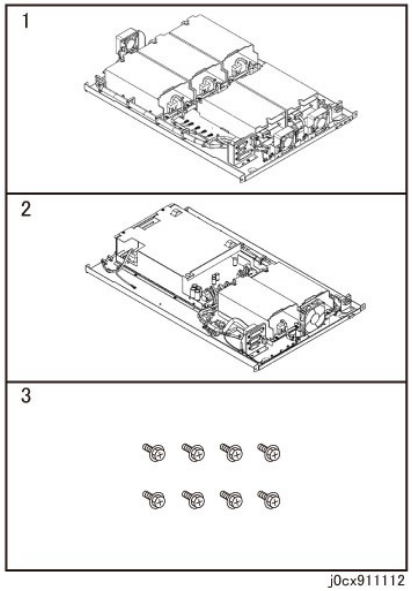


Figure 7 j0cx911112

- Toner Cartridge-Related Supplied Items

Table 6

No	Name	Qty
1	Toner Cartridge (Y)	1
2	Toner Cartridge (M)	1
3	Toner Cartridge (C)	1
4	Toner Cartridge (K)	1
5	Toner Cartridge (CLR/GLD/SLV/WHT/TX/PINK) (6 Color Type)	1
6	Toner Cartridge (GLD/SLV/WHT/PINK) (6 Color Type)	1

- PC-UI-Related Supplied Items

Table 7

No	Name	Qty
1	PC	1

- Post Cord Kit Supplied Items (Figure 10)

Table 8

No	Name	Qty
1	Guide Assembly-Post Kit	1
2	Label-Post (for Side Guide)	1
3	Label-Post (for End Guide)	1

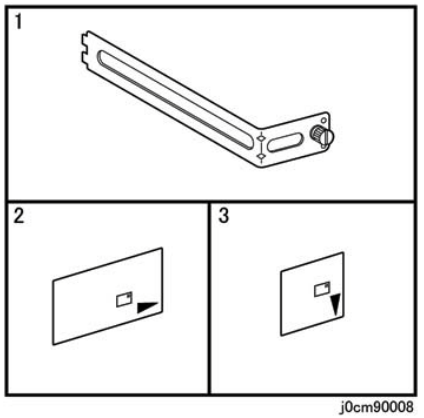


Figure 8 j0cm90008

- Toner Enabling Kit(CLR/GLD/SLV/WHT/TX/PINK) (Figure 11)

Table 9

No	Name	Qty
1	Toner Cartridge (CLR/GLD/SLV/WHT/TX/PINK)	1
2	Dispenser Inner Cover (CLR/GLD/SLV/WHT/TX/PINK)	1
3	Label L (GLD/SLV/WHT/PINK)	2
4	Label R (GLD/SLV/WHT/PINK)	2
5	Label (CLR/GLD/SLV/WHT/TX/PINK)	1
6	Toner Label (CLR/GLD/SLV/WHT/TX/PINK)	1
7	Screw (M3x6)	4

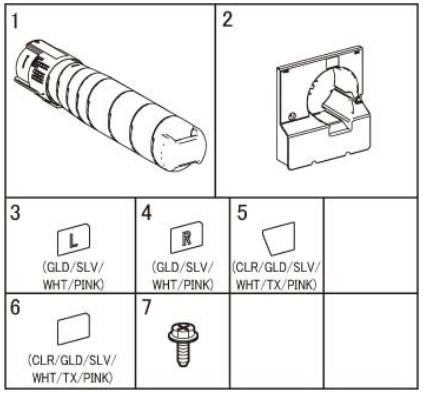


Figure 9 dar917001

- Marking Module Kit (Figure 12)

Table 10

No	Name	Qty
1	MM Assembly (CLR/GLD/SLV/WHT/TX/PINK)	1
2	Shoulder Screw	2
3	Dispenser Assembly (CLR/GLD/SLV/WHT/TX/PINK)	1
4	Drum Cartridge	1
5	Screw (M4x8)	2

*: Label is affixed for identification of WHT only. (Figure 13)

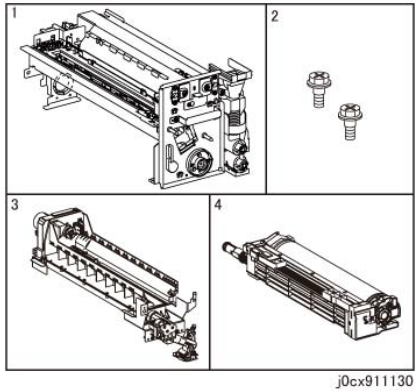


Figure 10 j0cx911130

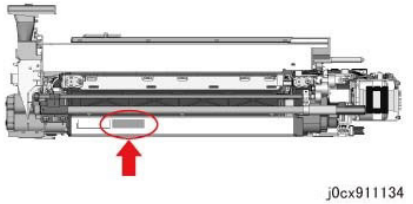


Figure 11 j0cx911134

2. Move the IOT-L to the specified place.
3. Lower the Foot (x6) of IOT-L. (Figure 14)
   (1) Lower the Foot (x6).

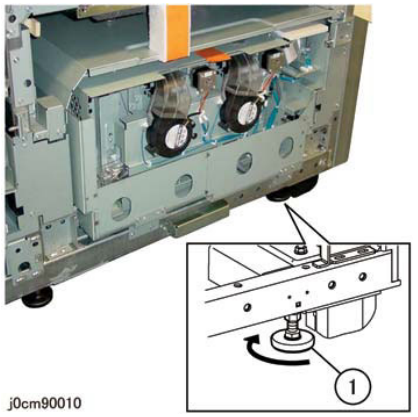


Figure 12 j0cm90010

4. Open the IOT-R Front Right Cover Assembly, and check that the emergency switch and the 3 breakers at the Rear are OFF. (Figure 15)

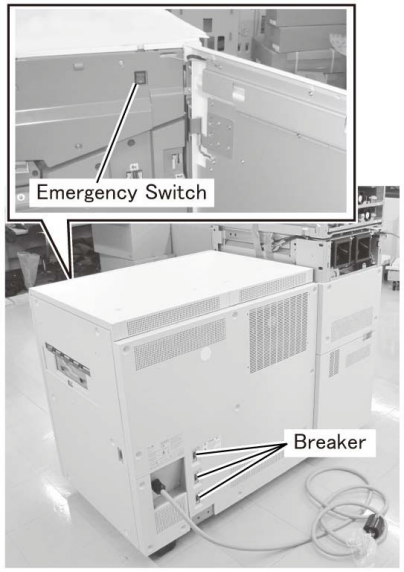


Figure 13 dar911001

5. Remove the ELEC Box Front Plate. (Figure 16)
   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

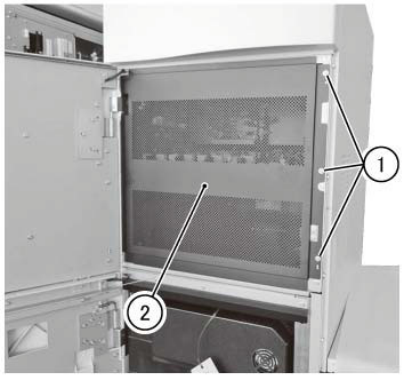


Figure 14 dar418003

6. Go to 9.1.1.2 Installation of Main Unit (2 of 14)

9.1.1.2 Installation of Main Unit (2 of 14)

Installation Procedures (Continue)

1. Remove the Print Server Support Cover. (PL 19.9)
   (1) Remove the Screw (x2).
   (2) Remove the Print Server Support Cover.
2. Remove the Elec Box Rear Cover. (PL 19.9)
   (1) Remove the Screw (x6).
   (2) Remove the Elec Box Rear Cover.
3. Peel off the tape. (Figure 1)

   NOTE: *Do not damage the harness when peeling the tape.*

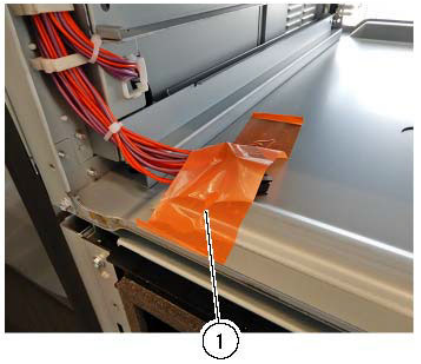


Figure 1 j0kol911152

4. Insert the LVPS S24 Chassis Assembly. (Figure 2)

   NOTE: *Insert it with care so as not to damage the harness.*

   (1) Insert the LVPS S24 Chassis Assembly while lifting, and avoiding the Stopper.

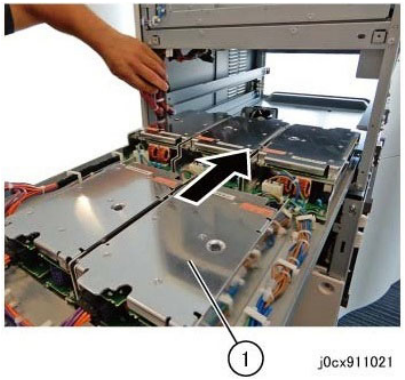


Figure 2 j0cx911021

5. Release the wire harness from the clamp. (Figure 3)
   (1) Release the wire harness from the bottom clamp.

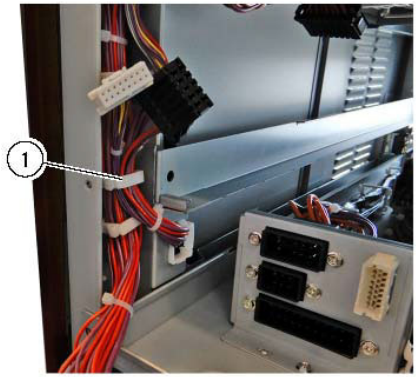


Figure 3 j0kol911153

6. Release the wire harness from the clamp (x3). (Figure 4)
   (1) Release the wire harness from the top clamp (x2).
   (2) Release the wire harness from the rear clamp.

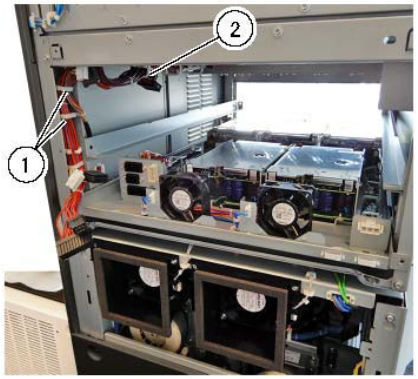


Figure 4 j0kol911154

7. Insert the LVPS H1U Chassis Assembly. (Figure 5)

   NOTE: *Insert it with care so as not to damage the harness.*

   (1) Insert the LVPS H1U Chassis Assembly while lifting, and avoiding the Stopper.

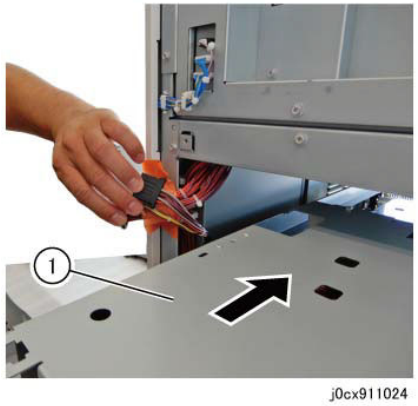


Figure 5 j0cx911024

8. Tighten the Screw (x4) at the Front. (Figure 6)

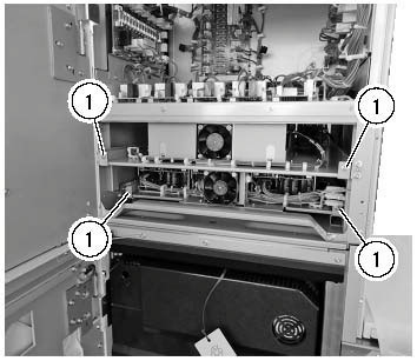


Figure 6 j0kol911155

9. Tighten the Screw (x4) at the Rear. (Figure 7)

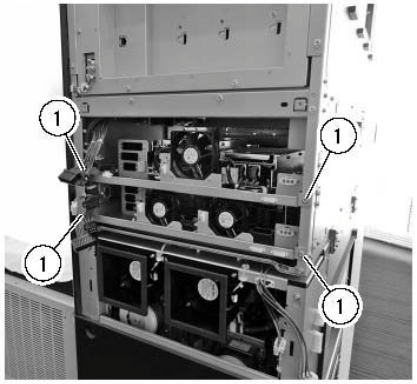


Figure 7 j0kol911156

10. Disconnect the Connector (x4) to the LVPS H1U Chassis Assembly. (Figure 8)
    (1) Connect the Connector (x4).

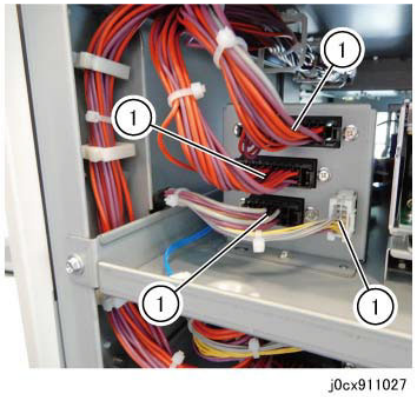


Figure 8 j0cx911027

11. Connect the Connector (x4) to the LVPS S24 Chassis Assembly. (Figure 9)
    (1) Connect the Connector (x4).

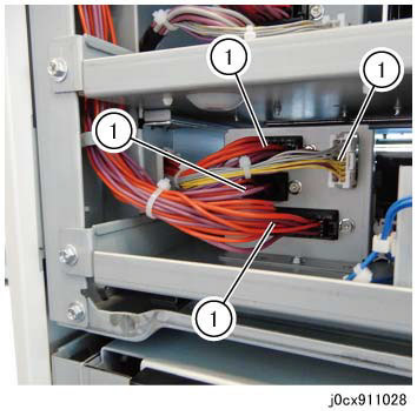
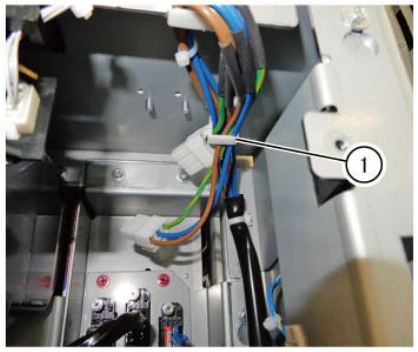


Figure 9 j0cx911028

12. Release the wire harness from the clamp. (Figure 10)



j0cx911029

Figure 10 j0cx911029

13. Connect the Connector (x2) from the IOT-R, and secure the wire harness by using the clamp (x3). (Figure 11)
    (1) Connect the connector (x2).
    (2) Secure the wire harness by using the clamp (x3).

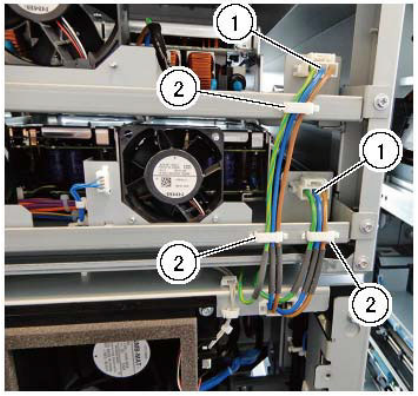


Figure 11 j0kol911109

14. Go to 9.1.1.3 Installation of Main Unit (3 of 14)

9.1.1.3 Installation of Main Unit (3 of 14)

Installation Procedures (Continue)

1. Remove the Cushion and tape, and protective seal from the Front of the IOT-L Main Unit. (Figure 1)
   (1) Remove the Cushion (x2).
   (2) Peel off the protective seal.

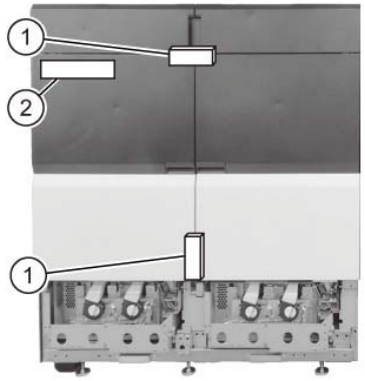


Figure 1 dar911002

2. Remove the tape (x2) from the Rear of the IOT-L Main Unit, and remove the cardboard. (Figure 2)

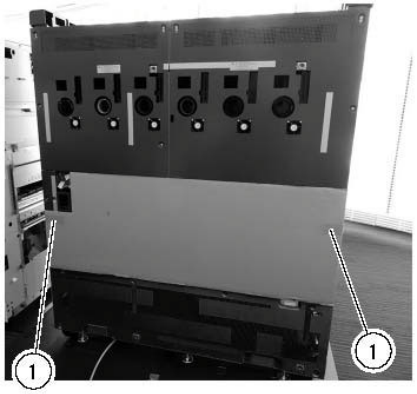


Figure 2 j0kol911157

3. Open the ULeft/Right Dispenser Cover Assembly.
4. Peel off the tape. (Figure 3)
   (1) Peel off the tape.

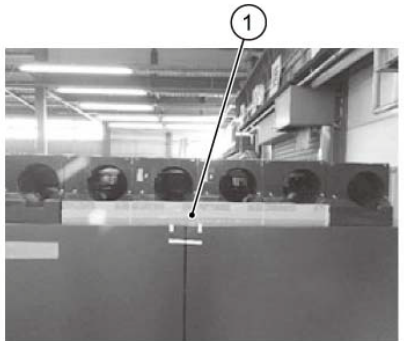


Figure 3 dar911003

5. Open the IOT-L Front Left Door/IOT-L Front Right Door.
6. Remove the tape and Cushion. (Figure 4)
   (1) Peel off the tape (x6), and remove the Cushion.
   (2) Peel off the tape (x4).

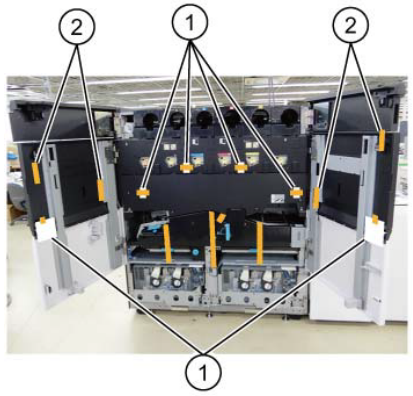


Figure 4 j0kol911005

7. Remove the IBT Front Cover, and remove the packing material. (Figure 5)
   (1) Loosen the Screw (x4). However, the Screw can not be removed from the IBT Front Cover.
   (2) Remove the IBT Front Cover.
   (3) Remove the packaging materials (x2).

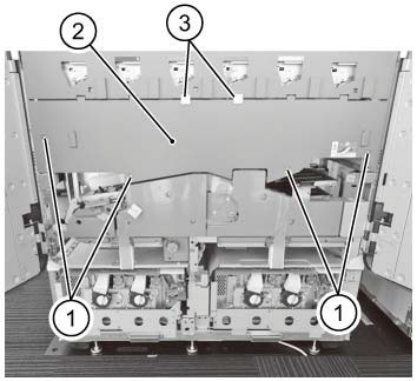


Figure 5 j0kol911006

8. Secure the IBT Frame, and remove the Shipping Bracket (x2). (Figure 6)

   NOTE: *Be sure to remove the Shipping Bracket (x2) before docking IOT-R and IOT-L.*

   (1) Remove the Screw.
   (2) Remove the Screw (x2).
   (3) Remove the Shipping Bracket.
   (4) Remove the Screw.
   (5) Remove the Screw (x2).
   (6) Remove the Shipping Bracket.

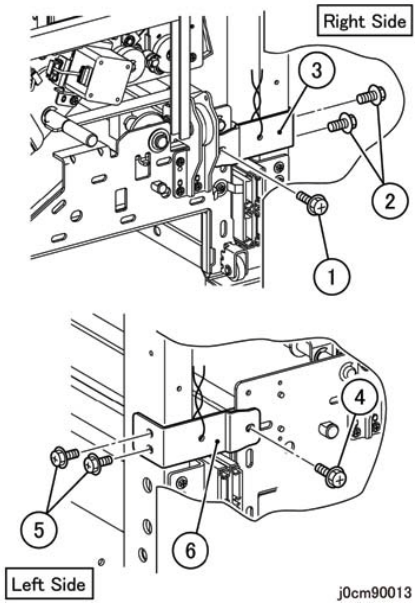


Figure 6 j0cm90013

9. Release the bundle of ROS cables. (Figure 7)
   (1) Remove tape and protective cover.
   (2) Release the ROS cables.

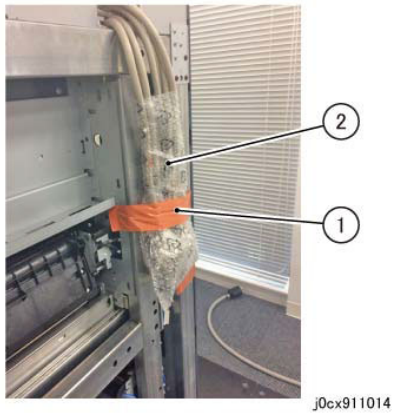


Figure 7 j0cx911014

10. Remove the tape of Pre Regi Assy. (Figure 8)
    (1) Peel off the tape.

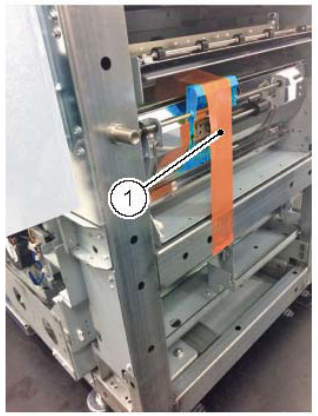


Figure 8 j0kol911007

11. Move the IOT-R closer to IOT-L.
12. Insert the ROS Cable from IOT-L into the Cover hole of IOT-R. (Figure 9)
    [6 Color Type]
    (1) Insert the Data Cable (1/2/3/4/5/6).
    [4 Color Type]
    (1) Insert the Data Cable (2/3/4/5).

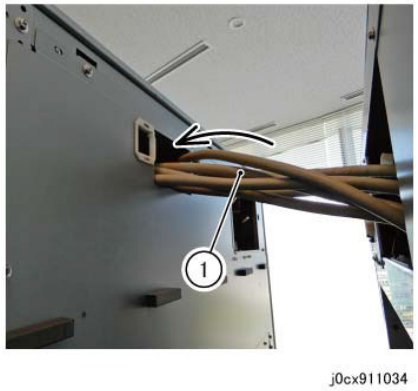


Figure 9 j0cx911034

13. Move the IOT-R even closer to ascertain the position of the docking pin (x2) on the IOT-L side and the square hole (x2) on the IOT-R side for the pin, and adjust the height of IOT-R by turning the Caster (x2). (Figure 10)

NOTE: *Dock it while being careful not to bend the plate.*

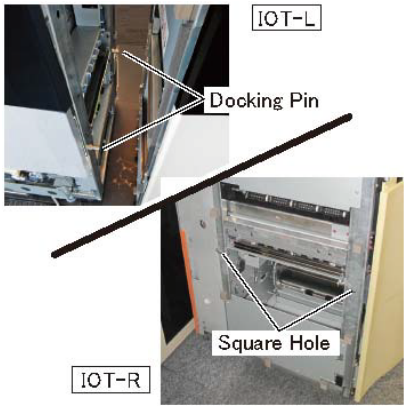


Figure 10 j0kol911110

14. [When Height Adjustment is Required]
    Perform Steps 15, 16 and 17 if required, then proceed to Step 18.
    [When height adjustment is not required]
    Proceed to Step 16.
15. [Front Side]
    Open the IOT-R Front Left Cover, and adjust the height of IOT-R by turning the Caster at the Front. (Figure 11)
    (1) Remove the Nut (x2) using the Plate Spanner supplied.
    (2) Using the Allen Key supplied, turn the Caster to adjust.

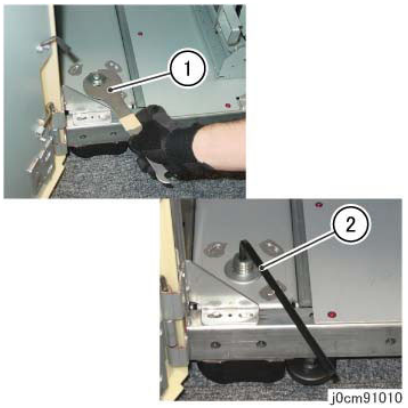


Figure 11 j0cm91010

16. [Read Side]
    - Open the Toner Bottle Cover Assembly, and take out the Toner Bottle. (Figure 12)
      (1) Pull out the Bottle Box.
      (2) Remove the Toner Bottle.

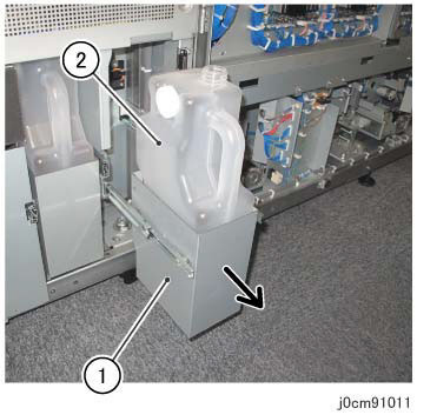


Figure 12 j0cm91011

- Remove the Bottle Box. (Figure 13)
  (1) Remove the Stopper of the Left/Right Rail, and remove the Bottle Box.

Figure 13 j0cm91072

- Push in the Left and Right Rail.
- Adjust the height of the IOT-R by rotating the Caster at the rear. (Figure 14)
  (1) Remove the Nut (x2) using the Plate Spanner supplied.
  (2) Using the Allen Key supplied, turn the Caster to adjust.

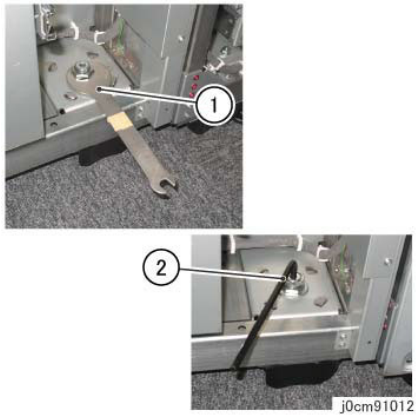


Figure 14 j0cm91012

17. Reinstall the Nut (x2) removed in Steps 13 and 14.
18. Dock the IOT-L and IOT-R, and secure them using the Docking Screw (x2). (Figure 15)

    NOTE: *Be careful not to pinch the ROS Cable (x4).*

    NOTE: *Be careful of over tightening the Docking Screw.*

    NOTE: *Be careful not to damage the Waste Bottle Position Sensor 2 when tightening the Docking Screw at the Rear.*

    (1) Install the Docking Screw.
    (2) Install the Docking Screw.

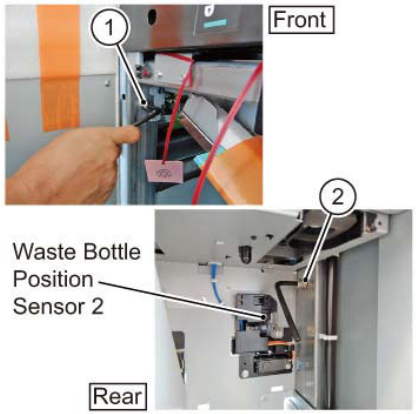


Figure 15 j0kol911008

19. Lower the Foot (x2) of IOT-R. (Figure 16)
    (1) Lower the Foot (x2).

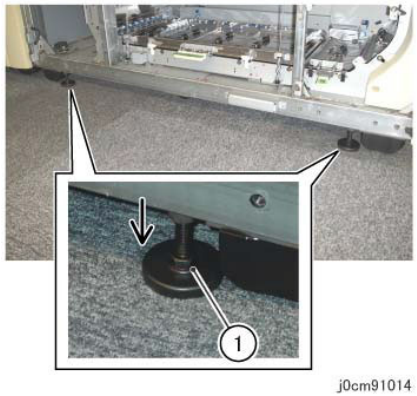


Figure 16 j0cm91014

20. Remove the IOT-R Top Cover. (PL 19.8)
    (1) Remove the Screw (x4).
    (2) Remove the IOT-R Top Cover.
    (3) Peel off the tape, and remove the Cushion. (Figure 17)

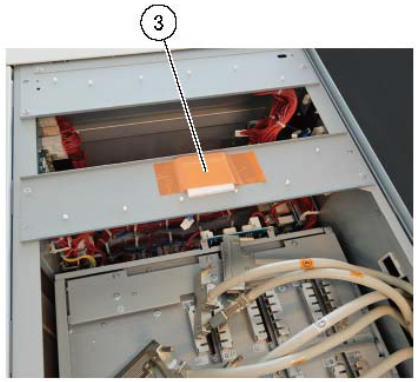


Figure 17 j0kol911111

21. Go to 9.1.1.4 Installation of Main Unit (4 of 14)

9.1.1.4 Installation of Main Unit (4 of 14)

Installation Procedures (Continue)

1. Connect the ROS Cable from IOT-L to the Video Box Unit according to the number indicated. (Figure 1)
   [6 Color Type]
   ROS Cable (1/2/3/4/5/6)
   [4 Color Type]
   ROS Cable (2/3/4/5)
   (1) Connect the ROS Cable.
   (2) Secure the ROS Cable by using the clamp (x2).

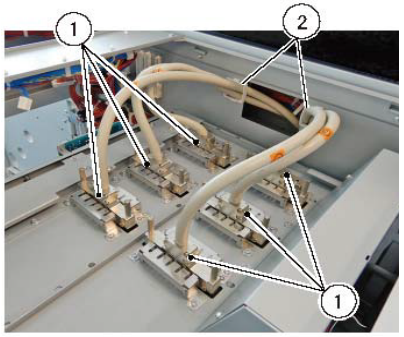


Figure 1 j0kol911112

2. Connect the Connector (x12) from IOT-R to IOT-L. (Figure 2)

   NOTE: *Connector must be securely connected so that it does not become half connected.*

   (1) Connect the Connector (x11).

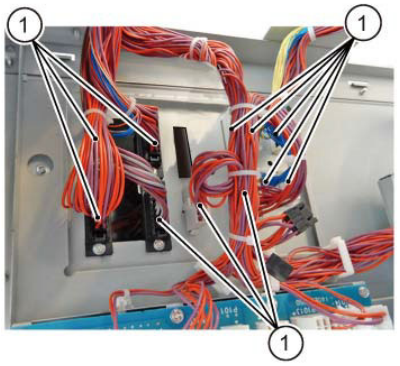


Figure 2 j0kol911092

3. Reinstall the ELEC Box Front Plate that was removed in Step 5 of 9.1.1.1 Installation of Main Unit (1 of 14).
4. Reinstall the IOT-R Top Cover that was removed in Step 16 of 9.1.1.3 Installation of Main Unit (3 of 14).
5. Reinstall the Elec Box Rear Cover that was removed in Step 2 of 9.1.1.2 Installation of Main Unit (2 of 14).

   NOTE: *In order to prevent bulging, install while holding down the center part of the Cover.*

6. Remove the IOT-L Rear Lower Cover. (Figure 3)
   (1) Loosen the Screw (x2).
   (2) Remove the Screw (x9).
   (3) Remove the IOT-L Rear Lower Cover.

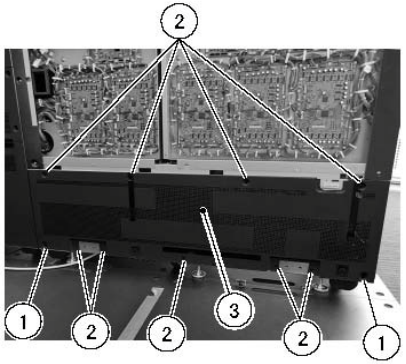


Figure 3 j0kol911113

7. Remove the IOT-L Rear Right Cover and IOT-L Rear Mid Cover. (Figure 4)

(1) Loosen the Screw (x2).
(2) Remove the Screw (x2).
(3) Remove the IOT-L Rear Right Cover.
(4) Remove the Screw (x2).
(5) Remove the IOT-L Rear Mid Cover.

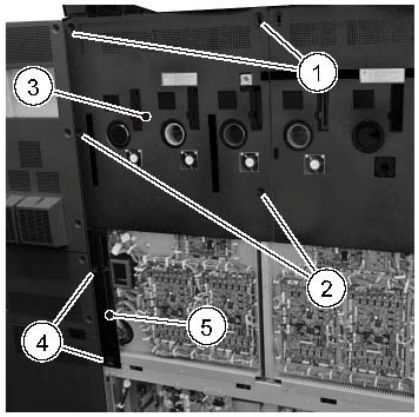


Figure 4 j0kol911114

8. Release Wire Harness, and open the Right PWB Chassis Assembly. (Figure 5)
(1) Release the wire harness from the clamp.
(2) Release the wire harness from the clamp (x2).
(3) Remove the Screw (x6).
(4) Open the Right PWB Chassis Assembly.

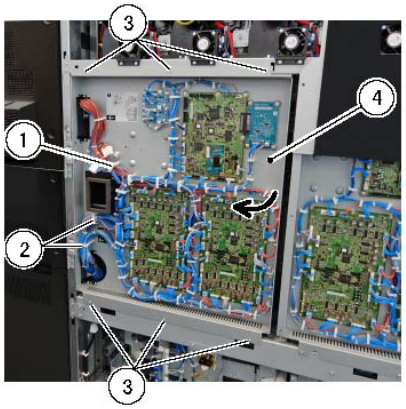


Figure 5 j0kol911115

9. Connect the connector (x2). (Figure 6)

(1) Connect the connector (x2).

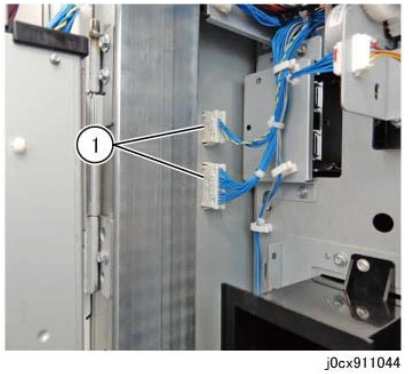


Figure 6 j0cx911044

10. Move the L&R Pipe of the BTB Joint Assembly until it stops at the IOT-R side. (Figure 7)
(1) Remove the Screw.
(2) Move the L&R Pipe.
(3) Tighten the Screw at the hole on the left. (Spare hole on the right side)

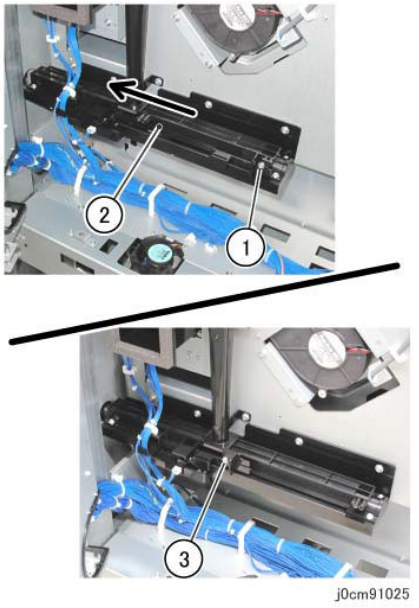


Figure 7 j0cm91025

11. Reinstall the Right PWB Chassis Assembly that was opened in Step 8.

NOTE: *When closing the Right PWB Chassis Assembly, be careful of pinching the Harness that was released in Step 1.*

12. Connect the connector. (Figure 8)
    (1) Connect the connector.

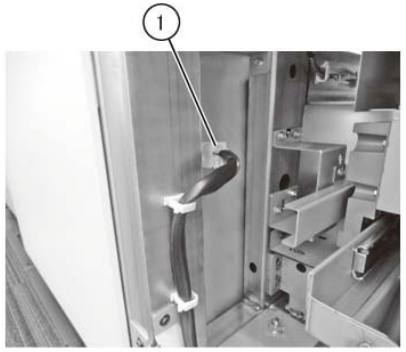


Figure 8 dar911004

13. Install the cushion that protects the arm of Tray 1/2. (Figure 9)
    (1) Push the Arm towards the Front.
    (2) Rotate the cushion counterclockwise, and pull it forward.

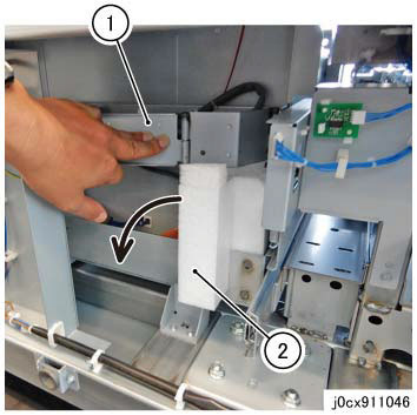


Figure 9 j0cx911046

14. Reinstall the Cover that was removed.
15. Remove the IOT-R Right Cover. (Figure 10)
    (1) Remove the Screw (x6).
    (2) Remove the IOT-R Right Cover.

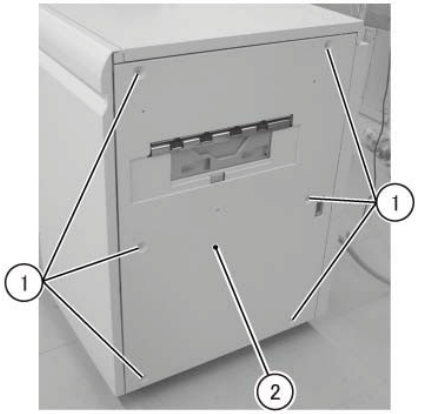


Figure 10 dar911005

16. Remove the Shipping Bracket attached to the Right side of Inverter 1. (Figure 11)
    (1) Remove the Screw (x4).
    (2) Remove the Shipping Bracket.

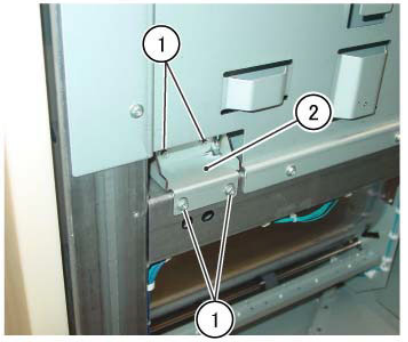


Figure 11 j0cm91033

17. Reinstall the IOT-R Right Cover.
18. Go to 9.1.1.5 Installation of Main Unit (5 of 14)

9.1.1.5 Installation of Main Unit (5 of 14)

Installation Procedures (Continue)

1. Open the IOT-R Front Right/Left Cover Assembly.
2. Remove the packing material, Cushion, and Shipping Bracket of Duplex Transport Assembly and D2 Transport Assembly section. (Figure 1)
   (1) Peel off the tapes and remove the packaging materials.
   (2) Peel off the tape, and remove the Cushion.
   (3) Remove the Screw.
   (4) Remove the Shipping Bracket.

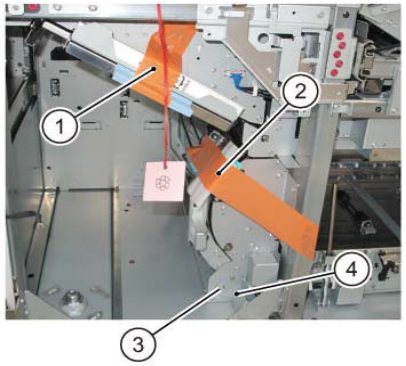


Figure 1 j0kol911009

3. Remove the tape and Cushion. (Figure 2)
   (1) Peel off the tape, and remove the Cushion.

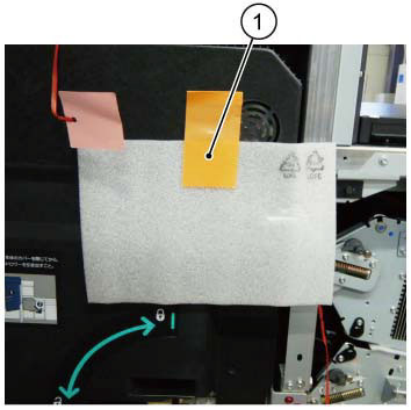


Figure 2 j0kol911094

4. Remove the Shipping Bracket attached to the Frame. (Figure 3)
   (1) Remove the Screw (x4).
   (2) Remove the Bolt (x3) using the Plate Spanner supplied.
   (3) Remove the Shipping Bracket.

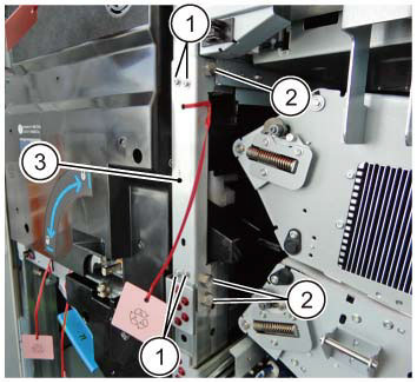


Figure 3 j0kol911010

5. Install the Bracket (x2) for reinforcement. (Figure 4)
   (1) Install the Bracket (x2).
   (2) Tighten the Screw (x4) that was removed in Step 5, and the supplied Screw (x2).

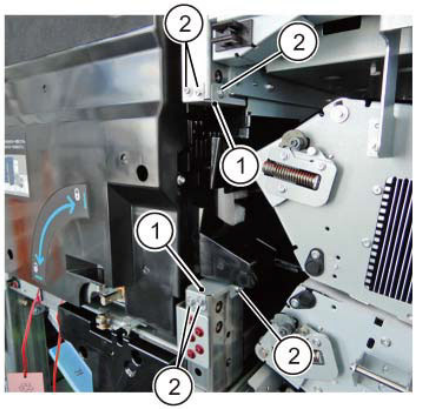


Figure 4 j0kol911011

6. Remove the Fusing Front Cover. (Figure 5)
   (1) Remove the Screw (x3).
   (2) Remove the Fusing Front Cover.

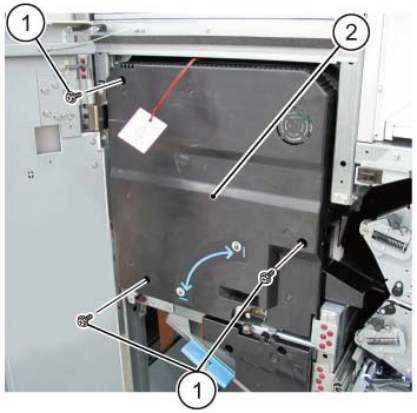


Figure 5 j0kol911012

7. Remove the Shipping Bracket (x2). (Figure 6)
   (1) Remove the Screw (x4).
   (2) Remove the Shipping Bracket.
   (3) Remove the Screw.
   (4) Remove the Shipping Bracket.

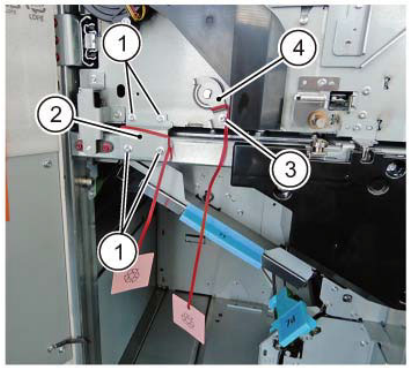


Figure 6 j0kol911013

8. Hold the Bracket at the position shown, and pull out the Fusing Unit. (Figure 7)
   (1) Pull out the Fusing Unit.

Figure 7 j0kol911014

9. Remove the Bracket. (Figure 8)
   (1) Remove the Screw.
   (2) Remove the Bracket.

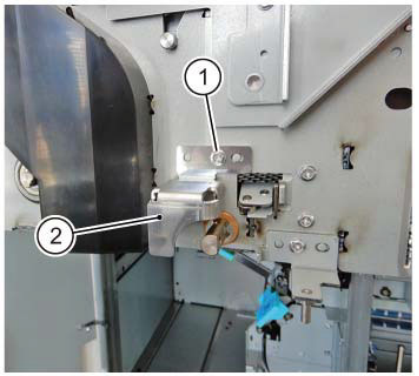


Figure 8 j0kol911015

10. Insert the Fusing Handle Assembly-5 horizontally.
11. Secure the Fusing Handle Assembly-5. (Figure 9)
    (1) Tighten the Machine Screw (M4 x12).
    (2) Tighten the Machine Screw (M3 x8).

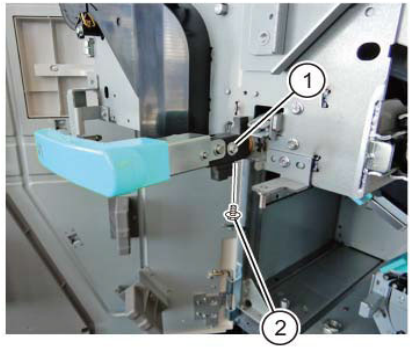


Figure 9 j0kol911016

12. Reinstall the Bracket that was removed in Step 9.
13. Remove the packaging materials (x2). (Figure 10)
    (1) Remove the packaging materials (x2).

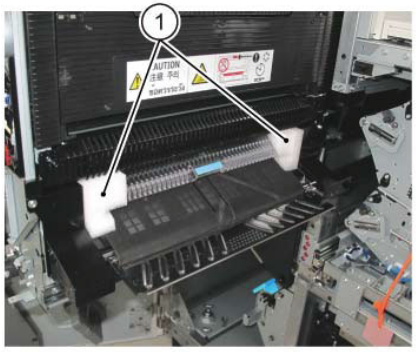


Figure 10 j0kol911017

14. Remove the Screw from the Fusing Rail Assembly on the right side. (Figure 11)
    (1) Remove the Screw, Nylon Washer, and Washer.

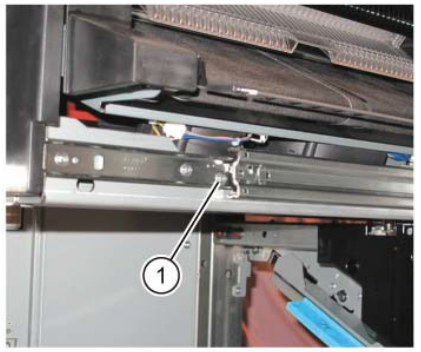


Figure 11 j0kol407001

15. Pull out the Fusing Unit further up to the service position. (Figure 12)
    (1) Remove the 1st of the 2-tier stopper of the left and right Rail by moving the Lever, and pull out the Fusing Unit further.

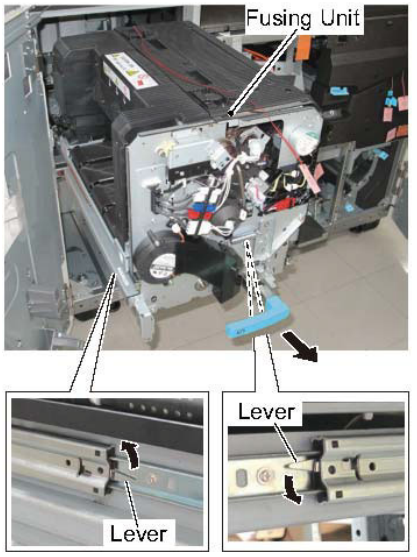


Figure 12 j0kol911018

16. Remove the Exit Cover. (Figure 13)
    (1) Remove the Screw (x2).

(2) Remove the Exit Cover.

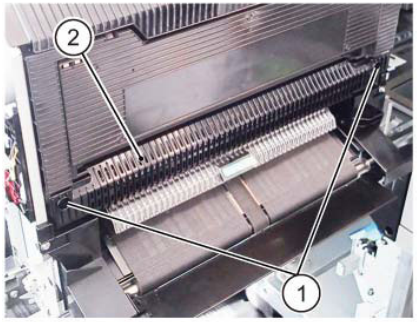


Figure 13 j0kol407007

17. Go to 9.1.1.6 Installation of Main Unit (6 of 14)

9.1.1.6 Installation of Main Unit (6 of 14)

Installation Procedures (Continue)

1. Remove the Exit Chute Assembly. (Figure 1)
   (1) Remove the Screw (x2).
   (2) Remove the Exit Chute Assembly.

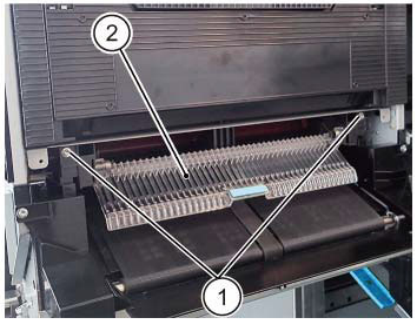


Figure 1 j0kol407008

2. Remove the Exit Front Cover. (Figure 2)
   (1) Remove the Screw.
   (2) Remove the Exit Front Cover.

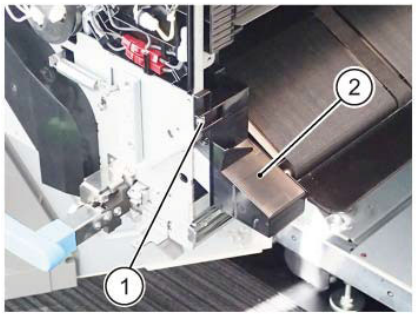
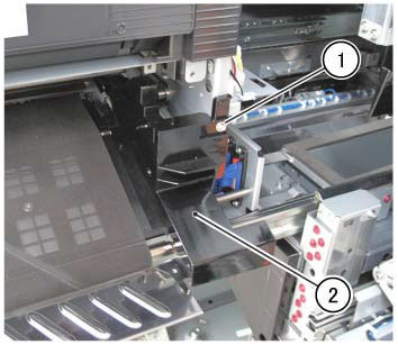


Figure 2 j0kol407009

3. Remove the Exit Rear Cover. (Figure 3)
   (1) Remove the Screw.

(2) Remove the Exit Rear Cover.



j0cm407044

Figure 3 j0cm407044

4. Open the Right Fusing Assembly by removing the Lock Pin Assembly (x2). (Figure 4)
   (1) Remove the Screw.
   (2) Remove the Lock Pin Assembly.
   (3) Remove the Screw.
   (4) Remove the Lock Pin Assembly.
   (5) Open the Right Fusing Assembly.

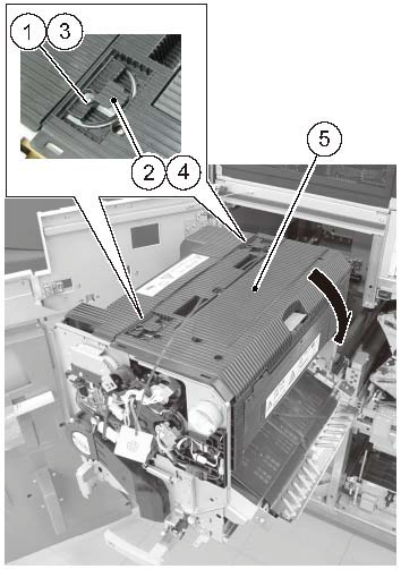


Figure 4 j0kol911019

5. Install the Lock Pin Assembly removed in Step 4 at the position shown. (Figure 5)
   (1) Install the Lock Pin Assembly.
   (2) Tighten the Screw.

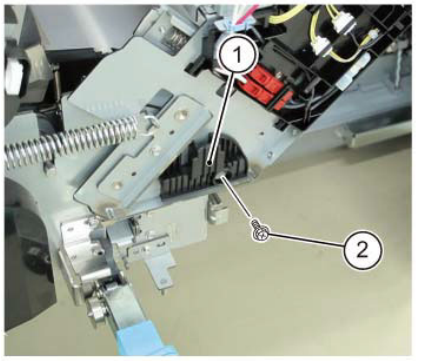
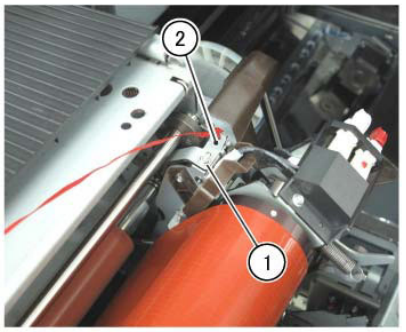


Figure 5 j0kol407011

6. Remove the Shipping Bracket. (Figure 6)
   (1) Remove the Screw.
   (2) Remove the Shipping Bracket.



j0cm91044

Figure 6 j0cm91044

7. Perform Step 1 to Step 5 in reverse order to reinstall the parts.
8. Perform Step 13 to Step 15 of 9.1.1.5 Installation of Main Unit (5 of 14) in reverse order to reinstall the parts.
9. Reinstall the Fusing Front Cover that was removed in Step 5 of 9.1.1.5 Installation of Main Unit (5 of 14).

10. Turn the Fusing Handle Assembly-5 clockwise to lock it.
11. Remove all the tapes at the back of IOT-R Front Left Cover Assembly and IOT-R Front Right Cover Assembly.

    NOTE: *If there is HCS, paste the HCS number label.*

12. Remove the Shipping Bracket (x3) of the Duplex section. (Figure 7)
    (1) Remove the Screw.
    (2) Remove the Shipping Bracket.
    (3) Remove the Screw.
    (4) Remove the Shipping Bracket.
    (5) Remove the Screw.
    (6) Remove the Shipping Bracket.

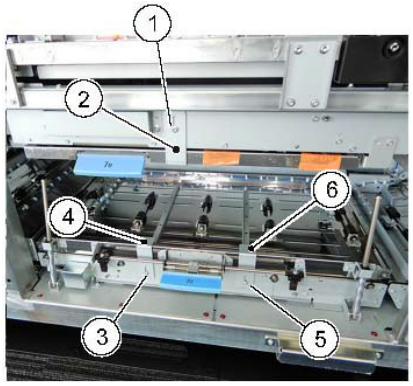


Figure 7 j0kol911020

13. Peel off the tape (x2), and remove the Cushion.
    (1) Open the Duplex Inverter Lower Chute of 7e, and peel off the Tape (x2).
    (2) Remove the Cushion.

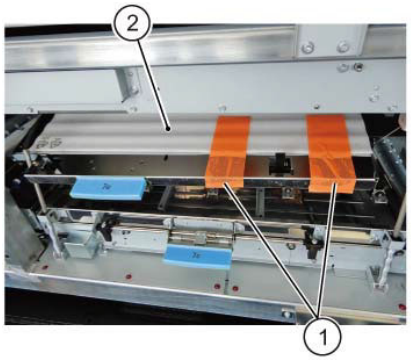


Figure 8 j0kol911021

14. Remove the Shipping Bracket (x2) of the Inverter 2 Assembly. (Figure 9)
    (1) Remove the Screw.
    (2) Remove the Shipping Bracket.
    (3) Remove the Screw.
    (4) Remove the Shipping Bracket.

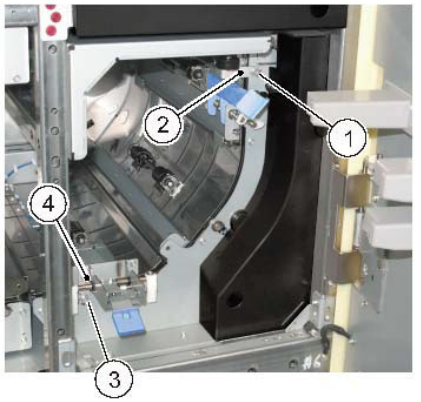


Figure 9 j0kol911022

15. Peel off the Cooling tape. (Figure 10)

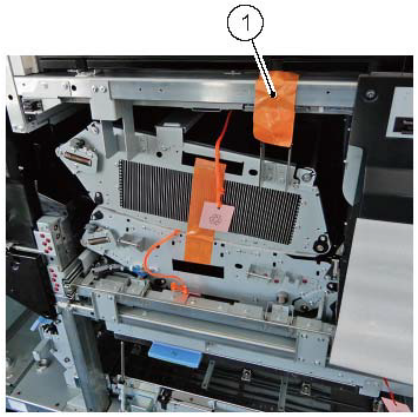
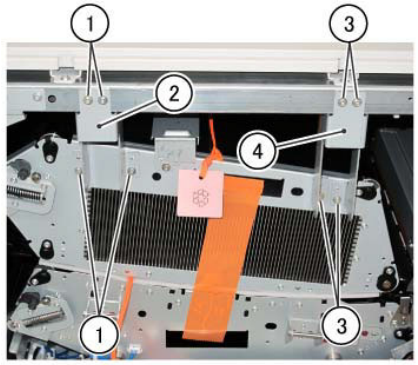


Figure 10 j0kol911023

16. Remove the Shipping Bracket (x2) of Cooling. (Figure 11)
    (1) Remove the Screw (x4).
    (2) Remove the Shipping Bracket.
    (3) Remove the Screw (x4).
    (4) Remove the Shipping Bracket.



j0cm91048

Figure 11 j0cm91048

17. Peel off the tape. (Figure 12)
    (1) Peel off the tape (x3).

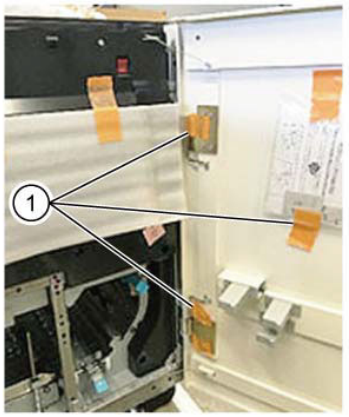


Figure 12 j0kol911095

18. Peel off the tape, and remove the Cushion. (Figure 13)

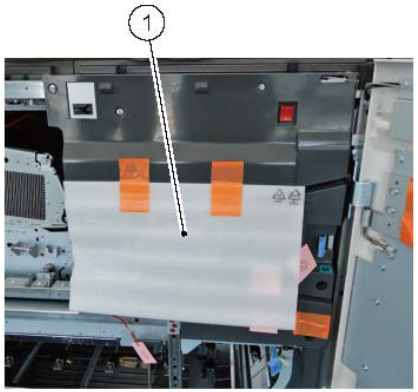


Figure 13 j0kol911024

19. Remove the Shipping Bracket (x2) of the Exit Drawer Unit. (Figure 14)

    NOTE: *Reuse the removed Screw (x8) later in Step 11 and Step 17 of* 9.1.1.7 *Installation of Main Unit (7 of 14).*

    (1) Remove the Screw (x4).
    (2) Remove the Shipping Bracket.
    (3) Remove the Screw (x4).
    (4) Remove the Shipping Bracket.

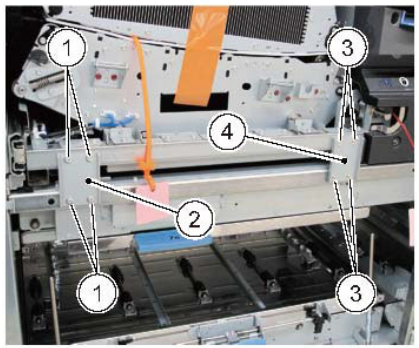


Figure 14 j0kol911025

20. Hold the Exit Drawer Unit at the position shown, and pull it out. (Figure 15)

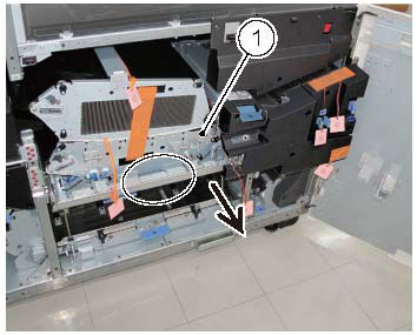


Figure 15 j0kol911026

21. Remove the Inverter 1 Front Cover. (Figure 16)

    NOTE: *Using a short Screw.*

    (1) Peel off the tape.
    (2) Remove the Screw (x2).
    (3) Remove the Inverter 1 Front Cover.

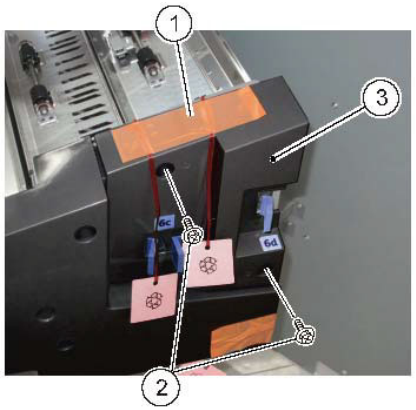


Figure 16 j0kol911027

22. Remove the Inner Right Lower Cover. (Figure 17)
    (1) Peel off the tape.
    (2) Remove the Screw (x5).
    (3) Remove the Inner Right Lower Cover.

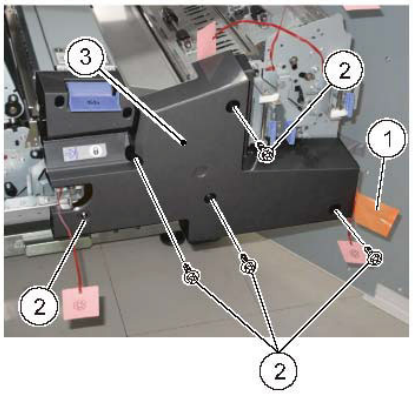


Figure 17 j0kol911028

23. Remove the Shipping Bracket (x3) of the Inverter 1 Assembly. (Figure 18)
    (1) Remove the Screw.
    (2) Remove the Shipping Bracket.
    (3) Remove the Screw.
    (4) Remove the Shipping Bracket.
    (5) Remove the Screw.
    (6) Remove the Shipping Bracket.

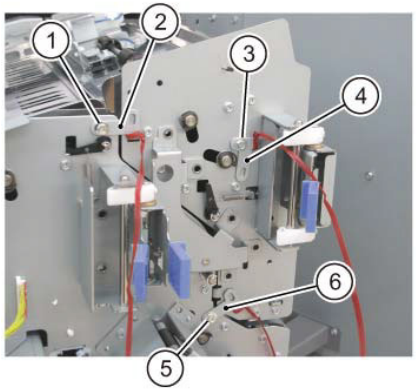


Figure 18 j0kol911029

24. Remove the Screw of the Shipping Bracket of the Upper Decurler Unit. (Figure 19)
    (1) Remove the Screw.

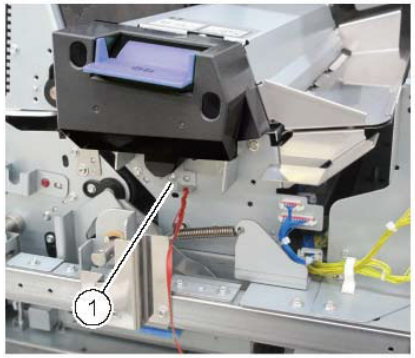


Figure 19 j0kol911030

25. Go to 9.1.1.7 Installation of Main Unit (7 of 14)

9.1.1.7 Installation of Main Unit (7 of 14)

Installation Procedures (Continue)

1. Open the Upper Decurler Assembly.
2. Slide the Shipping Bracket towards the rear, and remove it. (Figure 1)
   (1) Remove the Shipping Bracket.

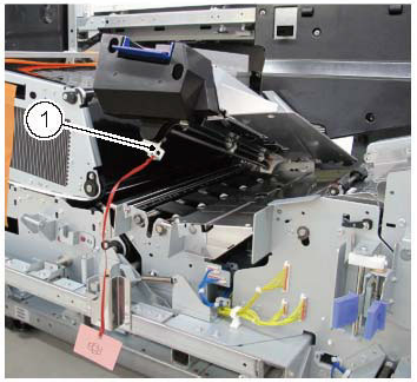


Figure 1 j0kol911031

3. Install the Exit Drawer Handle Assembly-6. (Figure 2)
   (1) Insert the Exit Drawer Handle Assembly-6.
   (2) Tighten the Machine Screw (M4 x12).
   (3) Tighten the Machine Screw (M3 x8).

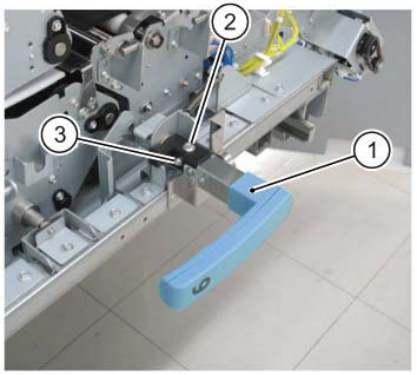


Figure 2 j0kol911032

4. Close the Upper Decurler Assembly.

5. Remove the Shipping Bracket (x2) of Fusing Cooling section. (Figure 3)
   (1) Remove the Shipping Bracket.
   (2) Remove the Shipping Bracket.

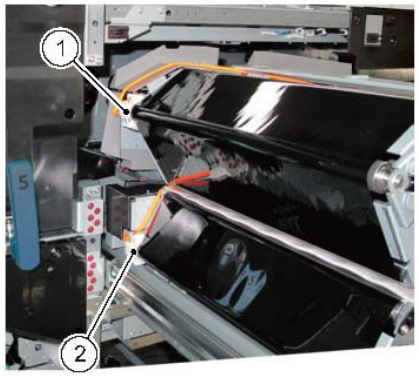


Figure 3 j0kol911033

6. Peel off the tape of the Cooling section. (Figure 4)

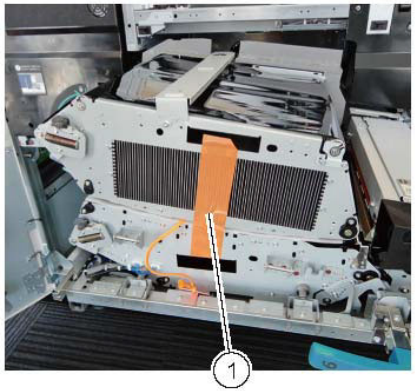


Figure 4 j0kol911034

7. Open the Upper Cooling Assembly.
8. Remove the Cushion on the Lower Cooling Assembly. (Figure 5)
   (1) Remove the Cushion.

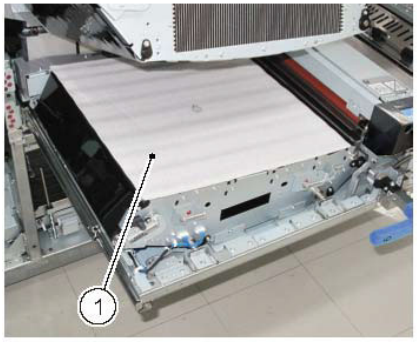


Figure 5 j0kol911035

9. Reinstall the parts removed in Steps 21 and 22 of 9.1.1.6 Installation of Main Unit (6 of 14).
10. Install the Latch Assembly. (Figure 6)
    (1) Install the Latch Assembly.
    (2) Tighten the Hexalobular Screw (M4 x8: 2).

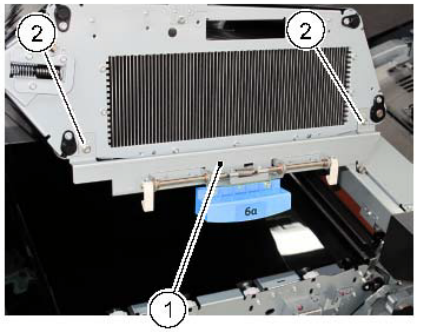


Figure 6 j0kol911036

11. Reuse the Hexalobular Screw (M4 x8) removed in step 19 of 9.1.1.6 the Installation of Main Unit (6 of 14), and install the Inner Left Lower Cover. (Figure 7)
    (1) Install the Inner Left Lower Cover.
    (2) Tighten the Hexalobular Screw (M4 x8: 5).

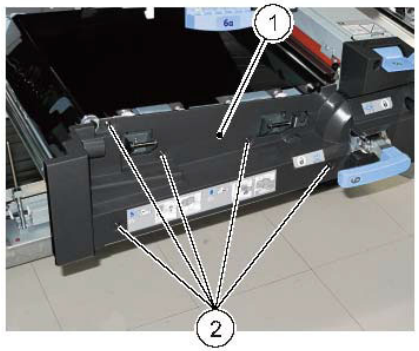


Figure 7 j0kol911037

12. Install the CLG Upper Cover. (Figure 8)
    (1) Install the CLG Upper Cover.
    (2) Tighten the Hexalobular Screw (M4 x8: 3).

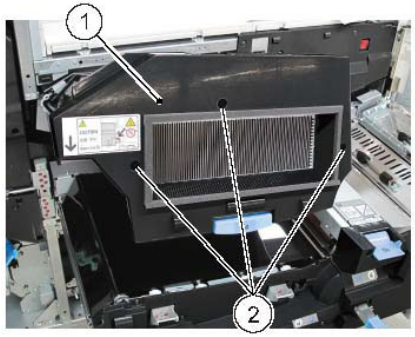


Figure 8 j0kol911038

13. Close the Upper Cooling Assembly.
14. Install the Stopper Assembly. (Figure 9)
    (1) Install the Stopper Assembly.
    (2) Tighten the Machine Screw (M4 x8: 2).

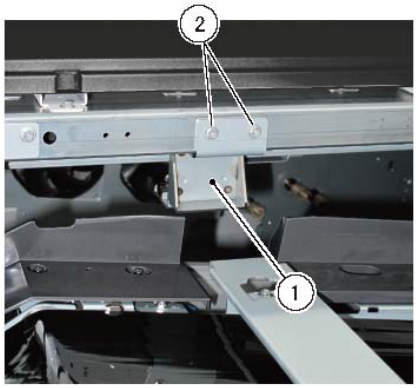


Figure 9 j0kol911116

15. Push in the Exit Drawer Unit.
16. Install the Inner Left Upper Cover. (Figure 10)
    (1) Install the Inner Left Upper Cover.
    (2) Tighten the Machine Screw (M4 x8: 2).

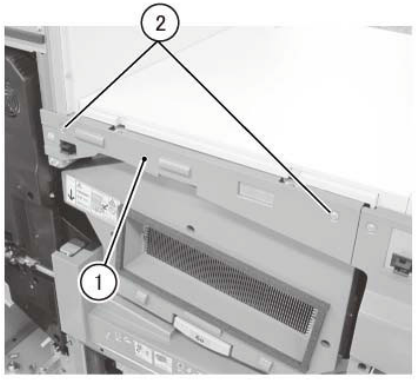


Figure 10 dar911006

NOTE: *After # 545256, the Switch Guard is included with the Inner Left Upper Cover. Install the Switch Guard from the back side of the Inner Left Upper Cover before installing the Inner Left Upper Cover. (Figure 11)*

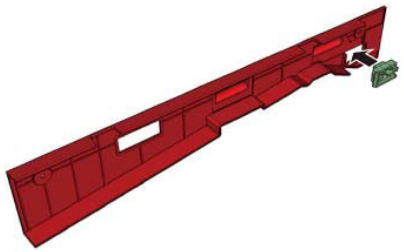


Figure 11 j0cx911152

17. Reuse the HEXALUBULAR Screw (M4 x8) removed in step 19 of 9.1.1.6 the Installation of Main Unit (6 of 14), and install the Inner Frame Cover. (Figure 12)
    (1) Install the Inner Frame Cover.
    (2) Tighten the Hexalobular Screw (M4 x8: 3).

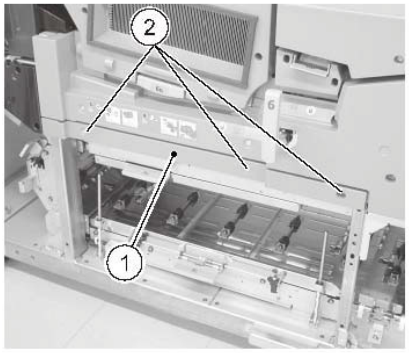


Figure 12 j0kol911040

18. Close the IOT-R Front Right/Left Cover Assembly.
19. Remove the Shipping Bracket (x2) from Tray 1, and pull Tray 1 towards you. (Figure 13)
    (1) Remove the Screw (x4).
    (2) Remove the Shipping Bracket.
    (3) Remove the Screw (x4).
    (4) Remove the Shipping Bracket.
    (5) Pull out Tray 1.

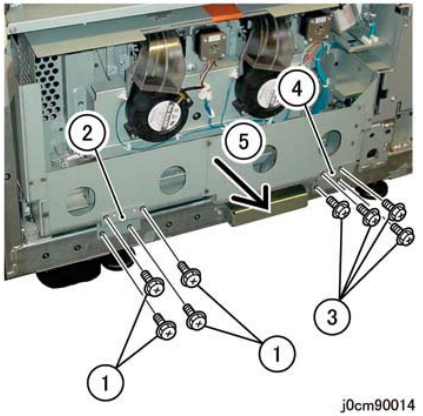


Figure 13 j0cm90014

20. Pull out Tray 1 up to the Service Position. (Figure 14)
    (1) Push in the stopper (x2) of Left Rail/Right Rail simultaneously.
    (2) Pull Tray 1 further out.

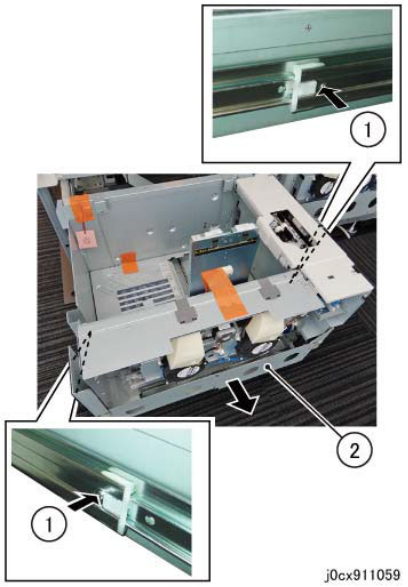


Figure 14 j0cx911059

21. Remove the tapes and packing materials from Tray 1. (Figure 15)

(1) Peel off the tape.
(2) Peel off the tape, and take out the Size Label. (Supplied only for Tray 1)
(3) Peel off the tape (x2), pull the Tag, and remove the packing materials.

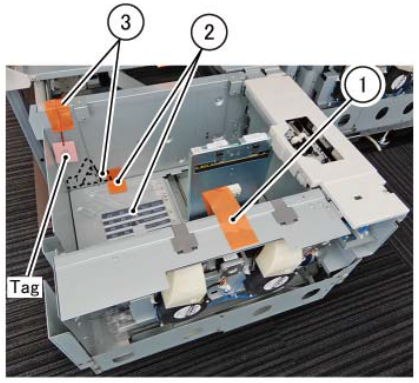


Figure 15 j0cx911060

22. Install the Safety Plate of the supplied items. (Figure 16)
    (1) Install the Safety Plate. However, the Safety Plate should be installed in front of the Tray Rear Frame.
    (2) Tighten the Screw (x2).

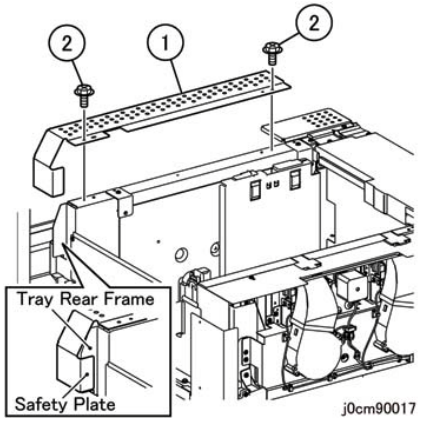


Figure 16 j0cm90017

23. Install the supplied Tray 1 Front Cover Assembly, and tighten the Screw (x3) on the Left. (Figure 17)
    (1) Install the Tray 1 Front Cover Assembly.
    (2) Tighten the DEL Screw (M3 x6: 3).

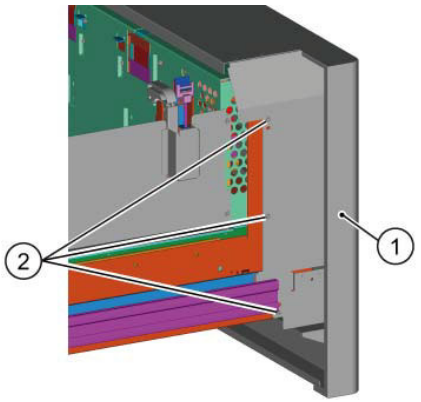


Figure 17 j0kol911090

24. Tighten the Screw (x3) on the Right of Tray 1 Front Cover Assembly, and install Connector and Connector Cover. (Figure 18)
    (1) Tighten the DEL Screw (M3 x6: 3).
    (2) Connect the connector.
    (3) Install the supplied Connector Cover.
    (4) Tighten the Machine Screw (M3 x8).

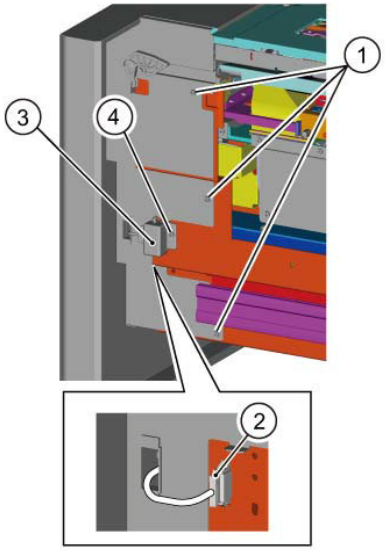


Figure 18 j0kol911091

25. After installing Tray 1 Front Cover Assembly, make sure that the dimensions of the gaps (A) and (B) between IOT-L Front Left Door and Tray 1 Front Cover are the same. If they are not the same, perform the following procedure to make them the same. (Figure 19)
    (1) Pull out Tray 1 Assembly.
    (2) Loosen the Screw (x3).
    (3) Adjust Tray 1 Front Cover Assembly.
    (4) Tighten the Screw (x3).

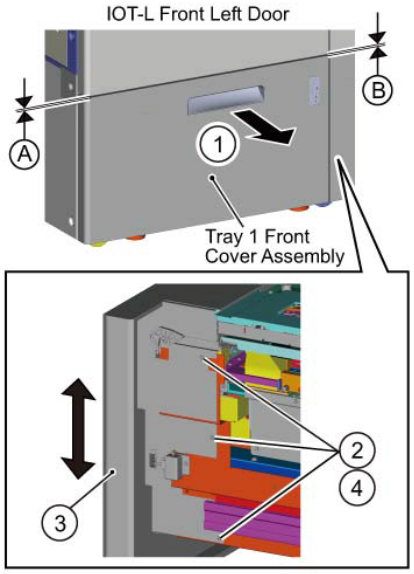


Figure 19 j0kol410011

26. The steps for Tray 2 are the same as Tray 1.
27. Open the IOT-L Front Left/Right Door.
28. Go to 9.1.1.8 Installation of Main Unit (8 of 14)

9.1.1.8 Installation of Main Unit (8 of 14)

Installation Procedures (Continue)

1. Remove the twist tie securing the Pre Regi. Upper Chute. (Figure 1)
    (1) Remove twist tie.

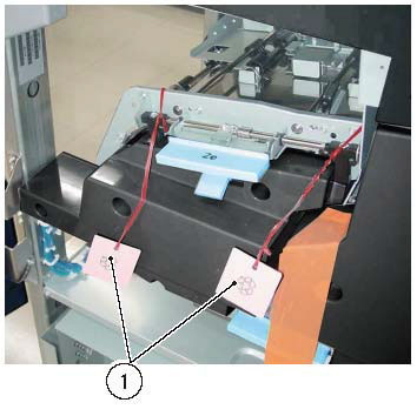


Figure 1 j0kol911041

2. Remove the tapes and packing materials from the Big Module. (Figure 2)
    (1) Remove the tapes and packing materials.
    (2) Peel off the tape (x2), and remove the packing material (x2).
    (3) Peel off the tape only for the Knob section.

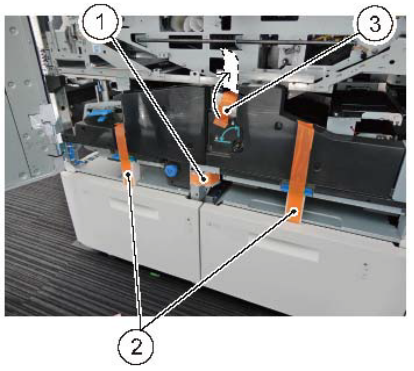


Figure 2 j0kol911042

3. Remove the Drawer Left Cover and Drawer Right Cover. (Figure 3)
    (1) Remove the Screw (x3).
    (2) Remove the Drawer Left Cover.

(3) Loosen the Screw (x3).
(4) Remove the Drawer Right Cover.

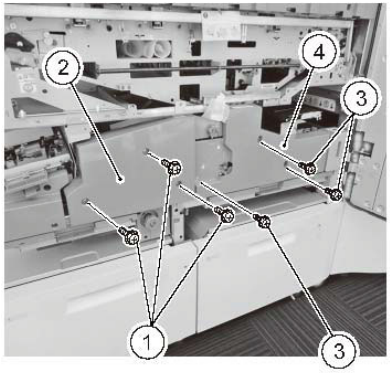


Figure 3 j0kol911043

4. Remove the Shipping Bracket (x2) securing the Drawer Frame. (Figure 4)
   (1) Remove the Screw (x2).
   (2) Remove the Shipping Bracket.
   (3) Remove the Screw (x4).
   (4) Remove the Shipping Bracket.

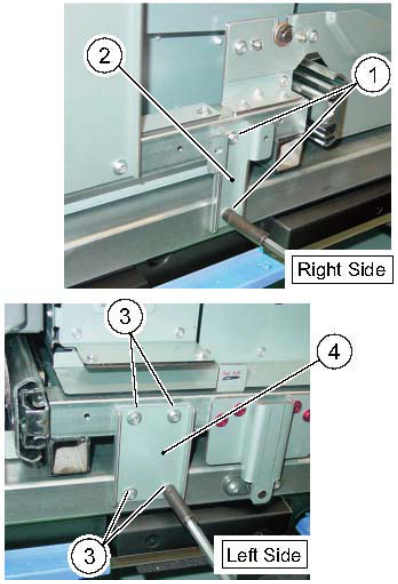


Figure 4 j0kol911044

NOTE: *As there is a plate similar to the Shipping Bracket, do not remove it by mistake. (Figure 5)*

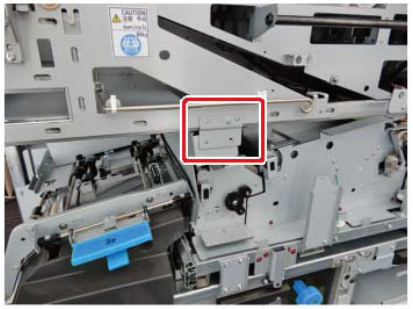


Figure 5 j0kol911045

5. Attach the supplied Handle (Label No. 3) to the Drawer Frame. (Figure 6)
   (1) Install the handle.
   (2) Tighten the Machine Screw (M4 x12).
   (3) Tighten the Machine Screw (M3 x8).

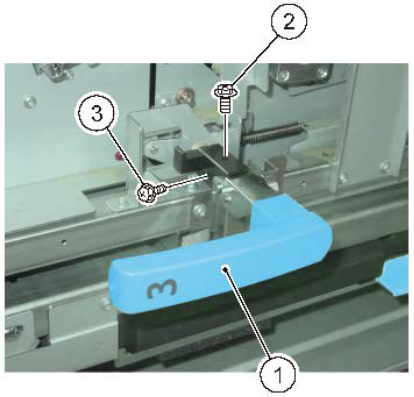


Figure 6 j0kol911046

6. Pull out Big Module up to the Service Position, and remove the tape and cushion of the Knob. (Figure 7)
   (1) Pull out the Big Module.
   (2) Remove the Screw (With Washer, Nylon Washer) from the Left Rail.
   (3) Simultaneously release the Stopper (x2) on Drawer Rail (x2), and pull out the Big Module further.
   (4) Remove the tape and Cushion.

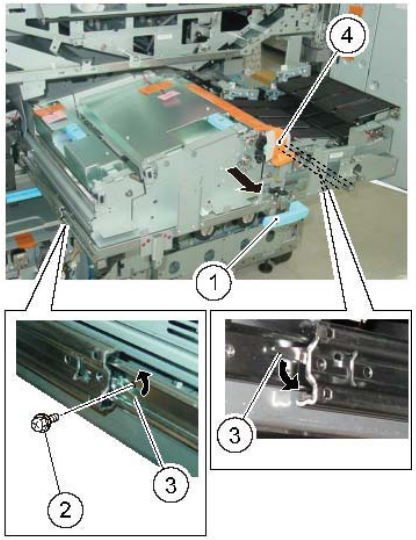


Figure 7 j0kol911047

7. Remove the Gear Cover from the Pre Aligner Assembly. (Figure 8)
   (1) Remove the Screw (x2).
   (2) Remove the Gear Cover.

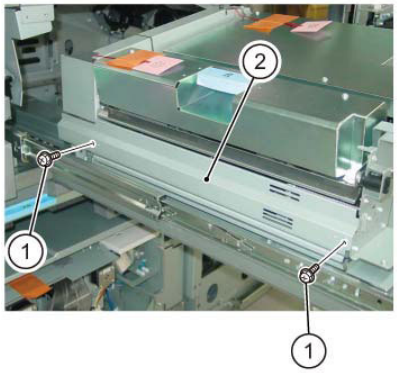


Figure 8 j0kol911048

8. Remove the Shipping Bracket (x4) from the Aligner Assembly. However, when removing the Screw (x4), use a Long Driver. (Figure 9)
   (1) Remove the Screw (x2).
   (2) Remove the Shipping Bracket (x2).
   (3) Remove the Screw.
   (4) Remove the Shipping Bracket.
   (5) Peel off the tape, pull the Tag, and remove the Shipping Bracket.
   (6) Remove the Screw.
   (7) Remove the Shipping Bracket.
   (8) Peel off the tape, pull the Tag, and remove the Shipping Bracket.

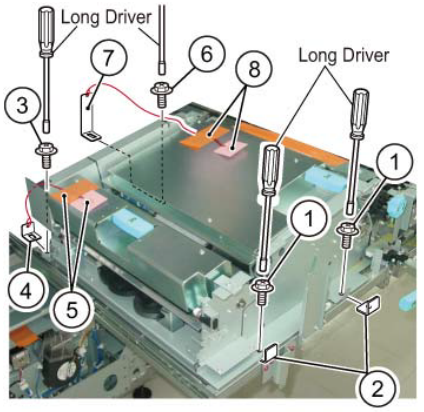


Figure 9 j0kol911049

9. Reinstall the Gear Cover that was removed in Step 7.
10. Remove the Shipping Bracket (x3) from the Pre Aligner Assembly and Aligner Assembly. (Figure 10)
    (1) Remove the Screw (x3).
    (2) Remove the Shipping Bracket (x3).

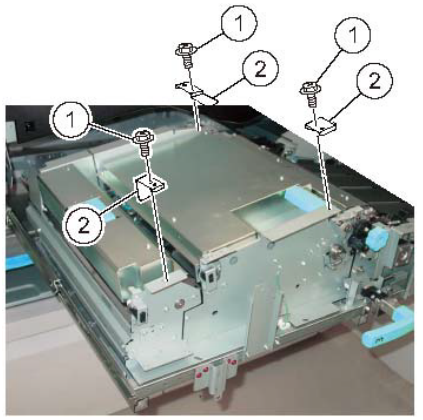


Figure 10 j0kol911050

11. Open the Aligner Upper Chute, and remove the Cushion. (Figure 11)
    (1) Loosen the Screw. and Slide the Stopper Plate.

(2) Open the Aligner Upper Chute.
(3) Peel off the tape, and remove the Cushion.
(4) Close the Aligner Upper Chute.
(5) Reinstall the Stopper Plate, and loosen the Screw.

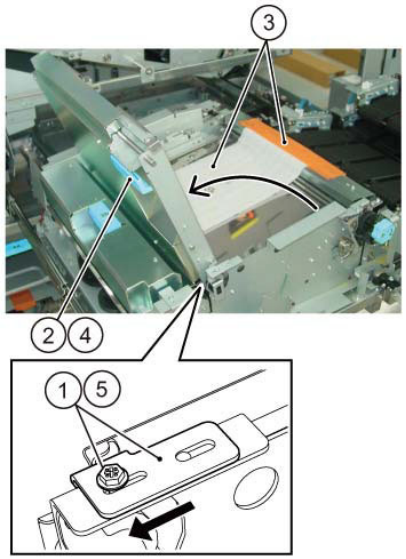


Figure 11 j0kol911051

12. Remove the Screw (x2) securing the BTB Frame Assembly. (Figure 12)
(1) Remove the Screw (x2).
(2) Remove the Tag.

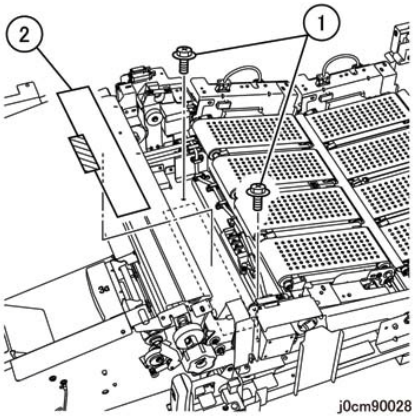


Figure 12 j0cm90028

13. Remove V-Transport 3 Assembly. (Figure 13)

NOTE: *Be careful not to damage the Brush when installing or removing the V-Transport 3 Assembly.*

(1) Remove the Screw (x4). Since this Screw (x4) is reused as a fixture for the V-Transport 3 Assembly, keep it until instructions are given.
(2) Remove the V-Transport 3 Assembly.

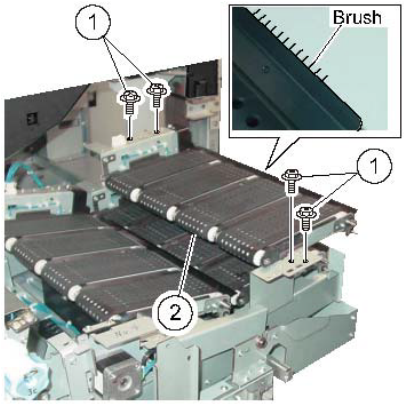


Figure 13 j0kol911052

14. Remove the Front Bracket and Rear Bracket. (Figure 14)
(1) Remove the Screw (x2).
(2) Remove the Rear Bracket.
(3) Remove the Screw (x2).
(4) Remove the Front Bracket.

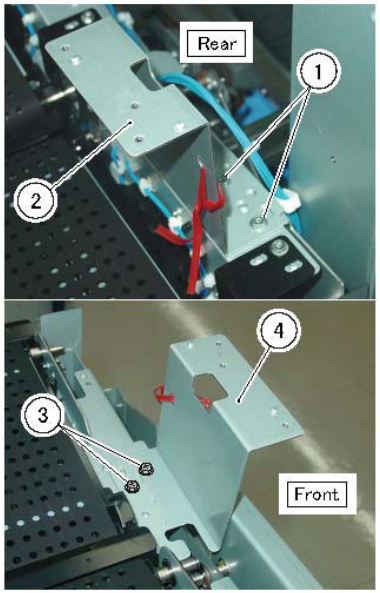


Figure 14 j0kol911117

15. Remove V-Transport 1 Assembly and V-Transport 2 Assembly. (Figure 15)

    NOTE: *Remove V-Transport 1 Assembly and V-Transport 2 Assembly, and do not install them reversely during reinstallation. Incidentally, the V-Transport 1 Assembly has a Connector Cover.*

    NOTE: *Be careful not to damage the Brush when installing or removing the V-Transport 1/2 Assembly.*

    (1) Disconnect the connector.
    (2) Remove the Screw (x4).
    (3) Remove the V-Transport 1 Assembly.
    (4) Disconnect the connector.
    (5) Remove the V-Transport 2 Assembly.

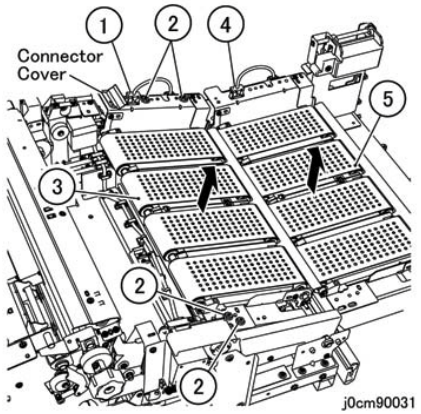


Figure 15 j0cm90031

16. Install the supplied 2nd Belt Assembly. (Figure 17)
    (1) Loosen the Screw (x2), and rotate the BTB Stopper Plate (x2).
    (2) Hold the handles (2 locations) on both sides of the 2nd Belt Assembly, and install it.

    NOTE: *Push the housing of the 2nd Belt Assembly from above and insert it firmly into the offset mechanism circled in red in the figure. Also, push in so that the top of BTB Front Holder Assembly and BTB Rear Holder Assembly are flush with the top of the Bearing. (Figure 16)*

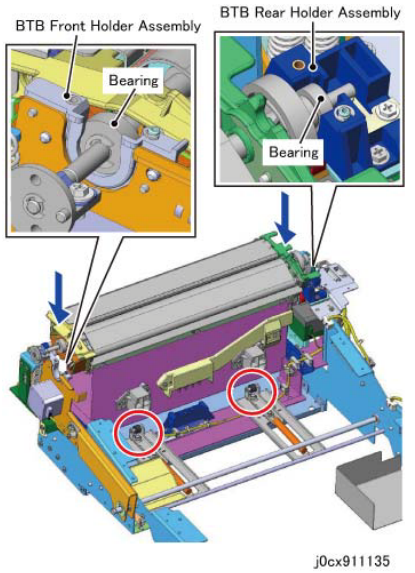


Figure 16 j0cx911135

(3) Rotate the BTB Stopper Plate (x2), and tighten the Screw (x2).

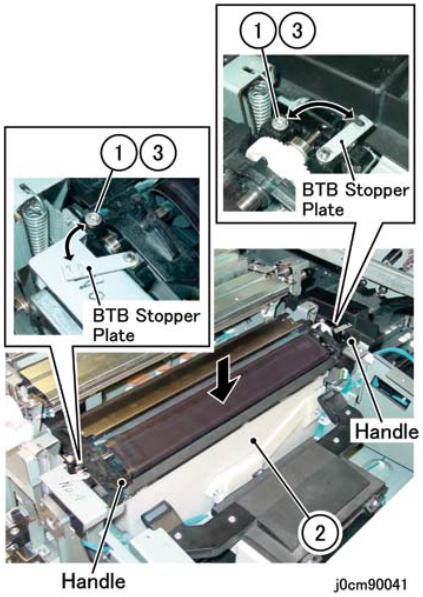


Figure 17 j0cm90041

17. Remove the V-Transport 3 Front Cover. (Figure 18)
    (1) Loosen the Screw (x2).
    (2) Remove the V-Transport 3 Front Cover.

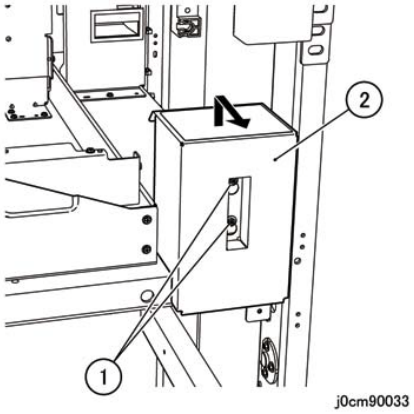


Figure 18 j0cm90033

18. Go to 9.1.1.9 Installation of Main Unit (9 of 14)

9.1.1.9 Installation of Main Unit (9 of 14)

Installation Procedures (Continue)

1. Open the V-Transport 3 Rear Cover. (Figure 1)
    (1) Loosen the Screw.
    (2) Lift the V-Transport 3 Rear Cover, and hook it so it does not fall.

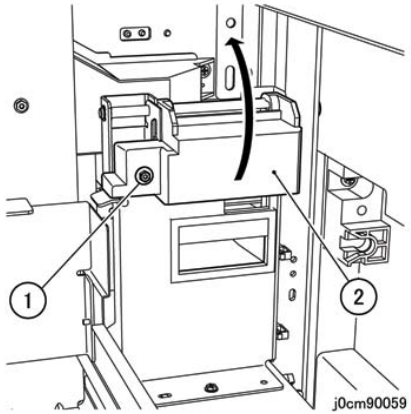


Figure 1 j0cm90059

2. Install the V-Transport 3 Assembly. (Figure 2)

    NOTE: *Be careful not to damage the Brush when installing or removing the V-Transport 3 Assembly.*

    NOTE: *When installing the V-Transport 3 Assembly, check that Bearing (x2) is attached to the Drive Roll of V-Transport 3 Assembly. This is because, incidentally, the Bearing is not attached to V-Transport 1/2.*

    (1) Bring the Bearing (x2) of the Drive Roll of V-Transport 3 Assembly into contact with the Bearing Holder.
    (2) Push the V-Transport 3 Assembly towards the Rear.

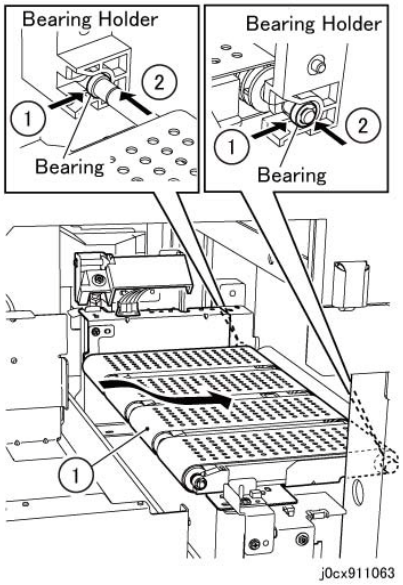


Figure 2 j0cx911063

3. Once the Service Position of the Big Module is released, push the Big Module inside the machine. (Figure 3)
   (1) Simultaneously release the Stopper (x2) of the Rail (x2), and push the Big Module.
   (2) Rotate the Handle of the Big Module to lock it.

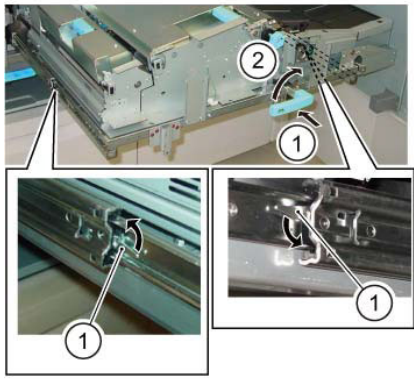


Figure 3 j0kol911053

4. Install V-Transport 3 Assembly. (Figure 4)
   (1) Connect the connector.
   (2) Lift the V-Transport 3 Rear Cover slightly, and lower it.
   (3) Tighten the Screw.
   (4) Tighten the Screw. Use the Screw removed in Step 13 of 9.1.1.8 Installation of Main Unit (8 of 14) for this Screw.

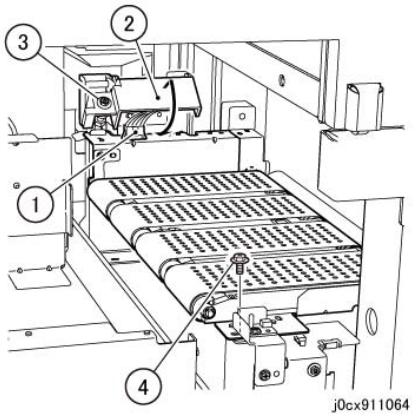


Figure 4 j0cx911064

5. 9.1.1.8 Reinstall the V-Transport 3 Front Cover that was removed in Step 17 of Installation of Main Unit (8 of 14).
6. Simultaneously release the Stopper (x2) of Drawer Rail (x2), and pull out the Big Module up to the Service Position.
7. 9.1.1.8 Reinstall the V-Transport 1/2 Assembly that was removed in Step 15 of Installation of Main Unit (8 of 14).

   NOTE: *Do not install V-Transport 1 Assembly and V-Transport 2 Assembly in reverse. Incidentally, the V-Transport 1 Assembly has a Connector Cover.*

8. Install the supplied V-Transport Front Cover (x2). (Figure 5)
   (1) Install the V-Transport Front Cover (x2).
   (2) Tighten the Hexalobular Screw (M3 x6: 2).

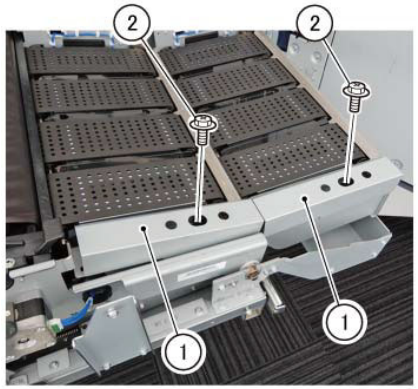


Figure 5 j0cx911065

9. Install the supplied V-Transport Rear Cover. (Figure 6)
   (1) Install the V-Transport Rear Cover.
   (2) Tighten the Hexalobular Screw (M3 x6: 3).

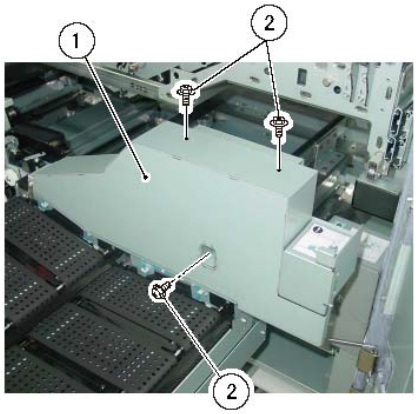


Figure 6 j0kol911118

10. Release the Stopper (x2) of the Rail (x2), and push the Big Module inside the machine. (Figure 7)

    NOTE: *When the Big Module is pushed into the machine from the Service Position, be sure to push the Big Module with the Motion Cover pushed down towards the Rear.*

    (1) Simultaneously release the Stopper (x2) of the Drawer Rail (x2), and push slightly.
    (2) Push in the Big Module with Motion Cover pushed down to the Rear.

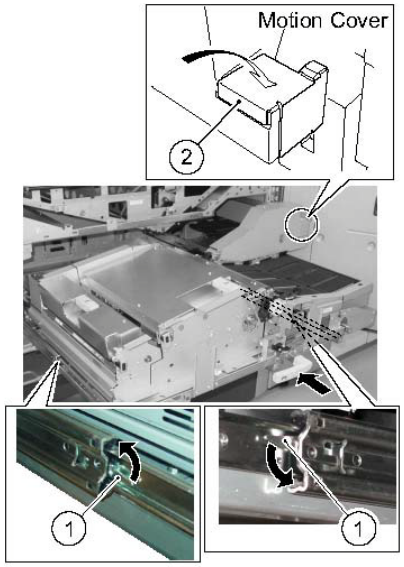


Figure 7 j0kol911054

11. Once you pull out the Big Module, attach the Screw (With Washer, Nylon Washer) removed in Step 6 of 9.1.1.8 Installation of Main Unit (8 of 14) to the Drawer Left Rail. (Figure 8)
    (1) Pull out the Big Module.
    (2) Attach the Screw (With Washer, Nylon Washer).
    (3) Push the Big Module into the machine. However, after pushing in, do not rotate the Handle of Big Module.

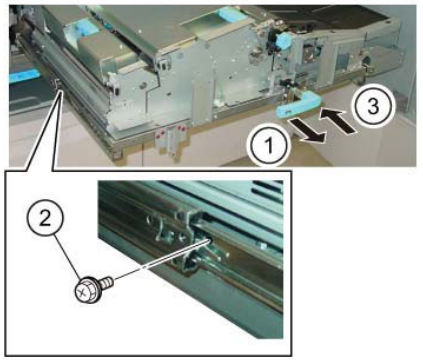
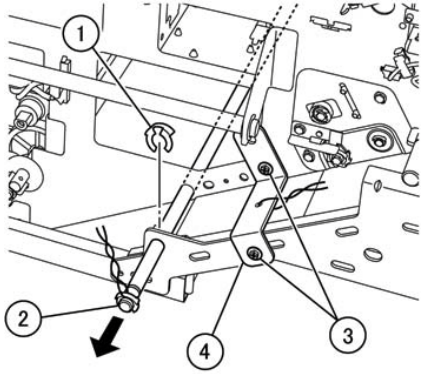


Figure 8 j0kol911055

12. Remove the Shipping Shaft and Shipping Bracket from the right side of the IBT Frame. (Figure 9)
    (1) Remove the KL-Clip.
    (2) Remove the Shipping Shaft.
    (3) Remove the Screw (x2).
    (4) Remove the Shipping Bracket.



j0cm90056

Figure 9 j0cm90056

13. Remove the Shipping Bracket and Shipping Shaft (x2) from the left side of the IBT Frame. (Figure 10)
    (1) Remove the KL-Clip.
    (2) Remove the Shipping Shaft.
    (3) Remove the KL-Clip.
    (4) Remove the Screw.
    (5) Remove the Plate and Shipping Shaft at the same time.
    (6) Remove the Screw (x6).
    (7) Remove the Shipping Bracket.

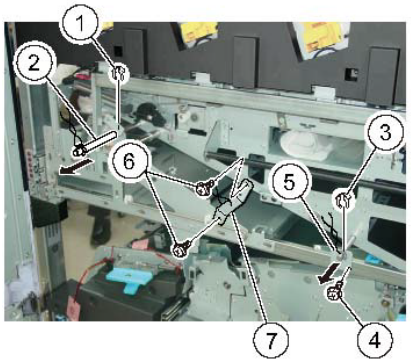
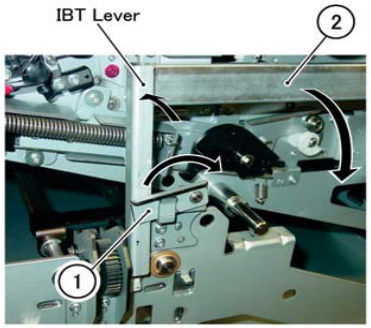


Figure 10 j0kol911056

14. Release the Stopper Plate of the IBT Lever, and lower the IBT Lever. (Figure 11)
    (1) Rotate the Stopper Plate while pressing the IBT Lever.
    (2) Lower the IBT Lever.



j0cm90062

Figure 11 j0cm90062

15. Remove the Developer Inner Cover Assembly. (Figure 12)
    (1) Loosen the Screw (x6).
    (2) Remove the Developer Inner Cover Assembly.

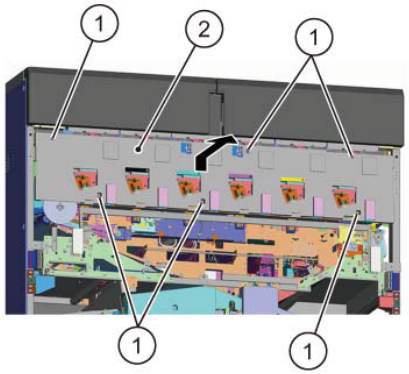


Figure 12 j0kol911057

16. Peel off the tapes and remove the packaging materials from each Front Plate Assembly. (Figure 13)
    (1) Peel off the tape.
    (2) Remove the packaging materials.

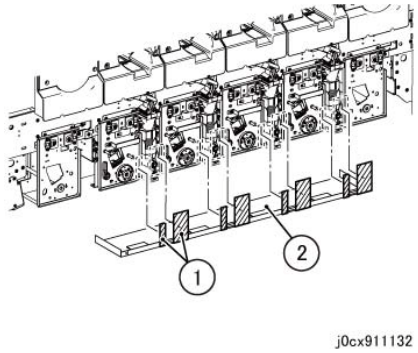


Figure 13 j0cx911132

17. Pull out the IBT Module, peel off the tape (x6) on the IBT Belt, and remove the Cushion. (Figure 14)

    NOTE: *When removing the Cushion, never touch the IBT Belt with bare hands.*

    (1) Hold both ends of the IBT Handle with both hands, and pull out the IBT Module.
    (2) Peel off the tape (x6).
    (3) Remove the Cushion.

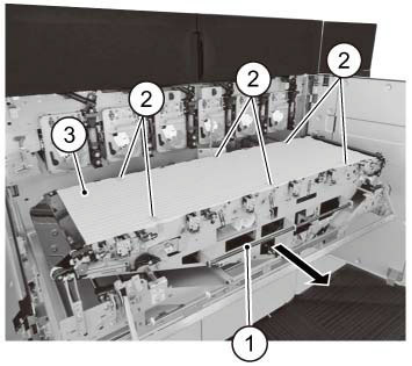


Figure 14 dar911008

18. Rotate the Belt Guard (x3), and secure it with the Screw (x3). (Figure 15)
    (1) Remove the Screw (x3), and affix the Screw temporarily in the hole at the top.
    (2) Rotate the Belt Guard (x3).
    (3) Position the Belt Guard (x3), and tighten the Screw (x3).

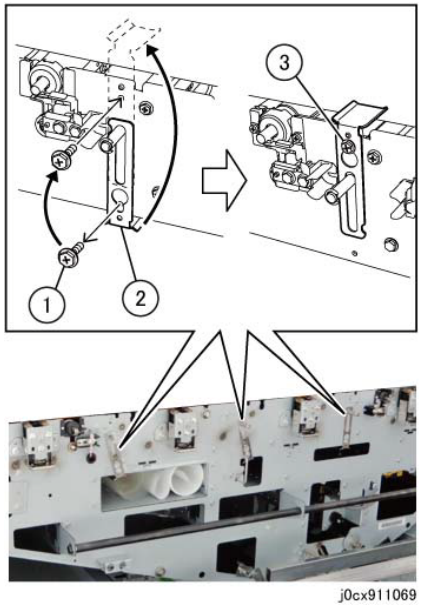


Figure 15 j0cx911069

19. Simultaneously release the Stopper (x2) of the Rail (x2), and push the IBT Drawer Frame. However, after pushing in, do not lift the IBT Lever. (Figure 16)

(1) Simultaneously release the Stopper (x2) of the Rail, and push the IBT Drawer Frame into the machine.

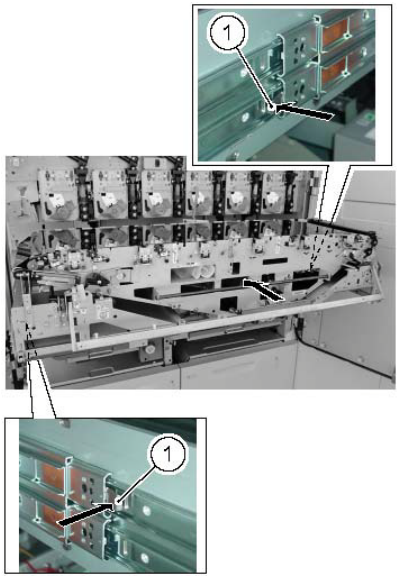


Figure 16 j0kol911059

20. Install the supplied IOT-L Left Cover Assembly and IOT-L Left Low Cover. (Figure 17)
    (1) Install the IOT-L Left Cover Assembly.
    (2) Tighten the Machine Screw (M4 x8: 6).
    (3) Install the IOT-L Left Low Cover.
    (4) Tighten the Machine Screw (M4 x8: 4).

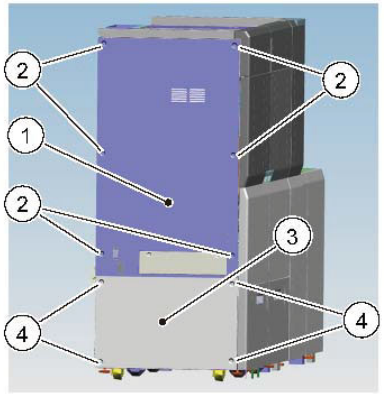


Figure 17 j0kol911119

21. Set the CRU Guide in the Front Plate Assembly, and remove the CC Assembly. (Figure 18)

    NOTE: *Be sure to use the CRU Guide when removing the CC Assembly. Trying to remove without using it may cause damage to the CC Assembly.*

    NOTE: *CC Assembly of #1 and #6 engines are not installed.*

    (1) Open the Left Dispenser Cover and take out the CRU Guide.
    (2) Set the CRU Guide to the pin (x2) of the Plate Assembly.
    (3) Lower the Lever, and pull the CC Assembly forward.
    (4) Remove the CRU Guide and CC Assembly at the same time.

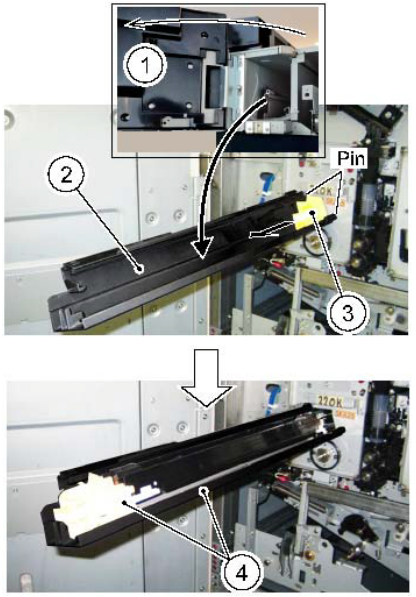


Figure 18 j0kol405006

22. Go to 9.1.1.10 Installation of Main Unit (10 of 14)

9.1.1.10 Installation of Main Unit (10 of 14)

Installation Procedures (Continue)

1. Pull out the MM Unit (K). (Figure 1)
   (1) Peel off the tape.
   (2) Loosen the Screw (x3).
   (3) Hold the Handle of the Front Plate Assembly, and pull out the MM Unit.

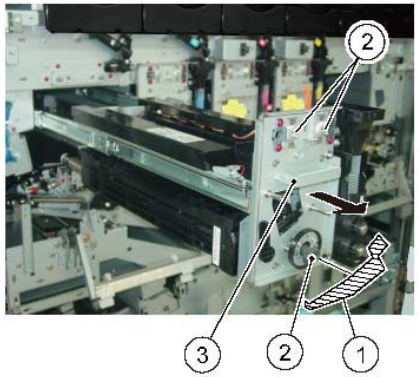


Figure 1 j0kol911060

2. Remove the fixing tape of the Deve Motor. (Figure 2)
   (1) Peel off the tape.

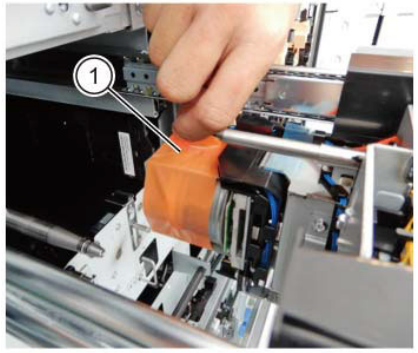


Figure 2 j0kol911061

3. Remove the anti-forgetting cord. (Figure 3)
   (1) Peel off the tape.
   (2) Pull out the anti-forgetting cord.

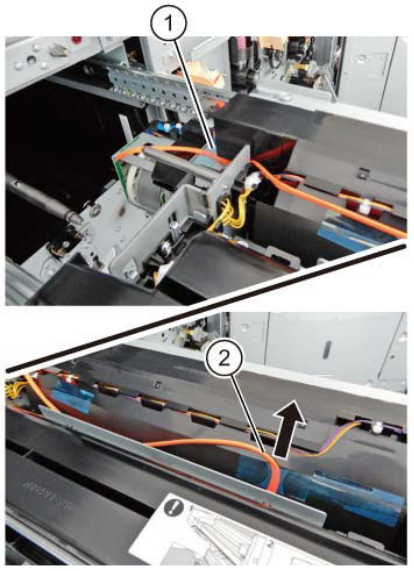


Figure 3 j0kol910062

4. Peel off the tape (x2) from the MM Assembly. (Figure 4)
   (1) Peel off the tapes (x2).

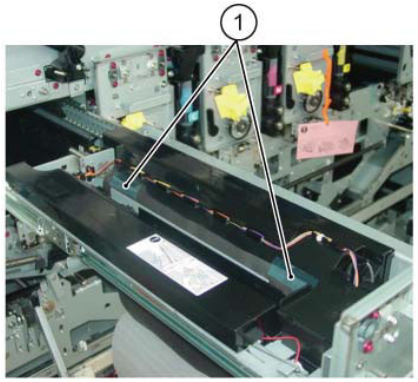


Figure 4 j0kol911063

5. Peel off the tape from the Bottom Rear of the MM Assembly. (Figure 5)
   (1) Peel off the tape.

(2) Check with your finger that no tape is left in the Duct hole.

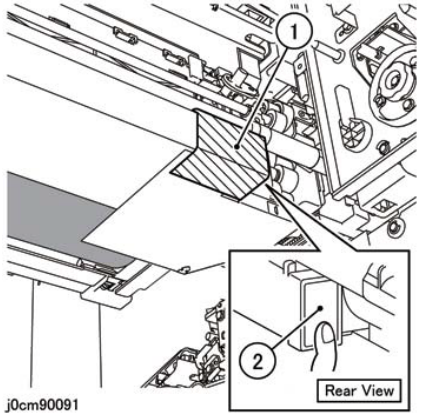


Figure 5 j0cm90091

6. Peel off the tape from the bottom of the Drum Cartridge, and remove the Drum Cartridge. (Figure 6)

NOTE: *When removing the Drum Cartridge, do not directly touch the surface of the Drum.*

(1) Peel off the tape (x2) pasted on the black paper.
(2) Pull and rotate the Knob Assembly to secure it.
(3) Pull the Knob forward, and rotate it.
(4) Free the tab from the square hole of the EPG Frame and remove the Drum Cartridge.

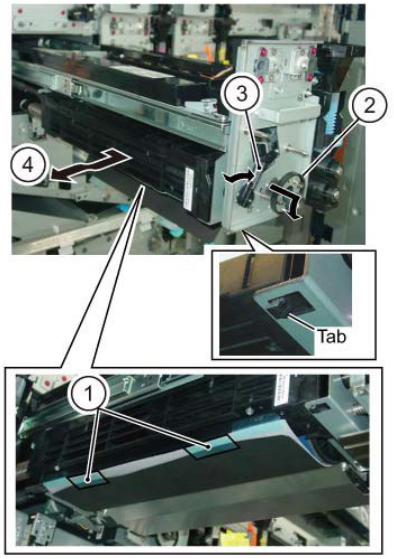


Figure 6 j0kol911064

7. Put the Drum Cartridge into the ERU Bag, and orientate it as shown. (Figure 7)
(1) Loosen the Screw at the inner side of the IOT-L Front Right Door.
(2) Remove the Blind Cover.
(3) Take out the ERU Bag.
(4) Put the Drum Cartridge into the ERU Bag, and orientate it as shown.

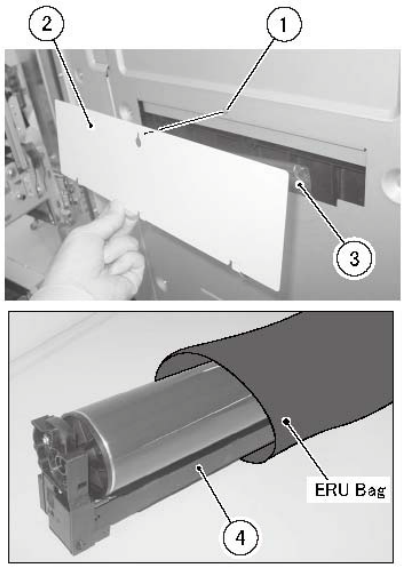


Figure 7 j0kol911120

8. Remove the black paper from the MM Assembly. (Figure 8)
   (1) Remove the black paper.

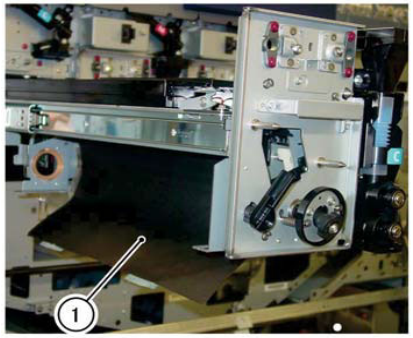


Figure 8 j0cm90093

9. Return the Drum Cartridge to its original position, and return the Knob and Knob Assembly to their original positions.
10. Release the Stopper (x2) of the Rail, push the MM Assembly into the machine, and secure it with the Screw (x3). (Figure 9)
    (1) Push the Stopper (x2) of the MM Rail at the same time, and push the MM Assembly.
    (2) Hold the Handle of the Front Plate Assembly, and push the MM Assembly into the machine.
    (3) Tighten the Screw (x3).

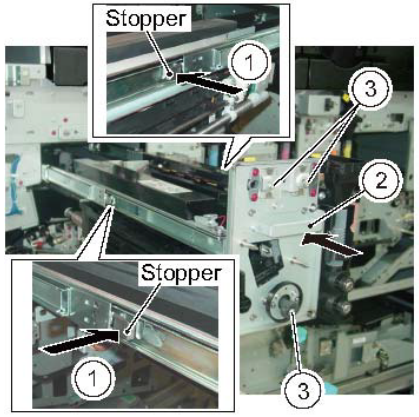


Figure 9 j0kol911065

11. Set the CRU Guide in the Front Plate Assembly, and install the CC Assembly. (Figure 10)

    NOTE: *When installing the CC Assembly, confirm that it is a CC Assembly for Digital Full Color Production Printer (Label attached to the Cover).*

    (1) Set the CRU Guide to the pin (x2) of the Front Plate Assembly.
    (2) Lower the Lever, and push the CC Assembly into the machine.
    (3) Remove the CRU Guide.

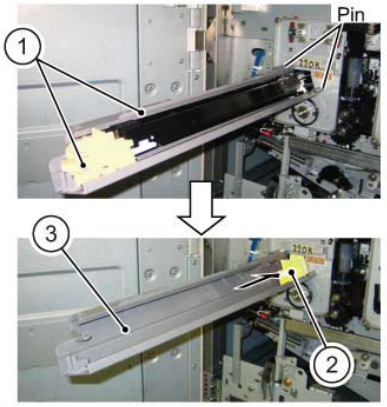


Figure 10 j0kol911066

12. Perform the same for all the MM Assemblies.
13. Remove the tag attached to the Handle of the Front Plate Assembly (M).

14. Return the ERU Bag to its original location, and install the Blind Cover.
15. Return the CRU Guide to its original location, and close the Left Dispenser Cover.
16. Install the Wheel Assembly in the IBT Module. (Figure 11)
    (1) Install the Wheel Assembly.
    (2) Tighten the Hexalobular TP Screw (x2).

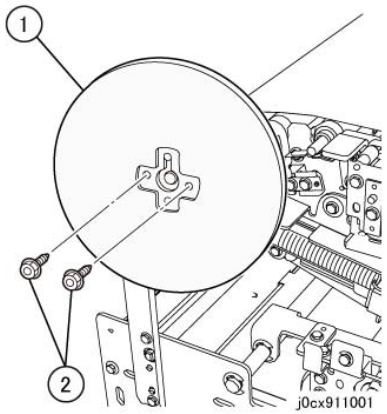


Figure 11 j0cx911001

17. Reinstall the Drawer Left Cover that was removed in Step 3 of 9.1.1.8 Installation of Main Unit (8 of 14).
18. Install the Fly Wheel. (Figure 12)
    (1) Install the Fly Wheel.
    (2) Tighten the Screw (x2).

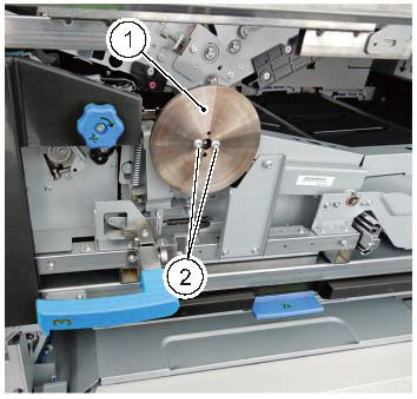


Figure 12 j0kol911067

19. Perform Step 13 of 9.1.1.9 Installation of Main Unit (9 of 14) in reverse order to reinstall the IBT Lever.
20. Rotate the Handle of the Big Module, and set the BTB Frame Assembly.
21. Reinstall the Drawer Right Cover that was removed in Step 3 of 9.1.1.8 Installation of Main Unit (8 of 14).
22. Close the IOT-L Front Left Door/IOT-L Front Right Door.
23. If the customer requests to install the Post Card Kit 2, refer to 9.1.5.1 Installation of Post Card Kit 2, and install it in either Tray 1/2 Assembly according to the wish of the customer. If Post Card Kit 2 is not used, follow Step 24, and store the Post Kit Guide Assembly inside the machine.
24. If Post Card Kit 2 is not used, store the Post Kit Guide Assembly inside the machine. However, since the Label can not be stored, refer to Step 4 of 9.1.5.1 Installation of Post Card Kit 2, and paste it at the Tray of Tray 1/2 Assembly according to the wish of the customer. (Figure 13)
    (1) Pull out the Tray, on which the Post Card Kit 2 will be installed.
    (2) Install the Post Kit Guide Assembly.
    (3) Tighten the ThumbScrew.
    (4) Push in the Tray.

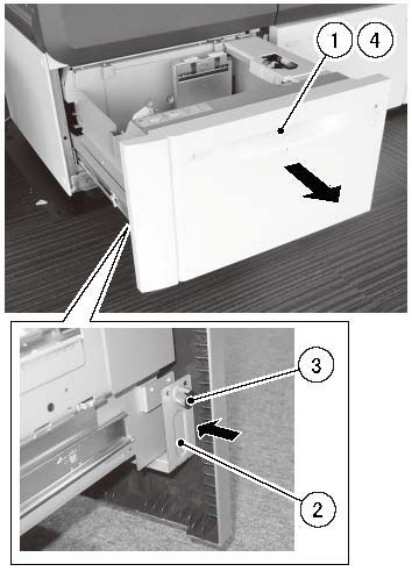


Figure 13 j0kol911121

25. Adjust the Side Guide and End Guide to the position of the paper size the customer wants.
26. Paste the Size Label on Tray 1/2 Front Cover according to the wish of the customer. (Figure 14)
    (1) Paste the Size Label (x2).

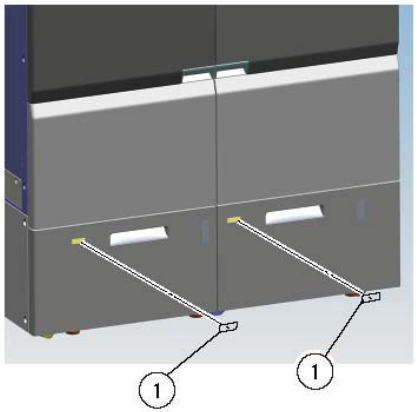


Figure 14 j0kol911122

27. Load paper in Tray 1/2.
28. Go to 9.1.1.11 Installation of Main Unit (11 of 14)

9.1.1.11 Installation of Main Unit (11 of 14)

Installation Procedures (Continue)

1. Remove the supplied Duct Hose (x4), Hose (x4), and Hose Hook (x4) from the ECO Box Unit, and Duct Hose (x2), Hose (x2), Hose Hook (x2), and Screw (M4 x8: 3) from the ECO Box Unit 2.
2. Remove the ECO Rear Upper Cover. (Figure 1)
   (1) Remove the Screw (x8).
   (2) Remove the ECO Rear Upper Cover.

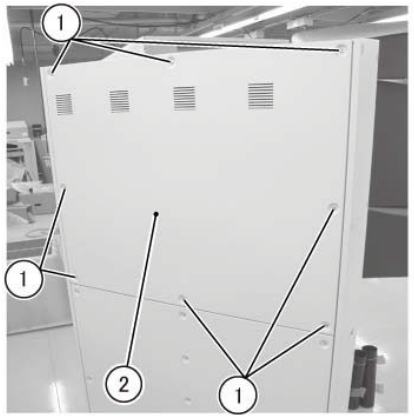


Figure 1 dar911009

3. Remove the ECO Rear Lower Cover. (Figure 2)
   (1) Remove the Screw (x10).
   (2) Remove the ECO Rear Lower Cover.

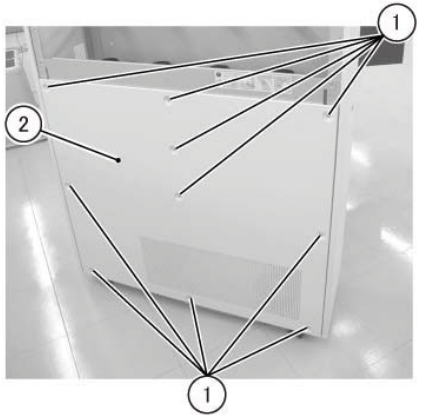


Figure 2 dar911010

4. Remove the ECO Right Cover. (Figure 3)
   (1) Remove the Screw (x8).
   (2) Remove the ECO Right Cover.

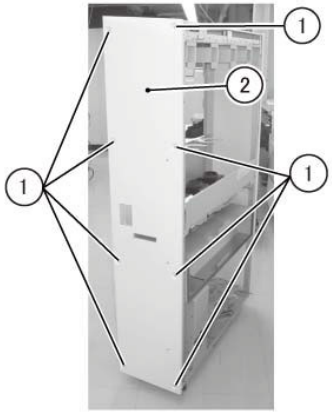


Figure 3 dar911011

5. Insert the Connector for ECO Box Unit 2 of ECO Box Unit in the Bracket. (Figure 4)
   (1) Insert the Connector in the Bracket.

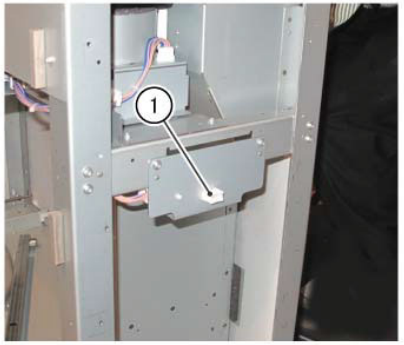


Figure 4 j0cm93022

6. Remove the ECO2 Rear Upper Cover and ECO2 Rear Lower Cover. (Figure 5)
   (1) Remove the Screw (x6).
   (2) Remove the ECO2 Rear Upper Cover.
   (3) Remove the Screw (x6).
   (4) Remove the ECO2 Rear Lower Cover.

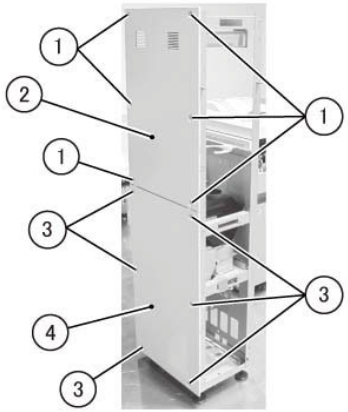


Figure 5 dar911012

7. Raise Adjuster Foot (x2) of ECO Box Unit 2 by about 5 mm. (Figure 6)

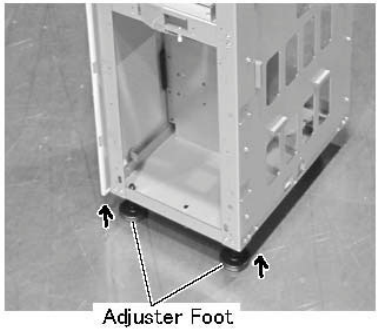


Figure 6 j0kol911162

8. Dock the ECO Box Unit 2 on the ECO Box Unit, and temporarily attach the Joint (x2) at the Rear only on 1 side using the Machine Screw (M4 x8: 2). (Figure 7)
   (1) Dock the ECO Box Unit 2.
   (2) Temporarily attach the Joint (x2) only on 1 side using the Machine Screw (M4 x8: 2).

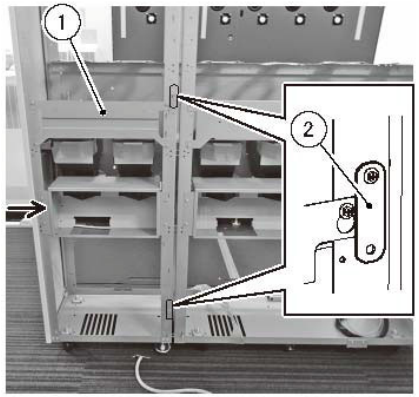
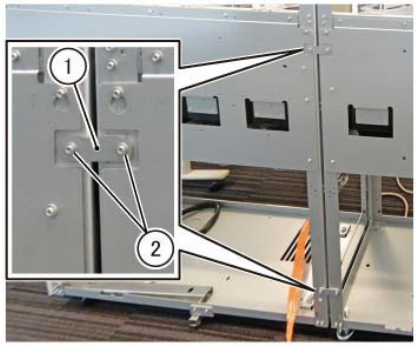


Figure 7 j0kol911124

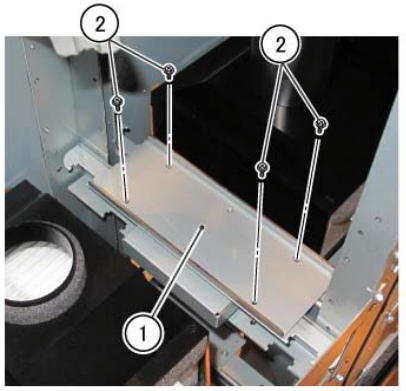
9. Install the Joint (x2) at the Front. (Figure 8)
   (1) Install the Joint (x2).
   (2) Use the Machine Screw (M4 x8: 4) to secure it.



j0cx911082

Figure 8 j0cx911082

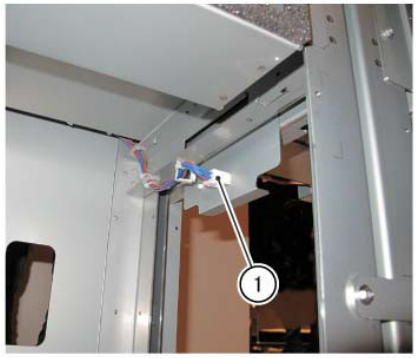
10. Secure further the Joint (x2) at the Rear which is temporarily installed in Step 8 using the Machine Screw (M4 x8: 2).
11. Use the Machine Screw (M4 x8: 4) to secure the Joint Bracket. (Figure 9)
    (1) Install the Joint Bracket.
    (2) Tighten the Machine Screw (M4 x8: 4).



j0cm93025

Figure 9 j0cm93025

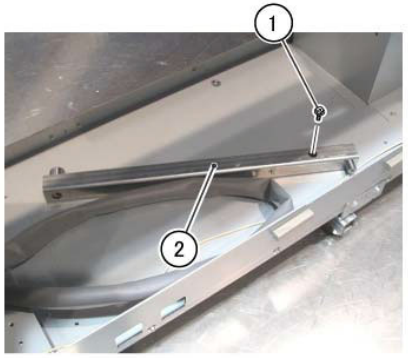
12. Connect the Connector of the ECO Box Unit 2. (Figure 10)
    (1) Connect the connector.



j0cm93026

Figure 10 j0cm93026

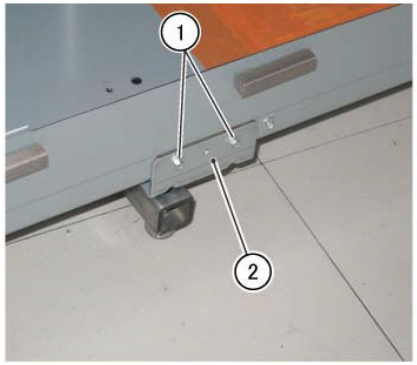
13. Remove the Side Foot. (Figure 11)
    (1) Remove the Screw.
    (2) Remove the Side Foot.



j0cm91060

Figure 11 j0cm91060

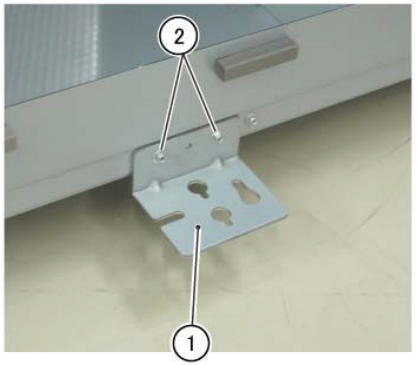
14. Remove the Foot Bracket. (Figure 12)
    (1) Remove the Screw (x2).
    (2) Remove the Foot Bracket.



j0cm91061

Figure 12 j0cm91061

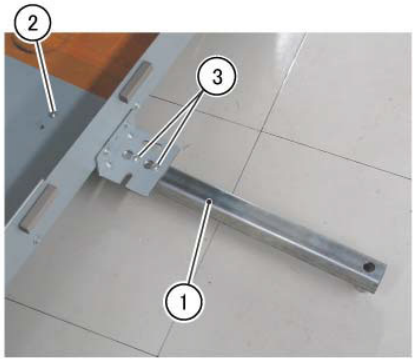
15. Reinstall the Foot Bracket that was removed in Step 14 as shown. (Figure 13)
    (1) Install the Foot Bracket.
    (2) Tighten the Screw (x2).



j0cm91062

Figure 13 j0cm91062

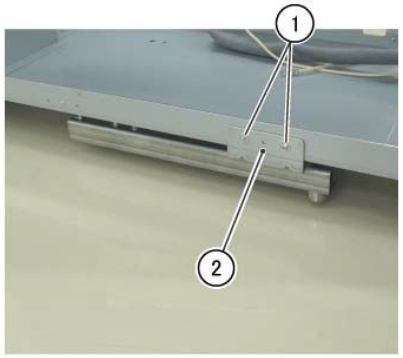
16. Install the Side Foot using the Screw and supplied Machine Screw (M4 x8: 2) that were removed in step 14. (Figure 14)
    (1) Install the Side Foot.
    (2) Tighten the Screw.
    (3) Tighten the Screw (x2).



j0cm91063

Figure 14 j0cm91063

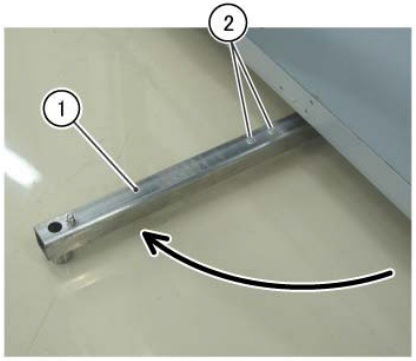
17. Remove the Foot Bracket. (Figure 15)
    (1) Remove the Screw (x2).
    (2) Remove the Foot Bracket.



j0cm404002

Figure 15 j0cm404002

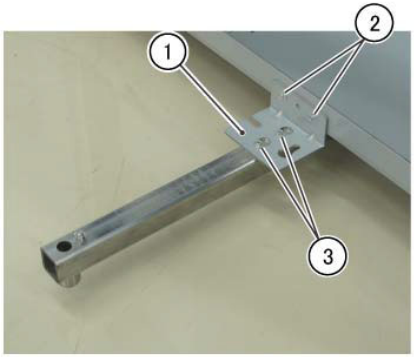
18. Open the Side Foot. (Figure 16)
    (1) Open the Side Foot.
    (2) Loosen the Screw (x2).



j0cm404003

Figure 16 j0cm404003

19. Install the Foot Bracket that was removed in Step 17 by reusing the Screw (x2). (Figure 17)
    (1) Install the Foot Bracket.
    (2) Tighten the Screw (x2).
    (3) Tighten the Screw (x2).



j0cm404004

Figure 17 j0cm404004

20. [6 Color Type]
    Install the Duct Hose (x6), whose length is shorter from the white line, facing upwards. (Figure 18)
    (1) Install the Duct Hose (x6).
    [4 Color Type]
    Install the Duct Hose (x4), whose length is shorter from the white line, facing upwards. (Figure 18)
    (1) Install the Duct Hose (x4).

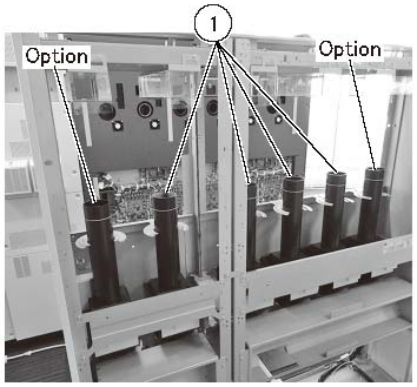


Figure 18 j0kol911125

21. [6 Color Type]
    Install the Hose Hook (x6) in the CC Duct. (Figure 19)
    [4 Color Type]
    Install the Hose Hook (x4) in the CC Duct. (Figure 19)

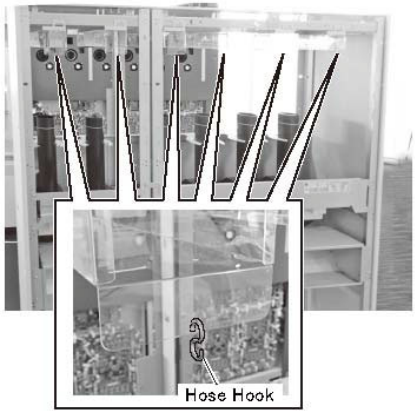


Figure 19 j0kol911126

22. Caulk the CC Duct side so that the Hose Hook does not come off. (Figure 20)
    (1) Caulk the CC Duct side.

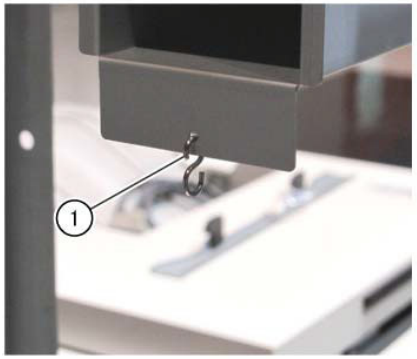


Figure 20 j0cm93027

23. [6 Color Type]
    Push the Hose (x6) into the hole for Hose Hook facing the front, and push it to the position of the white line of the Duct Hose, and hook it on the Hose Hook. (Figure 21)
    (1) Install the Hose (x6).
    (2) Hook Hose (K) on the Hose Hook.
    [4 Color Type]
    Push the Hose (x4) into the hole for Hose Hook facing the front, and push it to the position of the white line of the Duct Hose, and hook it on the Hose Hook. (Figure 21)
    (1) Install the Hose (x4).
    (2) Hook Hose (K) on the Hose Hook.

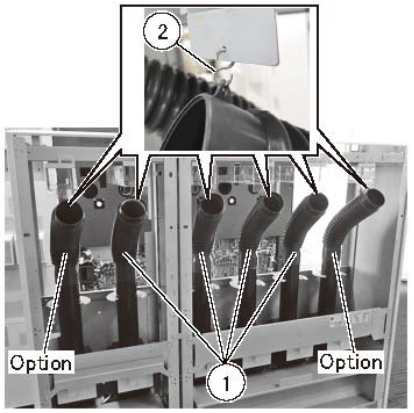


Figure 21 j0kol911127

24. Go to 9.1.1.12 Installation of Main Unit (12 of 14)

9.1.1.12 Installation of Main Unit (12 of 14)

Installation Procedures (Continue)

1. Dock the ECO Box Unit, and tighten the Thumb Screw (x3) and Docking Screw. (Figure 1)
   (1) Dock the ECO Box Unit.
   (2) Tighten the ThumbScrew (x3).
   (3) Tighten the Docking Screw.

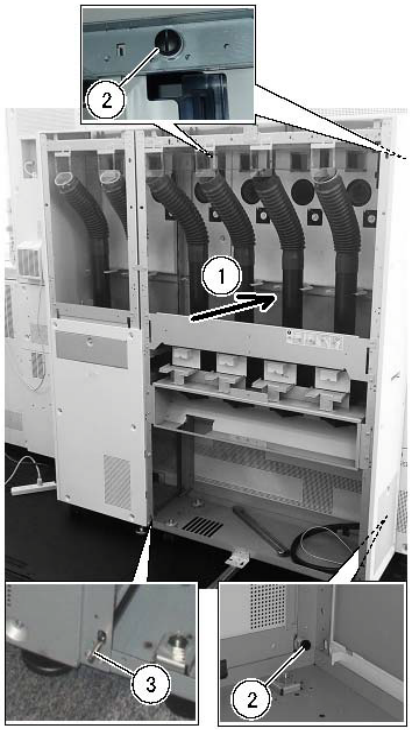


Figure 1 j0kol911163

2. Reinstall the Side Foot and Foot Bracket set in Step 17 to Step 19 of 9.1.1.11 Installation of the Main Unit (11 of 14).
3. [6 Color Type]
   Remove the Hose (x6) from the Hose Hook (x6), and insert it into the Duct (x6) on the IOT-L side.
   [4 Color Type]
   Remove the Hose (x4) from the Hose Hook (x4), and insert it into the Duct (x4) on the IOT-L side.
4. Install the Strain Relief, and connect the Connector. (Figure 2)
   (1) Install the Strain Relief using the supplied Machine Screw (M4 x8).
   (2) Connect the connector.

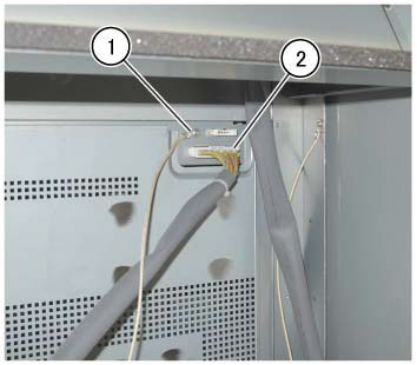


Figure 2 j0cm91069

5. Store the ROS Window Tool in the Left Dispenser Cover, and the Fusing Tool Kit, Allen Key, Plate Spanner, Wrench in the ECO Box Unit. (Figure 3)

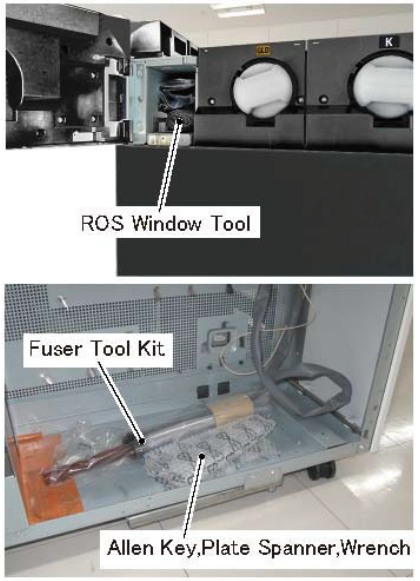


Figure 3 j0kol911128

6. Place the Sipping Bracket, Screw, Cushion, and packing materials, etc. to be used at the time of Removal in a bag, and store it in the ECO Box Unit.
7. Reinstall the parts removed in Steps 2 and 3 of 9.1.1.11 Installation of Main Unit (11 of 14).

8. Install the Cap (x4) to the Top Cover (x2). (Figure 4)
   (1) Install the Cap (x4).

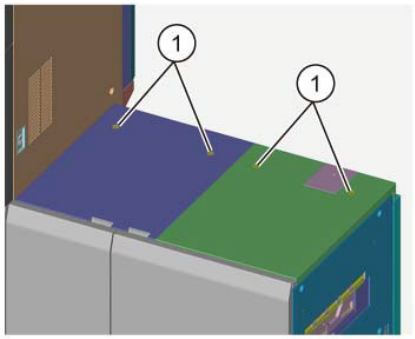


Figure 4 j0kol911074

9. Install the option for ejecting paper with reference to each item in Chapter 9.
   - Installation of OCT (Item 9.1.2.1)
   - Installation of LCT (Item 9.1.2.2)
10. Go to 9.1.1.13 Installation of Main Unit (13 of 14)

9.1.1.13 Installation of Main Unit (13 of 14)

Installation Procedures (Continue)

Installation of #1 (CLR/GLD/SLV/WHT/TX/PINK) and #6 (GLD/SLV/WHT/PINK) Engines

1. Remove the supplied Pipe Auger Assembly of the Dispenser Assembly (#1) from the Pin, and rotate it. (Figure 1)
   (1) Remove the Pipe Auger Assembly from the pin and rotate it.

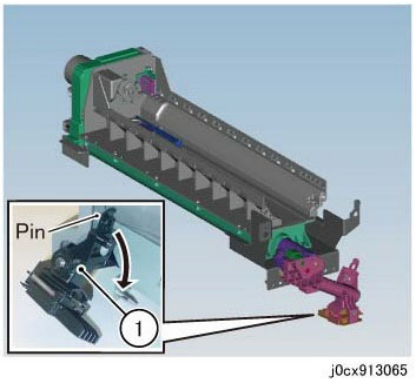


Figure 1 j0cx913065

2. Install the Dispenser Assembly (#1) and Dispenser Inner Cover (#1), and affix the Toner Label of the color to be used. (Figure 2)
   (1) Install the Dispenser Assembly (#1).
   (2) Tighten the Screw (x3).
   (3) Install the Dispenser Inner Cover (#1).
   (4) Tighten the Machine Screw (M3 x6: 2).
   (5) Paste the supplied Toner Label.
   (6) Paste the supplied Label L/R. (GLD/SLV/WHT/PINK only)

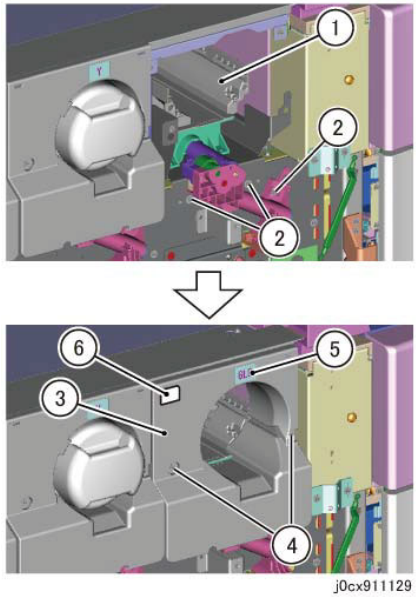


Figure 2 j0cx911129

3. Set the supplied Toner Cartridge on the Dispenser Assembly (#1).
4. Remove the Front Plate Assembly (Dummy).(Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Front Plate Assembly (Dummy).
   (3) Peel off the tape (x2) of the MM Left/Right Rail.

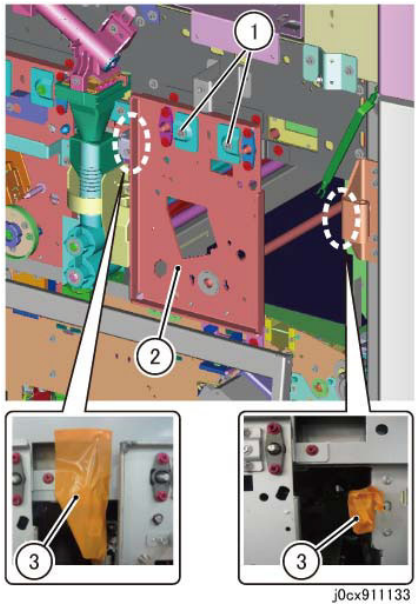


Figure 3 j0cx911133

5. Peel off the packing tape from the supplied MM Assembly (#1), and install it to the MM Left/Right Rail. (Figure 4)

   NOTE: *As the MM Assembly is heavy, be careful about your posture when performing the task.*

   NOTE: *When installing the MM Assembly, do not hold to the pin at the Rear Frame as it might damage the pin.*

   (1) Pull out the MM Left Rail and the MM Right Rail.
   (2) Install the MM Assembly (#1).
   (3) Tighten the Shoulder Screw (M4 x10: 2).

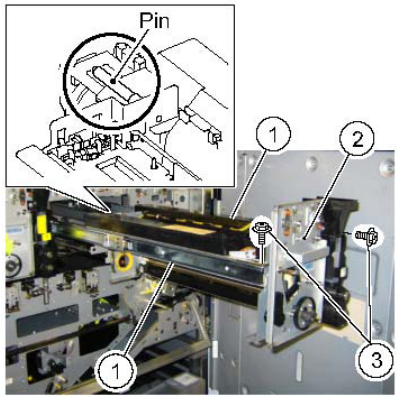


Figure 4 j0kol911068

6. Release the Stopper (x2) of the Rail, push the MM Assembly (#1) into the machine, and secure it with the Screw (x3). (Figure 5)

   NOTE: *When tightening the Screw (x3) of the MM Assembly (#1), tighten the Screws at the 3 locations evenly.*

   (1) Push the Stopper (x2) of the MM Rail at the same time, and push the MM Assembly (#1).

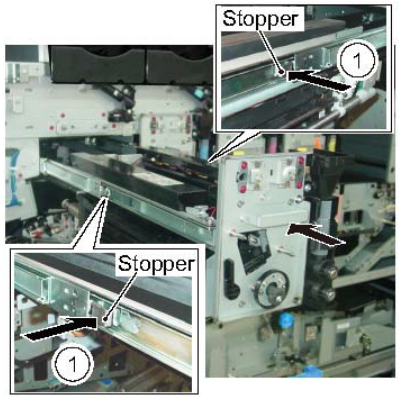


Figure 5 j0kol911069

7. Peel off the barcode label from the right side of the MM Assembly, and paste it on the Service Log. (Figure 6)
   (1) Loosen the Screw (x3).
   (2) Hold the Handle, and pull out the MM Assembly (#1).
   (3) Peel off the Barcode Label.
   (4) Paste the peeled Barcode Label on the Service Log.

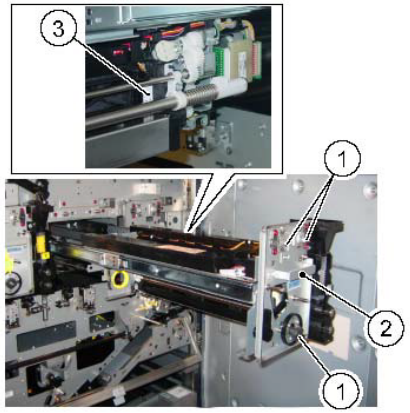


Figure 6 j0kol911070

8. Install the supplied Drum Cartridge (#1). (Figure 7)
   (1) Pull out the Knob Assembly, and rotate it.
   (2) Pull out the Knob, and rotate it.
   (3) Install the Drum Cartridge (#1). After installation, check that the Tab is in the position shown.

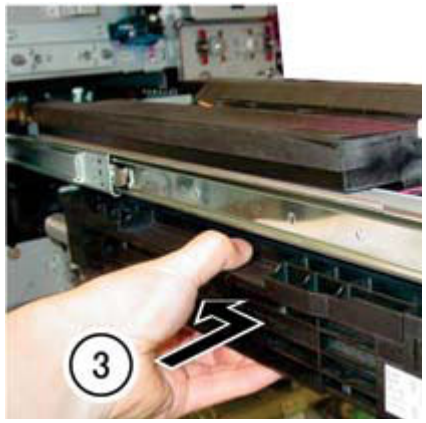


Figure 7 j0cm93177

9. Set the Knob and Stopper, release the Stopper (x2) of the Left and Right Rail, and push the MM Assembly (#1) into the machine. (Figure 8)
   (1) Rotate while pushing the Knob to restore it.
   (2) Rotate while pulling the Knob Assembly to restore it.
   (3) Push the Stopper (x2) of the Rail (x2) at the same time, and push the MM Assembly (#1) into the machine.

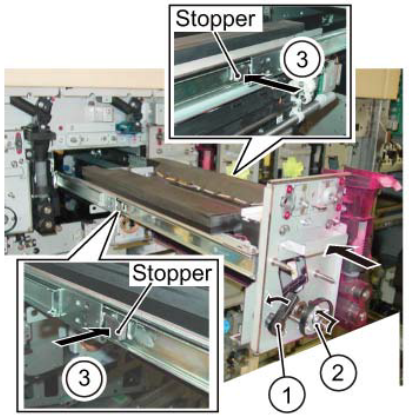


Figure 8 j0kol911071

10. Tighten the Screw (x3) of the Front Plate Assembly. (Figure 9)

    NOTE: *Paste the Label of the applicable color supplied from the Kit in Step 2, 3.*

    (1) Tighten the Screw (x3).
    (2) Paste the Label of the color to be used.
    (3) Paste the supplied Label L/R. (GLD/SLV/WHT/PINK only)

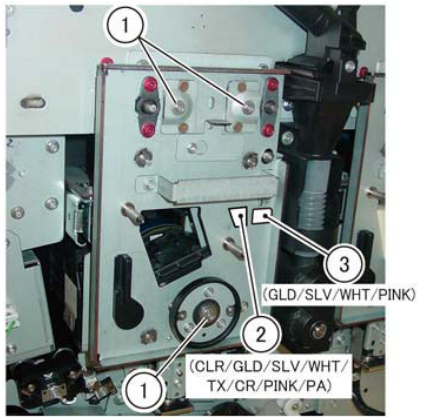


Figure 9 j0kol917007

11. Install the supplied CC Assembly (#1). (Figure 10)

    NOTE: *When installing the CC Assembly, confirm that it is a CC Assembly for Digital Full Color Production Printer(Label attached to the Cover).*

    (1) Install the CRU Guide (CC Assembly) to the Pin (x2) of the Plate Assembly (#1).
    (2) Lower the Lever of the CC Assembly (#1), and push it into the machine.
    (3) Remove the CRU Guide.

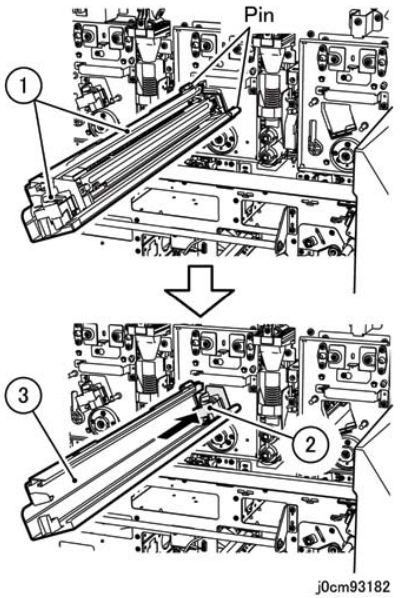


Figure 10 j0cm93182

12. Also install the #6 engine with the same procedure.
13. Lift the IBT Lever, rotate the Stopper Plate, and set the IBT Belt and Big Module. (Figure 10)
    (1) Lift the IBT Lever.
    (2) Rotate the Stopper Plate while pressing the IBT Lever.
    (3) Rotate the Handle of the Big Module.

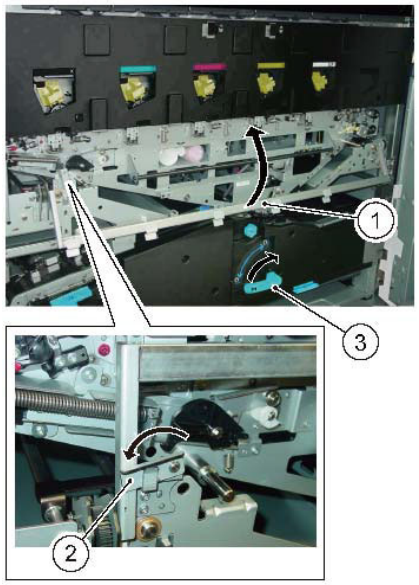


Figure 11 j0kol911072

14. Reinstall the IBT Front Cover that was removed in Step 7 of 9.1.1.3 Installation of Main Unit (3 of 14).
15. Store the supplied Bag in the inner pocket of the IOT-L Front Right Door.
16. Close the IOT-L Front Right Door/IOT-L Front Left Door.
17. Remove the IOT-R Rear Right Cover. (PL 19.9)
18. Check the voltage of the AC power supply to the Device, and change the power connector that supplies the Transformer. (Figure 12)

NOTE: *Remove the Connector Cap, and reconnect. Attached the removed Cap to the Connector before reconnecting.*

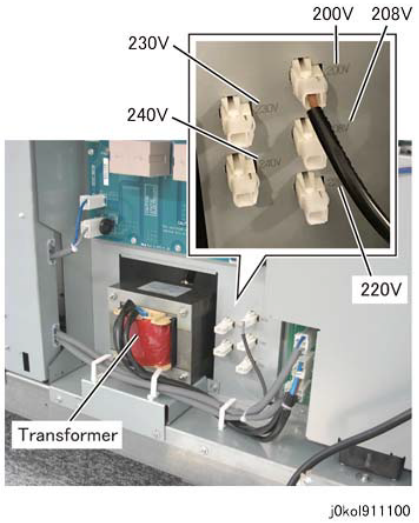


Figure 12 j0kol911100

19. Remove the Plate and Screw. (Figure 13)
    (1) Remove the Screw (x4).
    (2) Remove the Plate.
    (3) Remove the Screw.

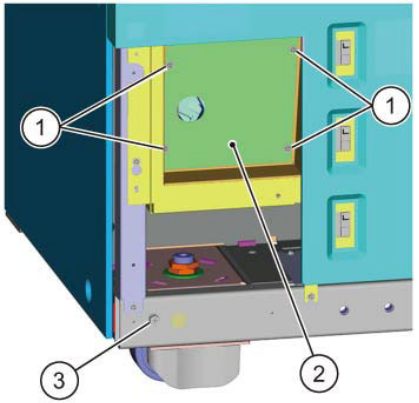


Figure 13 j0kol911076

20. Open the US power cord set in the IOT-R carton box.

21. Attach the Power Cord to the Plate as shown in the figure below. (Figure 14)
    CAUTION: Cable Ground must not be loose.

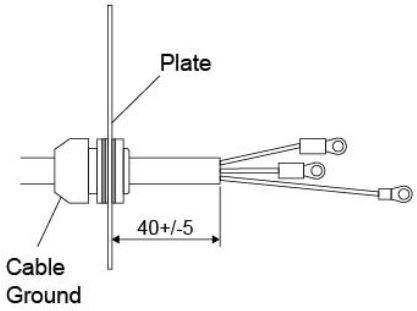


Figure 14 j0kol911078

22. Attach the Power Cord to the IOT-R. (Figure 15)
    A: Black2
    B: Black 1
    C: Y/G

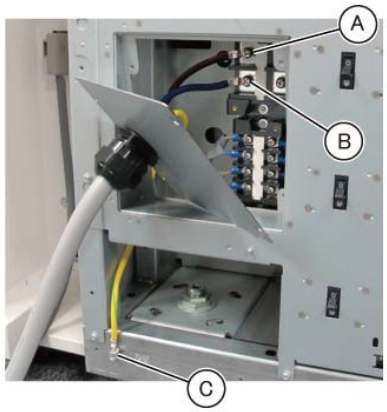
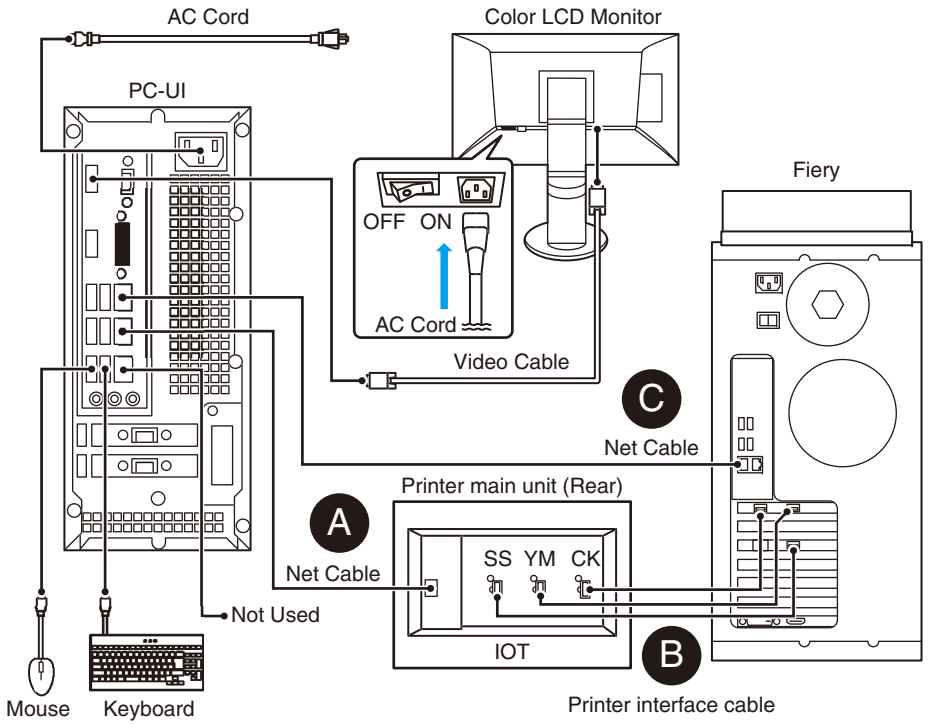


Figure 15 j0kol911079

23. Use the Screw (x4) to secure the Plate.
24. Connection the devices.
    A.Connect IOT and PC-UI with Net Cable.
    B.Connect IOT and Fiery with Printer interface cable.
    C.Connect PC-UI and Fiery with Net Cable.



25. Go to 9.1.1.14 Installation of Main Unit (14 of 14)

9.1.1.14 Installation of Main Unit (14 of 14)

Installation Procedures (Continue)

Installation of #1 Color (CLR/GLD/SLV/WHT/TX/PINK) and #6 Color (GLD/SLV/WHT/PINK)

1. Open the Dispenser Cover.
2. [6 Color Type]
   Install the Toner Cartridge (Y, M, C, K, CLR/GLD/SLV/WHT/TX/PINK).
   [4 Color Type]
   Load the Toner Cartridge (Y, M, C, K).
3. Open the IOT-L Front Left/Right Door Assembly.
4. Open the IOT-R Front Right Cover Assembly.
5. Remove the Inner Right Upper Cover. (Figure 1)
   (1) Remove the Screw of the Stopper Wire.
   (2) Remove the Screw (x4).
   (3) Remove the Inner Right Upper Cover.

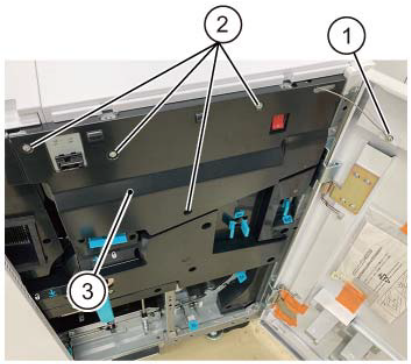


Figure 1 dar420001

6. Turn ON the 3 breakers, and turn ON the emergency switch, PC and LCD power switches.
7. Change the PC-UI Windows login name and password. (Refer to 9.1.1.19 for the change method)
8. Load the software installation CD.
9. Start InstManager, and select [AP (China)] or [AP (w/o China)] or [FF (NT)]. (Figure 2)

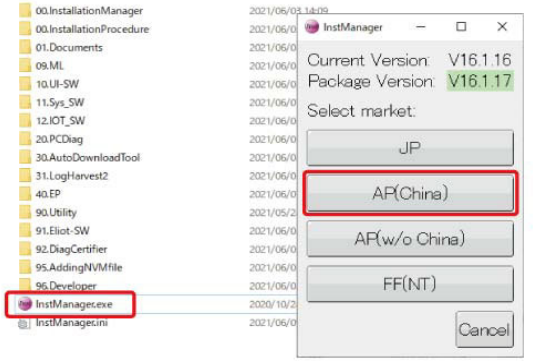


Figure 2 e0kol911098

10. Install the software in Figure 3 as required. (Figure 3)

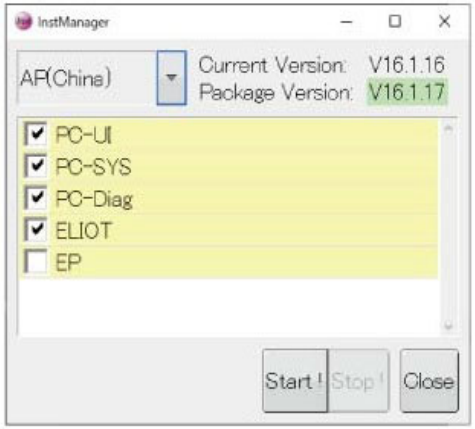


Figure 3 e0kol911099

NOTE: *Refer to the InstManager manual for detailed instructions.*

NOTE: *If the Auto Download Tool is unable to upgrade the ILS firmware to the latest version, first upgrade the firmware of the Main Unit and options and then use the Download Tool (manual mode) to upgrade it to the latest version.*

NOTE: *Authentication is required to use PC-Diag. For the authentication method, see the procedure of the software package.*

11. Select DC361 of PC-Diag, select [Reset] in the execution selection field, select the check box of [IOT-R adjustment value], and press [Execute].

[Reason] IOT-R/L adjusts NVM at the time of factory shipment, but the combination at installation is not necessarily the adjusted combination. Therefore, since the NVM value of IOT-R at factory shipment is stored in IOT-L, it is necessary to return the adjusted value of IOT-R to IOT-R.

12. Insert the Toner Cartridges of all colors, and close the Dispenser Cover.
13. Turn ON the Main Switch.

    NOTE: *The PC-UI must be turned on.*

14. The specialty toner color replacement screen is displayed. (Figure 4)

    NOTE: *It takes 7 to 8 minutes to complete per color, and the IOT automatically reboots after completion.*

Replace Specialty Toner Color
Specialty Toner Color replacement in progress.
Station L and R Colors replacement in progress.
System will automatically restart during process.

Figure 4 dar911013

15. As colors are approved, check on the PC-UI screen that the correct color is included. (Figure 5)

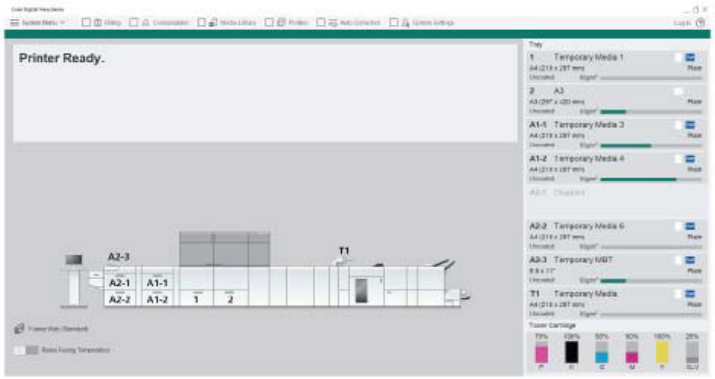


Figure 5 dar911014

16. Install and/or upgrade the following software. (Refer to ADJ 18.1.2)
    - RML File
17. Start PC Diag Tools UI, and enter PC-Diag. (Figure 6)

Figure 6 j0kol911107

18. Open the Switch Cover, and pull the Service Interlock Switch. (Figure 7)
    (1) Loosen the Screw. However, the Screw can not be removed from the Switch Cover.
    (2) Open the Switch Cover.
    (3) Pull the Service Interlock Switch.

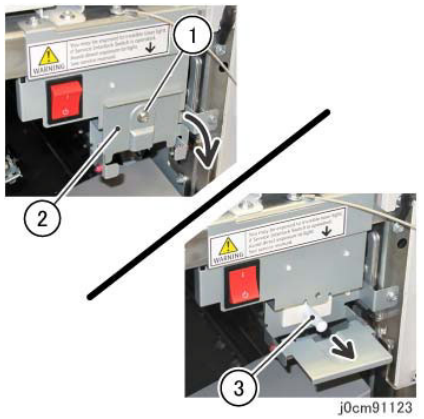


Figure 7 j0cm91123

19. Open the IOT-L Front Left/Right Door. (PL 19.1)
20. Remove the Developer Inner Cover and the IBT Front Cover.
    (1) Loosen the Screw (x6).
    (2) Remove the Developer Inner Cover.
    (3) Loosen the Screw (x4).
    (4) Remove the IBT Front Cover.

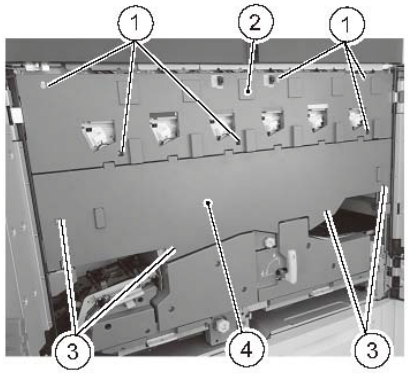


Figure 8 j0kol405001

21. Lower the IBT Lever to lower the IBT Belt. (Figure 9)
    (1) Bring down the Handle of the Big Module.
    (2) Lightly push the IBT Lever to rotate the Stopper Plate.
    (3) Lower the IBT Lever.

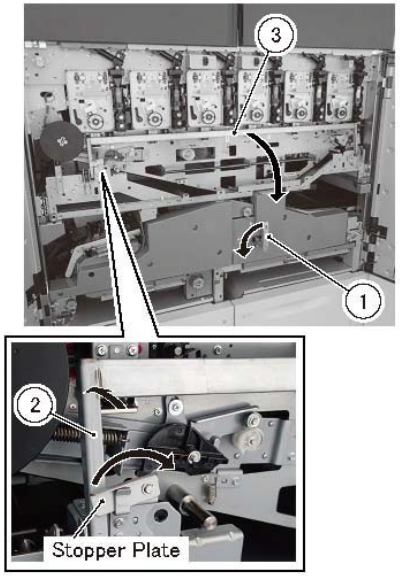
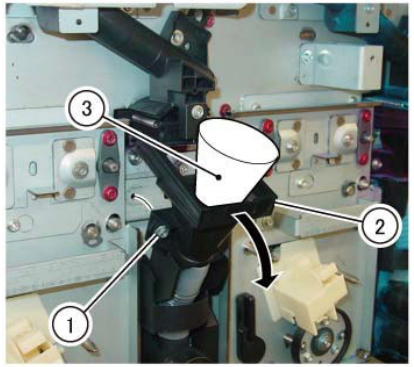


Figure 9 j0kol405002

22. Pull the guide of the supply port toward you and set the paper funnel. (Figure 10)
    (1) Remove the Screw.
    (2) Bring down the Guide.
    (3) Set the bundled paper funnel on the Joint Pipe.



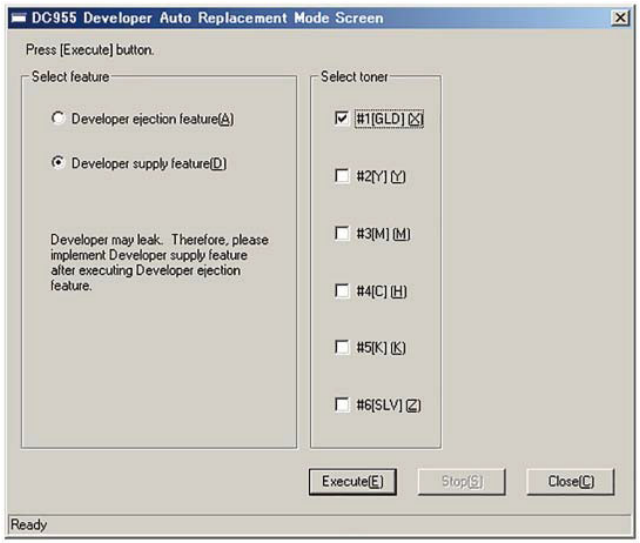
j0cx911015

Figure 10 j0cx911015

23. Use the DC955 Automatic Developer Replacement Mode to fill the Developer of the color you want to use. (Figure 11)

    NOTE: *Do not select #2 (Y), #3 (M), #4 (C), #5 (K) in toner selection*

    (1) Select the developer supply feature.
    (2) Select the toner color of Developer to be supplied.
    (3) Click the [Execute] button.



j0cx911120

Figure 11 j0cx911120

24. Supply Developer. (Figure 12)
    (1) Supply Developer.

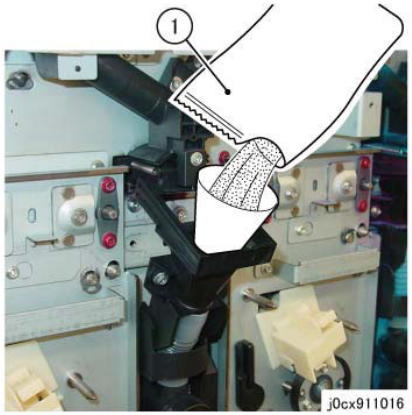


Figure 12 j0cx911016

25. Return the supply port that was brought down in Step 20 to the original position.
26. Use DC950 (ATC Sensor Setup) to input the ATC Sensor Attribute for #1. (Figure 13)
    (1) Enter the value from the Barcode Label that was peeled off from the MM Assembly (#1) in Step 7 of 9.1.1.13 Installation of Main Unit (13 of 14), and then click [Execute].
    In the following example, the value for the #1 Engine is 55, so enter 55 in the #1 Barcode Number.
    (2) Perform the same for #6 engine.

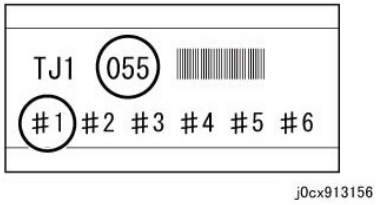


Figure 13 j0cx913156

27. Select DC960 (Install Toner) of PC-Diag, and transfer the toner of each color to the transport path.

    NOTE: *Check the toner supply with one of the following methods 1 and 2.*

    (1) Disconnect the bellows tube, spread paper, etc. to prevent dispersal, and check the Toner droppage. If performing 1 time of DC960 is not enough to drop any Toner, perform the following until the Toner drops. Change the value of NVM below to 1, and execute DC960 again.

    (2) Make sure that the toner cartridge rotates, and the Dispense Motor is rotating (it can be confirmed by rotating the E ring in front of the developer supply port).

    DC960 can only be performed 1 time to prevent secondary problems from occurring. Changing the NVM value allows it to be performed again (this is also limited to 1 time).

    In the case where the DC960 is re-executed due to some trouble, it can be re-executed by changing the following NVM value to 1, but take note of the possibility that faults may occur if a large amount of toner is sent into the developer.

    - *For Engine #1: NVM [754-434]*
    - *For Engine #2: NVM [754-435]*
    - *For Engine #3: NVM [754-436]*
    - *For Engine #4: NVM [754-437]*
    - *For Engine #5: NVM [754-438]*
    - *For Engine #6: NVM [754-439]*

28. Restore the Big Module and IBT Belt that you lowered in Step 16.
29. Restore the Service Interlock Switch that you pulled in Step 18.
30. Select DC802 (Deve Mixing) in PC-DIAG, and execute it.

    NOTE: *Select #2 (Y), #3 (M), #4 (C), #5 (K) for DC802, and execute. Do not select 1, #6.*

31. In PC-DIAG, select DC685, and execute it in the following mode.
    - 4-color machine: Color mode (4C (CMYK))
    - 6-color machine: Color mode (6C (CMYK+CLR/GLD/SLV/WHT/TX/PINK))

    Proceed to the next step without display of any fault.

    If a Fault occurs, go to Chapter 2 Fault FIP to take corrective action.
32. Select [Color Regi for Measurement] in DC612, and print. (Recommended paper: 1 sheet of A3 J Paper)
33. Check that the printed Color Regi is not badly misaligned. If it is badly misaligned, perform DC685 again.
34. Select [Grid] and [2 Sided] in DC129, and print. After printing, check the following.
    - Lead Registration
    - Side Registration
    - Dual Registration (check for any misalignment between the grids on both sides.)

    When there is a problem, adjust with DC129.
35. Check the overall operation.
36. Return the Switch Cover that was opened in Step 18.
37. Reinstall the Inner Right Upper Cover that was removed in Step 4.
38. Reinstall the Developer Inner Cover Assembly that was removed in Step 15 of 9.1.1.9 Installation of Main Unit (9 of 14).
39. Reinstall the IBT Front Cover that was removed in Step 7 of 9.1.1.3 Installation of Main Unit (3 of 14).
40. Close the IOT-R Front Right Cover Assembly.
41. Close the IOT-L Front Left/Right Door Assembly.
42. Install the Fiery Server. (Refer to the Fiery Server Service Manual)
43. Attach the clamp, and secure the HSS Cable and Net Cable. (Figure 14)
    [6 Color Type]
    Attach the clamp (x7), and secure the HSS Cable (x3) and Net Cable.

[4 Color Type]

Attach the clamp (x7), and secure the HSS Cable (x2) and Net Cable.

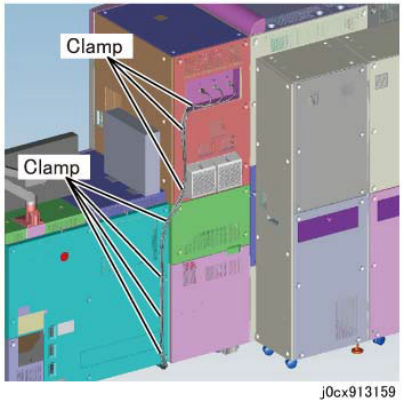


Figure 14 j0cx913159

44. Reinstall the Print Server Support Cover that was removed in Step 1 of 9.1.1.2 Installation of Main Unit (2 of 14). (Figure 15)

Figure 15 j0kol911164

For backup procedures, please refer to “6-204 6.4.15 DC361 NVM Save / Restore”.

9.1.1.15 Change PC-UI Windows User Name and Password

Check the PC-UI Windows user name and password to be changed by the customer, and change them.

NOTE: *The PC-UI Windows user name and password must be listed in the customer setting list of the Print Server.*

Procedure

1. Enter "netplwiz" and run it.
2. Cancel the Auto Login setting and reboot.
3. Enter the Windows password "FF_Lib" to boot.
4. Execute netplwiz and change the Windows user name from "FF_USER" to any user name requested by the customer.
5. When changing the password, confirm with the customer and change the password.
6. Select the Auto Login setting checkbox. At that time, you will be asked for a password, so enter it twice.
7. Restart the system.

9.1.2.1 Installation of OCT

Before Starting

- The Catch Tray Enabling Kit (Product Code:BP-PP12) is required when installing this Kit. Prepare the Kits and perform the installation in sequence.

Product Code

- OCT : BP-PP10
- Catch Tray Enabling Kit : BP-PP12

Installation Procedure

1. Open the package and check the bundled items.
   - OCT

Table 1

No	Name	Qty
1	OCT	1
2	Screw	1

   - Catch Tray Enabling Kit

Table 2

No	Name	Qty
1	IOT Exit Roll	1
2	Pinch Roll Assembly	2
3	Pinch Spring	4

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

2. Open the IOT-R Front Left/Right Cover.
3. Pull out the Exit Drawer Unit.
4. Remove the Inner Right Upper Cover. (Figure 1)
   (1) Remove the Screw of the Stopper Wire.
   (2) Remove the Screw (x4).
   (3) Remove the Inner Right Upper Cover.

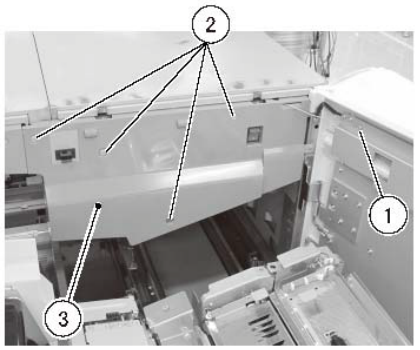


Figure 1 j0kol417001

5. Remove the Screw from the Left Rail Assembly. (Figure 2)
   (1) Remove the Screw, Nylon Washer, and Washer.

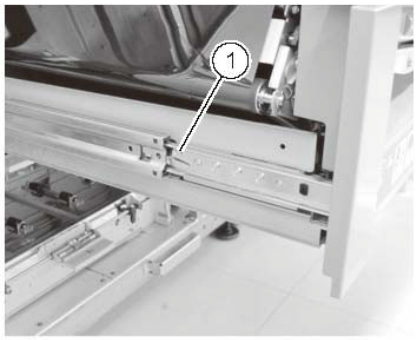


Figure 2 j0kol416001

6. Pull out the Exit Drawer Unit up to the service position. (Figure 3)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

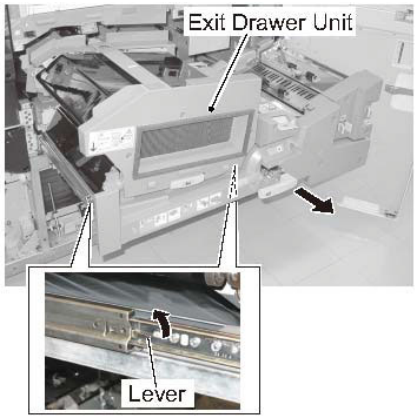


Figure 3 j0kol416002

7. Remove the EXIT Assembly. (Figure 4)
   (1) Disconnect the connector (x2).
   (2) Remove the Screw.
   (3) Remove the EXIT Assembly.

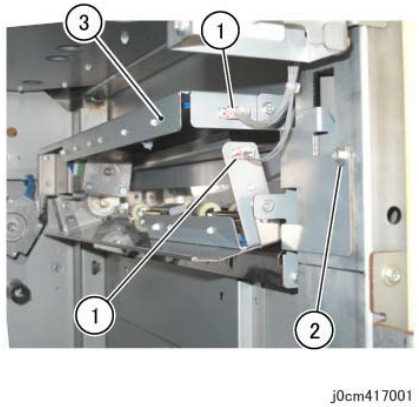


Figure 4 j0cm417001

8. Remove the Idler Gear. (Figure 5)
   (1) Remove the KL-Clip.
   (2) Remove the Idler Gear.

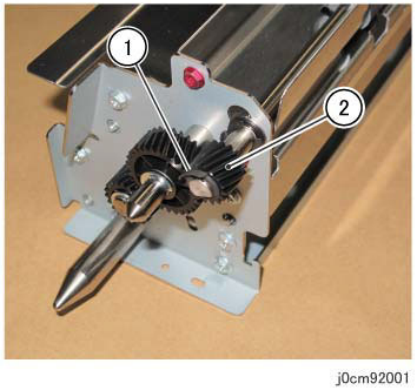


Figure 5 j0cm92001

9. Remove the bearing at the front. (Figure 6)
   (1) Remove the KL-Clip.
   (2) Remove the Nylon Washer.
   (3) Remove the bearing.

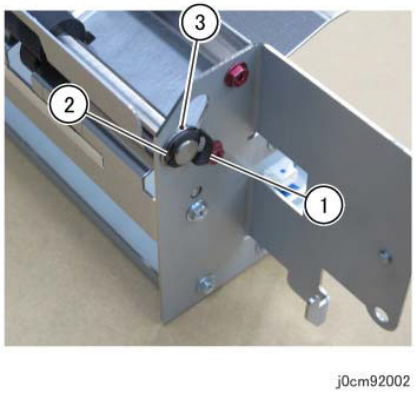
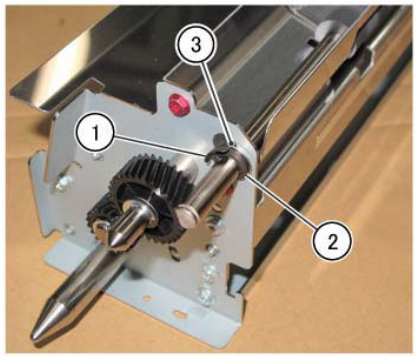


Figure 6 j0cm92002

10. Remove the bearing at the rear. (Figure 7)
    (1) Remove the KL-Clip.
    (2) Remove the Nylon Washer.
    (3) Remove the bearing.



j0cm92004

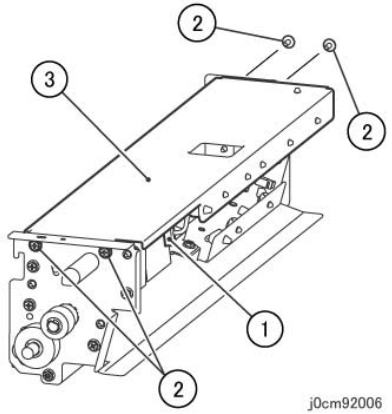
Figure 7 j0cm92004

11. Remove the IOT Exit Roll. (Figure 8)
    (1) Remove the IOT Exit Roll.

j0cm92003

Figure 8 j0cm92003

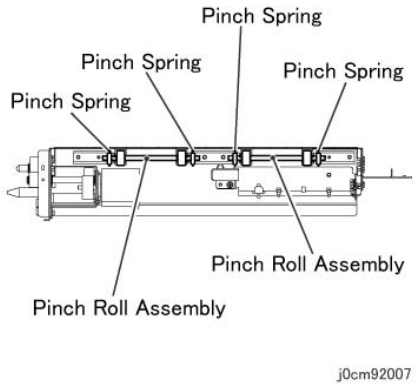
12. Remove the Exit Support Bracket Assembly. (Figure 9)
    (1) Disconnect the connector.
    (2) Remove the Screw (x4).
    (3) Remove the Exit Support Bracket Assembly.



j0cm92006

Figure 9 j0cm92006

13. Remove the Pinch Roll Assembly and Pinch Spring, and replace them with parts inside the Kit. (Figure 10)



j0cm92007

Figure 10 j0cm92007

14. Perform Steps 12 and 13 in reverse.
15. Replace the IOT Exit Roll removed in Step 11 with the part in the Kit, and perform Step 2 to Step 10 in reverse to return the machine to its original state.
16. Install the OCT. (Figure 11)
    (1) Install the OCT.
    (2) Tighten the Screw.
    (3) Connect the connector.

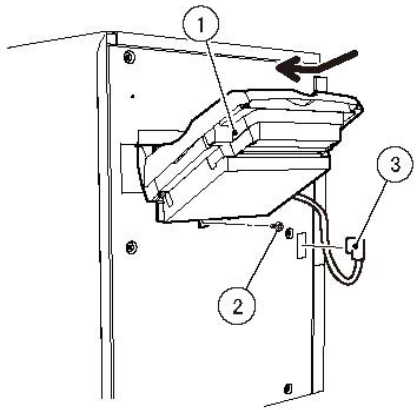


Figure 11 j0kol911129

17. Turn the machine Power ON.
18. Check the OCT operation.

9.1.2.2 Installation of LCT

Before Starting

- The Catch Tray Enabling Kit (Product Code:BP-PP12) is required when installing this Kit. Prepare the Kits and perform the installation in sequence.

Product Code

- LCT : BP-PP11
- Catch Tray Enabling Kit : BP-PP12

Installation Procedure

1. Open the package and check the bundled items.
   - LCT

Table 1

No	Name	Qty
1	LCT	1
2	Screw	1
3	Extension Wire Tray	2
4	Corrugation Wire Tray	2 (0)
5	Wire Holder	1
6	Screw	1
7	Clamp	2
8	Guide Corrugation	1

NOTE: *Quantity in () is the quantity when Lightweight paper is not supported.*

   - The Catch Tray Enabling Kit

Table 2

No	Name	Qty
1	IOT Exit Roll	1
2	Pinch Roll Assembly	2
3	Pinch Spring	4

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

2. Open the IOT-R Front Left/Right Cover.
3. Pull out the Exit Drawer Unit.
4. Remove the Inner Right Upper Cover. (Figure 1)
   (1) Remove the screw of the Stopper Wire.
   (2) Remove the screw (x4).
   (3) Remove the Inner Right Upper Cover.

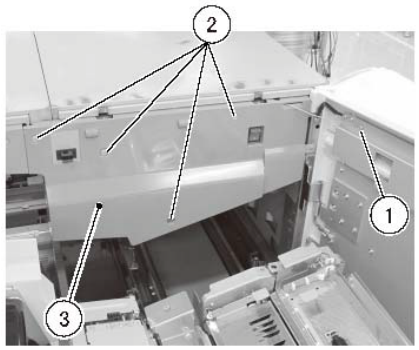


Figure 1 j0kol417001

5. Remove the screw from the Left Rail Assembly. (Figure 2)
   (1) Remove the Screw, Nylon Washer, and Washer.

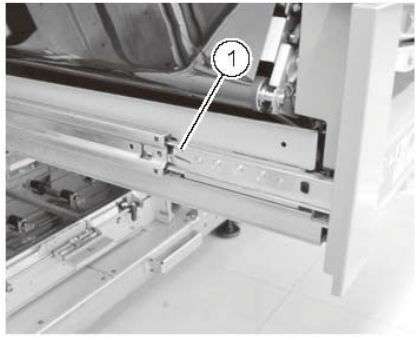


Figure 2 j0kol416001

6. Pull out the Exit Drawer Unit up to the service position. (Figure 3)
   (1) Remove the 1st of the 2-tier stopper of the left and right Rail by lifting the Lever, and pull out the Exit Drawer Unit further.

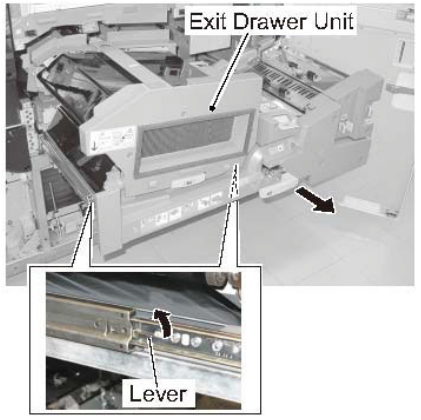


Figure 3 j0kol416002

7. Remove the EXIT Assembly. (Figure 4)
   (1) Disconnect the connector (x2).
   (2) Remove the screw.
   (3) Remove the EXIT Assembly.

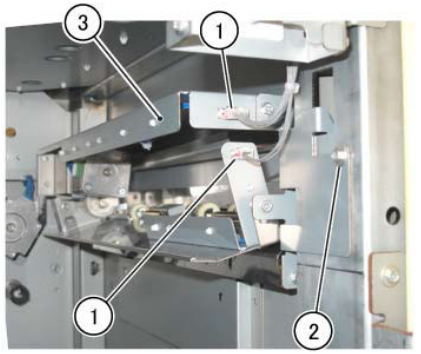
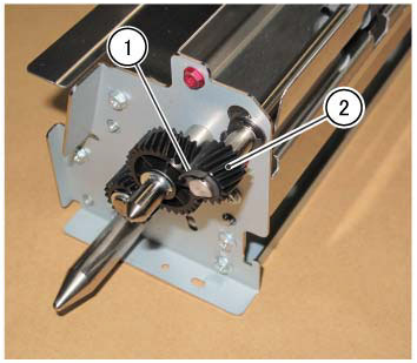


Figure 4 j0cm417001

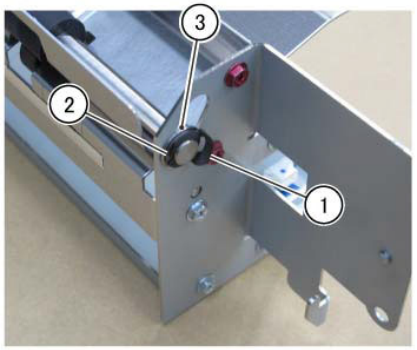
8. Remove the Idler Gear. (Figure 5)
   (1) Remove the KL-Clip.
   (2) Remove the Idler Gear.



j0cm92001

Figure 5 j0cm92001

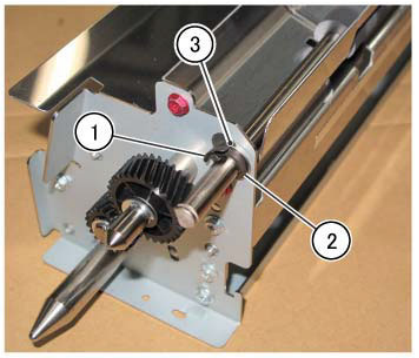
9. Remove the bearing at the front. (Figure 6)
   (1) Remove the KL-Clip.
   (2) Remove the Nylon Washer.
   (3) Remove the bearing.



j0cm92002

Figure 6 j0cm92002

10. Remove the bearing at the rear. (Figure 7)
    (1) Remove the KL-Clip.
    (2) Remove the Nylon Washer.
    (3) Remove the bearing.



j0cm92004

Figure 7 j0cm92004

11. Remove the IOT Exit Roll. (Figure 8)
    (1) Remove the IOT Exit Roll.

j0cm92003

Figure 8 j0cm92003

12. Remove the Exit Support Bracket Assembly. (Figure 9)
    (1) Disconnect the connector.
    (2) Remove the screw (x4).
    (3) Remove the Exit Support Bracket Assembly.

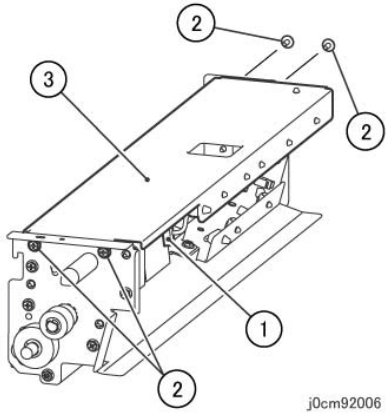


Figure 9 j0cm92006

13. Remove the Pinch Roll Assembly and Pinch Spring, and replace them with parts inside the Kit. (Figure 10)

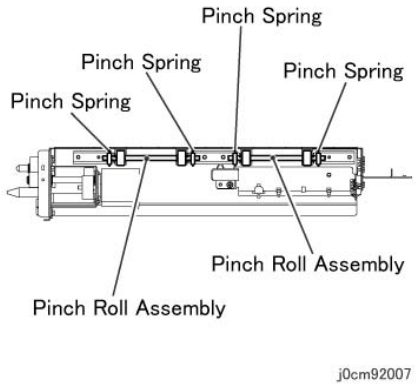


Figure 10 j0cm92007

14. Perform Steps 12 and 13 in reverse.
15. Replace the IOT Exit Roll removed in Step 11 with the part in the Kit, and perform Step 2 to Step 10 in reverse to return the machine to its original state.
16. Install the LCT. (Figure 11)
    (1) Install the LCT.
    (2) Tighten the screw.
    (3) Connect the connector.

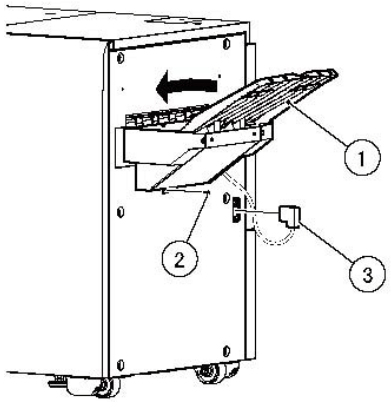


Figure 11 j0kol911130

17. Install the Wire Holder. (Figure 12)
    (1) Remove the Screw of the IOT-R Right Cover.
    (2) Install the Wire Holder.
    (3) Tighten the screw from the LCT Kit.

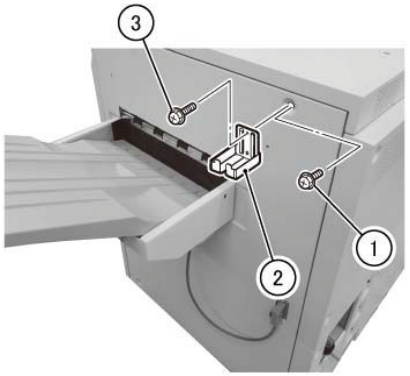


Figure 12 dar911016

NOTE: *Install the Wire holder freely.*

18. When the Wire Holder is installed to the IOT-R Right Cover, use Clamp (2) in the LCT kit to secure the LCT cable. (Figure 13)

    NOTE: *Refer to the diagram below for Clamp positions.*

    (1) Secure the LCT cable with Clamp (2).

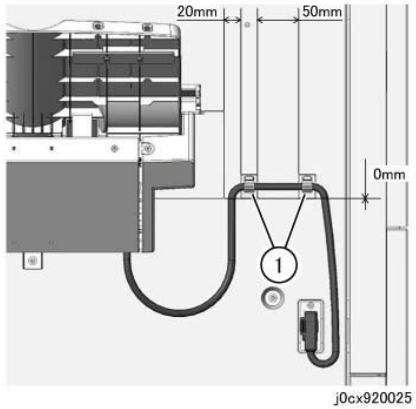


Figure 13 j0cx920025

19. Install the Extension Wire Tray/Corrugation Wire Tray. (Figure 14)
    (1) Install the Extension Wire Tray/Corrugation Wire Tray.

    NOTE: *Install the Corrugation Wire Tray only when long lightweight paper is used.*

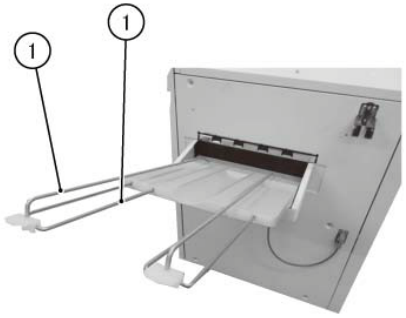


Figure 14 dar911017

NOTE: *When using long lightweight paper, install the Guide Corrugation, and align the rear end of the Corrugation Wire Tray to the triangular mark of the Guide Corrugation. (Figure 15)*

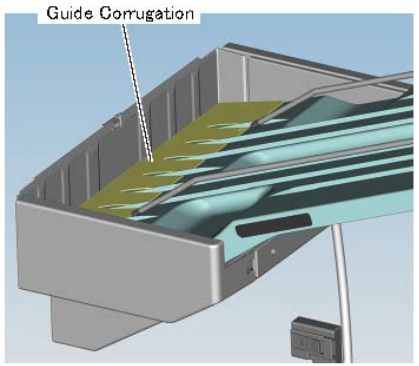


Figure 15 j0kol911133

NOTE: *If the Extension Wire Tray/Corrugation Wire Tray is not used, it can be stored as shown in the figure. (Figure 16).*

Figure 16 dar911018

20. Turn the machine Power ON.
21. Check the LCT operation.

9.1.3.1 Spot Color Extension Kit for #1 Engine (1 of 9)

Before Starting

- This Kit can be installed to the 4 Color Type models of Digital Full Color Production Printer.
- When installing this Kit, the Speciality Color Engine Kit (Overlay), Specialty Color Extention Kit, Marking Module Kit, and Toner Module Kit for the color to be added are required. Prepare the Kits and perform the installation in sequence.

NOTE: *At the beginning of the procedure, [Right], [Left], [ECO], [Server] is written.*

When 2 persons are working, we recommend that 1 person do the [Right] work and 1 other person work on the other 3 tasks, and then collaborate in order to proceed efficiently.

- [Right]: Work on the IOT-Right section.
- [Left]: Work on the IOT-Left section.
- [ECO]: Work on the Eco-Box section.
- [Server]: Work on the Server.

Product Code

- Speciality Color Engine Kit (Overlay) : BP-PM12
- Specialty Color Extention Kit : BP-PM11
- Toner Enabling Kit (Clear) : BP-PM16
- Toner Enabling Kit (Gold) : BP-PM17
- Toner Enabling Kit (Silver) : BP-PM18
- Toner Enabling Kit (White) : BP-PM21
- Toner Enabling Kit (Textured Paper) : BP-PM20
- Toner Enabling Kit (Pink) : BP-PM19
- Marking Module Kit : BP-PM14
- White Marking Module Kit : BP-PM15

Installation Procedure

1. Open the package and check the bundled items.
   - Speciality Color Engine Kit (Overlay) (Figure 1, Figure 2, Figure 3, Figure 4)

Table 1

No	Name	Qty
1	ROS Assembly	1
2	Rear Drive Fan Assembly	1
3	Wire Harness (DISPSM)	1
4	Drum Drive Assembly	1
5	Drawer Harness Assembly	1
6	Bracket	1
7	Joint Assembly	1
8	Motor Drive Bracket Assembly	1
9	Main Connector Assembly	1
10	Deve Bias HVPS	1
11	CC HVPS	1
12	PCC HVPS	1
13	Plate Spring	2
14	Tie Plate	1
15	1st BTR HVPS	1
16	Duct Joint Cap Assembly	1
17	Blower Fan	1
18	Case Assembly	1
19	CC Assembly	1
20	Retract Shaft Assembly	1
21	1st Roll Assembly	1
22	Retract Roll Assembly	1
23	Duct Assembly	1
24	Main Filter	1
25	Rear BTR Holder Assembly	1
26	PCC-Connector	1
27	Bracket	1
28	Hose Hook	1
29	CC Duct	1
30	Bracket	1
31	MM Right Rail Assembly	1
32	MM Left Rail Assembly	1
33	Duct Hose	1
34	Hose	1
35	Duct Bracket	1
36	Drum Sub Crum PWB	1

Table 1

No	Name	Qty
37	CC Fan Assembly	1
38	Duct	1
39	ROS Cable 1	1
40	CC-Connector	1
41	PCC Duct	1
42	CC Cleaner Motor Assembly	1
43	Terminal Housing	1
44	Terminal Assembly	1
45	Clamp	1
46	Front BTR Holder Assembly	1
47	Retract Slide Block	2
48	Spring	1
49	Cleaner Motor Assembly	1
50	Bearing (for Retract Slide Block)	8
51	Bearing (for Retract Shaft Assembly)	2
52	Spring (for Retract Slide Block)	2
53	Spring (for Retract Roll Assembly)	1
54	PWB Support	2
55	PWB Support	2
56	PWB Support	3
57	PWB Support	2
58	KL-Clip	2
59	E-Ring	4
60	Machine Screw (M4 x8)	24
61	Machine Screw (M3 x6)	29
62	DEL Screw (M4 x8)	11
63	DEL Screw (M4 x6)	4
64	DEL Screw (M3 x6)	2
65	Tapping Screw WP (M3 x8)	1

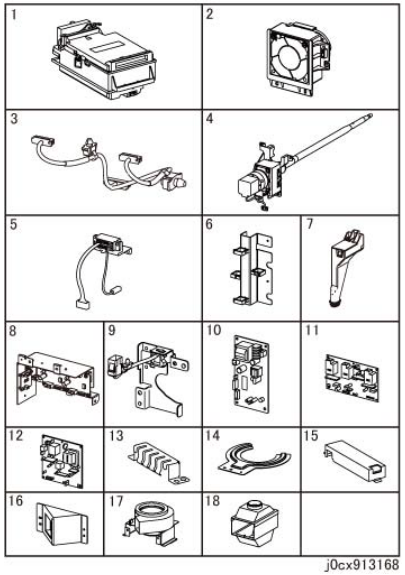


Figure 1 j0cx913168

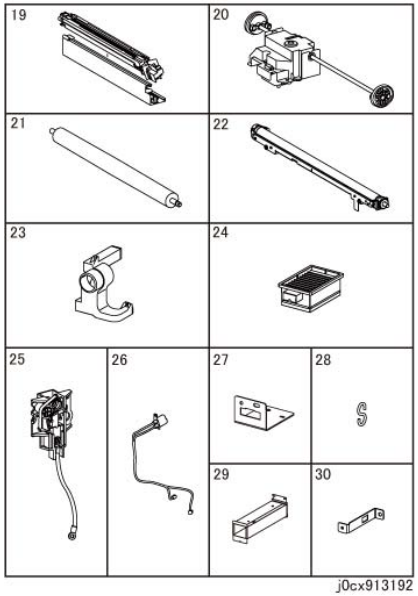


Figure 2 j0cx913192

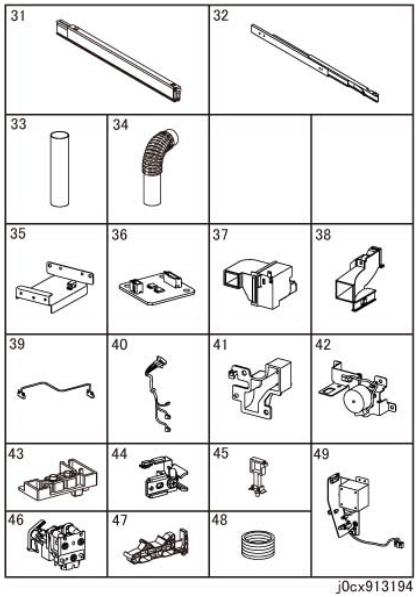


Figure 3 j0cx913194

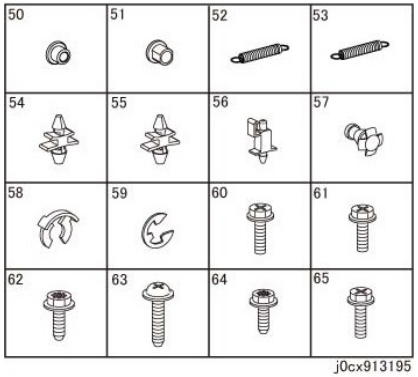


Figure 4 j0cx913195

- Specialty Color Extention Kit (Figure 5)

Table 2

No	Name	Qty
1	LVPS S24	1
2	Bracket	1

Table 2

No	Name	Qty
3	FLY 8 PWB	1
4	Halftone PWB Assembly	1
5	DST 4 PWB	1
6	Bag	1
7	PWB Support	3
8	Machine Screw (M3 x6)	16

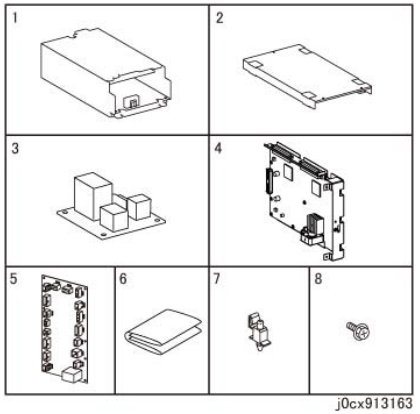


Figure 5 j0cx913163

- Toner Enabling Kit(CLR/GLD/SLV/WHT/TX/PINK) (Figure 6)

Table 3

No	Name	Qty
1	Toner Cartridge (CLR/GLD/SLV/WHT/TX/PINK)	1
2	Dispenser Inner Cover (CLR/GLD/SLV/WHT/TX/PINK)	1
3	Label L (GLD/SLV/WHT/PINK)	2
4	Label R (GLD/SLV/WHT/PINK)	2
5	Label (CLR/GLD/SLV/WHT/TX/PINK)	1
6	Toner Label (CLR/GLD/SLV/WHT/TX/PINK)	1
7	Screw (M3 x6)	4

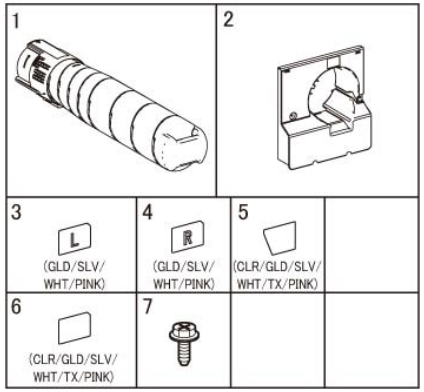


Figure 6 dar917001

- Marking Module Kit (Figure 7)

Table 4

No	Name	Qty
1	MM Assembly (CLR/GLD/SLV/WHT/TX/PINK)	1
2	Shoulder Screw	2
3	Dispenser Assembly (CLR/GLD/SLV/WHT/TX/PINK)	1
4	Drum Cartridge	1
5	Screw (M4x8)	2

*: Label is affixed for identification of WHT only. (Figure 8)

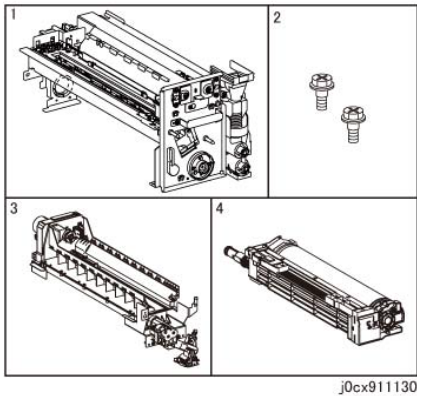


Figure 7 j0cx911130

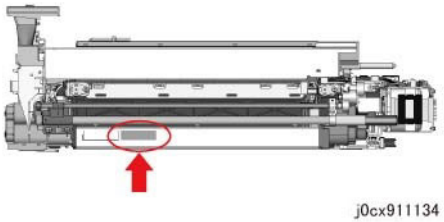


Figure 8 j0cx911134

WARNING

Turn OFF the Fiery Server and unplug the Power Cord.

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

CAUTION

Turning OFF the main switch before removing or attaching the HSS Cable (9 m).

2. [Right] Remove the Print Server Support Cover. (Figure 9)

NOTE: *Do not turn ON the main switch with the Print Server Support Cover removed. If not, it can cause damage to the board or operation failure.*

(1) Remove the Screw (x2).
(2) Remove the Print Server Support Cover.

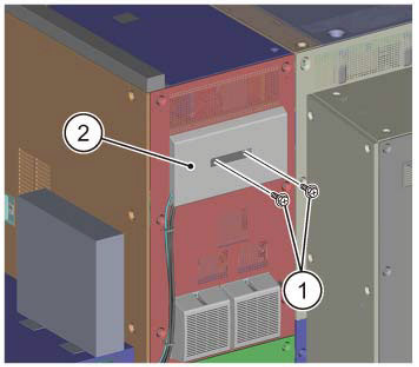


Figure 9 j0kol913001

3. [Right/Server] Disconnect all cables that are connected externally to the Video Box Unit.

4. [Server] Release the HSS Cable (9 m) (x2) from the Clamp (x7).
5. [Right] Release the Net Cable from the Clamp (x6).
6. [Right] Open the IOT-R Front Left Cover.
7. [Right] Remove the ELEC Box Front Plate. (Figure 10)
   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

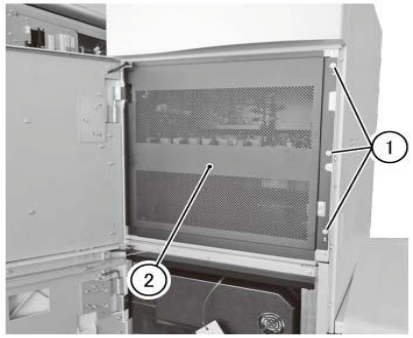


Figure 10 dar418003

8. [Right] Remove the Screw (x2). (Figure 11)
   (1) Remove the Screw (x2).

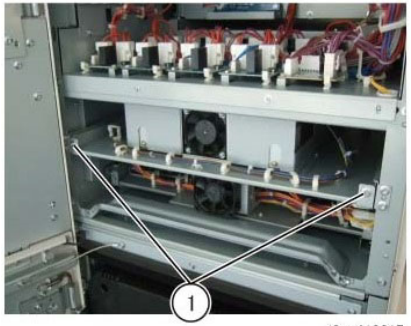


Figure 11 j0cx418017

9. [Right] Remove the ELEC Box Rear Cover. (Figure 12)
   (1) Remove the Screw (x6).
   (2) Remove the ELEC Box Rear Cover.

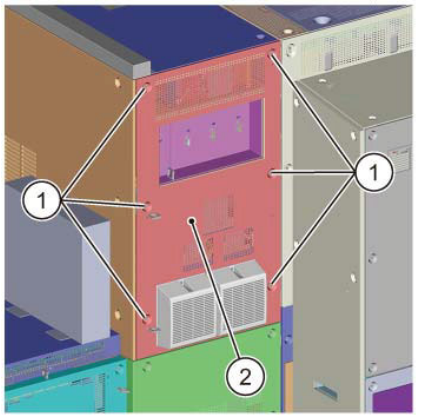


Figure 12 j0kol913002

10. [Right] Disconnect the connector (x5). (Figure 13)
    (1) Disconnect the connector (x4).
    (2) Disconnect the connector.
    (3) Release the wire harness from the clamp.

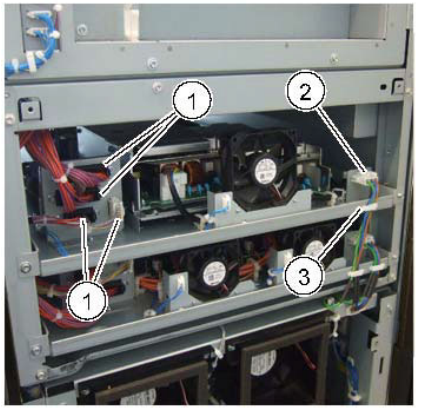


Figure 13 j0kol418005

11. [Right] Pull the LVPS H1U Chassis Assembly horizontally until it is stopped by the Stopper. (Figure 14)
    (1) Remove the Screw (x2).
    (2) Pull out the LVPS H1U Chassis Assembly.

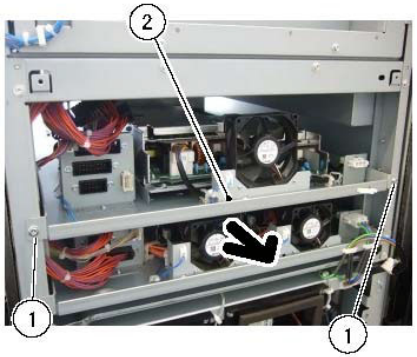


Figure 14 j0kol418006

12. [Right] Release the wire harness for LVPS S24 from the clamp (x2). (Figure 15)
    (1) Release the wire harness from the clamp (x2).
    (2) Remove the clamp.

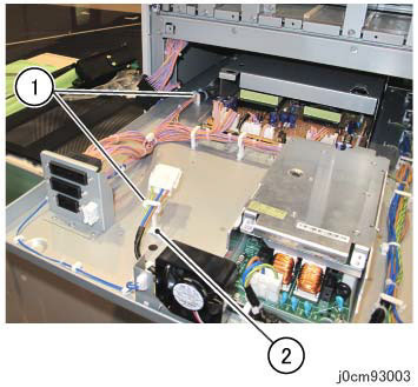


Figure 15 j0cm93003

13. [Right] Install the Bracket in the kit with the Machine Screw (M3 x6: 4). (Figure 16)
    (1) Install the Bracket.
    (2) Tighten the Machine Screw (M3 x6: 4).

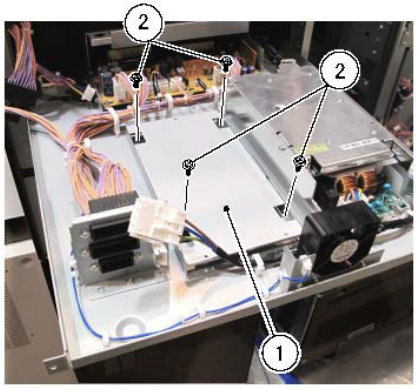


Figure 16 j0kol913018

14. [Right] Go to 9.1.3.2 Spot Color Extension Kit for #1 Engine (2 of 9).

9.1.3.2 Spot Color Extension Kit for #1 Engine (2 of 9)

Installation Procedures (Continue)

1. [Right] Connect the Connector (x2) to LVPS S24. (Figure 1)
   (1) Connect the connector (x2).

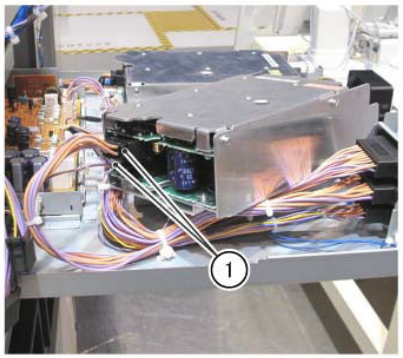


Figure 1 j0cm93006

2. [Right] Install LVPS S24 with the Machine Screw (M3 x6: 3). (Figure 2)
   (1) Install LVPS S24.
   (2) Tighten the Machine Screw (M3 x6: 3).

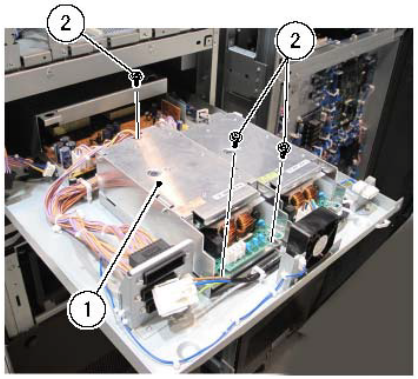


Figure 2 j0kol913019

3. [Right] Disconnect the Shorting Connector, and connect the Connector to LVPS S24. (Figure 3)
   (1) Disconnect the Shorting Connector.
   (2) Connect the connector.

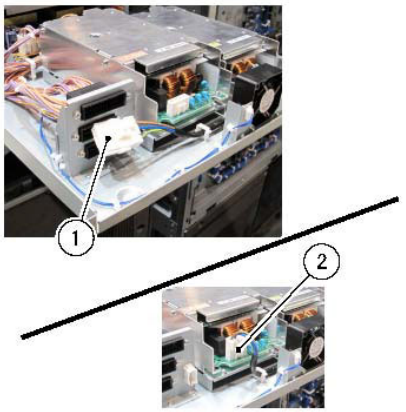


Figure 3 j0kol913020

4. [Right] Secure the wire harness with the clamp (x2), and connect the Connector. (Figure 4)
   (1) Secure the wire harness with the clamp (x2).
   (2) Connect the #1 labeled Connector (2 Pin).

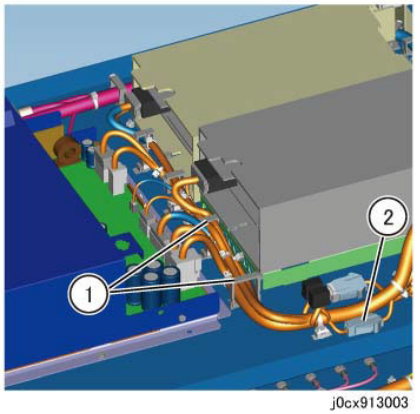


Figure 4 j0cx913003

5. [Right] Perform Step 8 to Step 11 of 9.1.3.1 Spot Color Extension Kit for #1 Engine (1 of 9) in reverse order to reinstall the removed parts.
6. [Right] Release the wire harness from the clamp. (Figure 5)
   (1) Release the wire harness from the clamp.

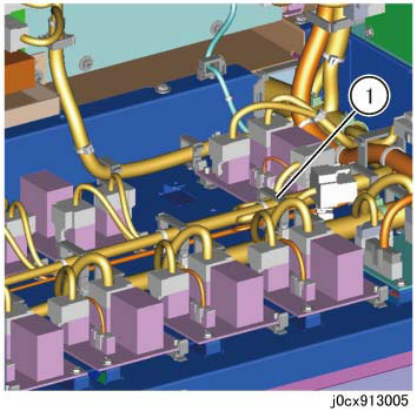


Figure 5 j0cx913005

7. [Right] Install the FLY 8 PWB with the Screw (M3 x6). (Figure 6)
   (1) Install the PWB Support (x3).
   (2) Install the FLY 8 PWB.
   (3) Tighten the Machine Screw (M3 x6).

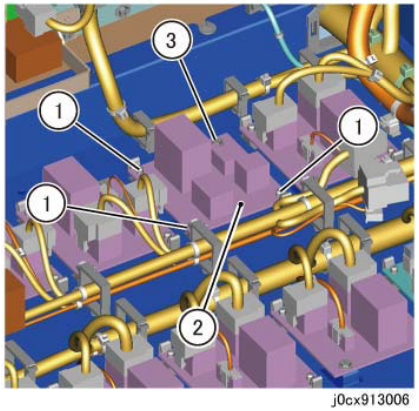


Figure 6 j0cx913006

8. [Right] Connect the Connector (x3) to the FLY 8 PWB. (Figure 7)
   (1) Connect the Connector (x3).

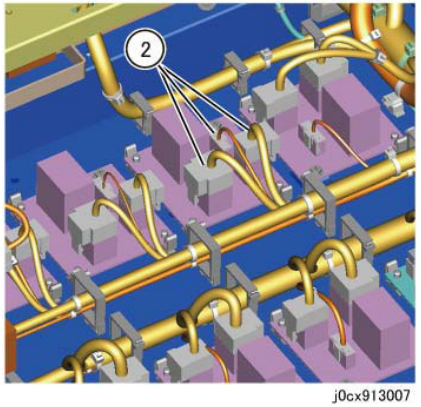


Figure 7 j0cx913007

9. [Right] Release the wire harness for DST4 PWB from the clamp (x4). (Figure 8)
   (1) Release the wire harness from the clamp (x4).

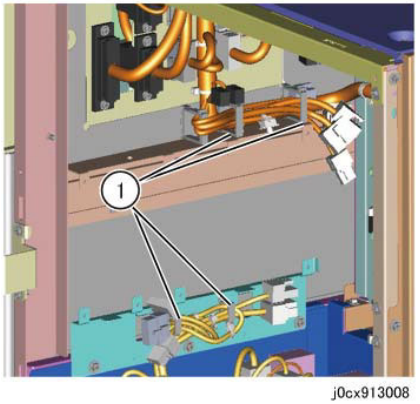


Figure 8 j0cx913008

10. [Right] Install the DST4 PWB with the Screw (M3 x6) (x8). (Figure 9)
    (1) Install the DST4 PWB.
    (2) Tighten the Screw (M3 x6) (x8).

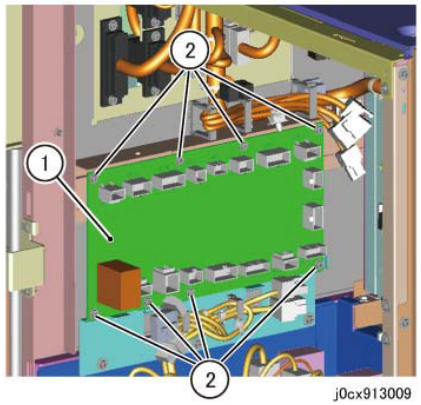


Figure 9 j0cx913009

11. [Right] Connect the Connector (x10) to the DST4 PWB. (Figure 10)
    (1) Connect the Connector (x10).
    (2) Insert the Push Tie (x1).
    (3) Close the clamp (x4).

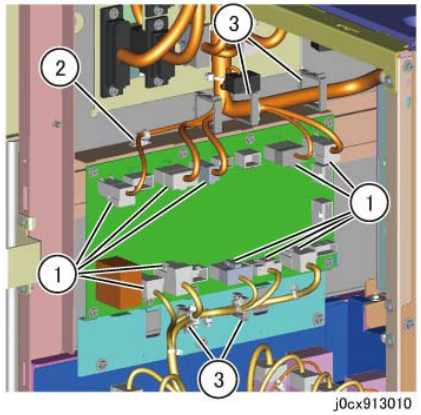


Figure 10 j0cx913010

12. [Right] Reinstall the ELEC Box Front Plate that was removed in Step 7 of 9.1.3.1 Spot Color Extension Kit for #1 Engine (1 of 9).
13. [Right] Close the IOT-R Front Left Cover.
14. [Right] Disconnect the connector (x3). (Figure 11)
    (1) Release the wire harness from the clamp.
    (2) Disconnect the connector (x3).

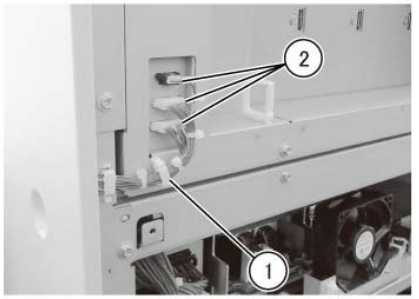


Figure 11 dar418008

15. [Right] Remove the Video Box Rear Cover. (Figure 12)
    (1) Remove the Screw (x9).
    (2) Remove the Video Box Rear Cover.

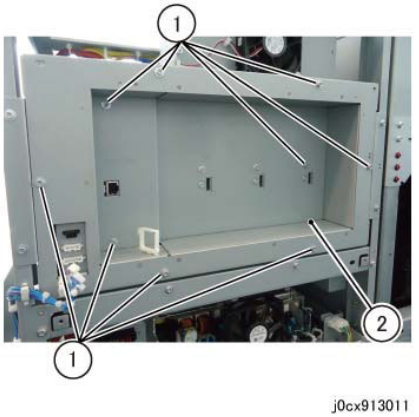


Figure 12 j0cx913011

16. [Right] Remove the Blind Panel. (Figure 13)
    (1) Remove the Screw (x2).
    (2) Remove the Blind Panel.

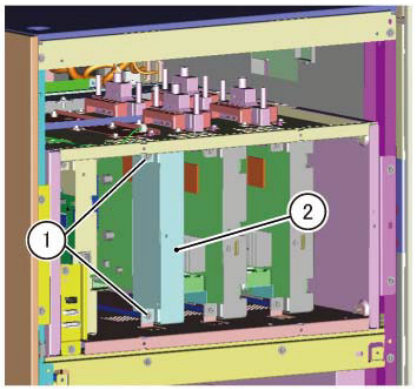


Figure 13 j0cx913012

17. [Right] Reuse the Screw (x2) that was removed in Step 16 to install the Halftone PWB Assembly. (Figure 14)
    (1) Insert the Halftone PWB Assembly.
    (2) Tighten the Screw (x2).

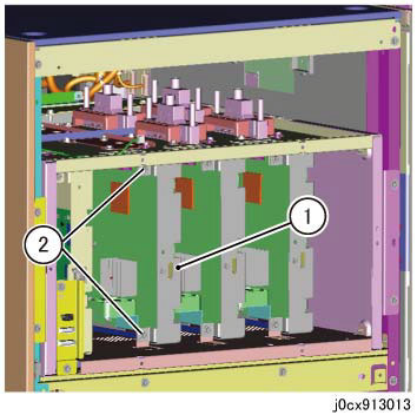


Figure 14 j0cx913013

18. [Right] Perform Step 14 and Step 15 in reverse to reinstall the removed parts.
19. [Right] Remove the Top Corner Cover. (Figure 15)
    (1) Remove the Screw (x2).
    (2) Remove the Top Corner Cover.

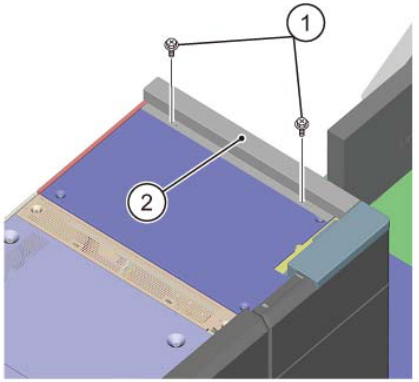


Figure 15 j0kol913014

20. [Right] Remove the IOT-R Top Cover. (Figure 16)
    (1) Remove the Screw (x4).
    (2) Remove the IOT-R Top Cover.

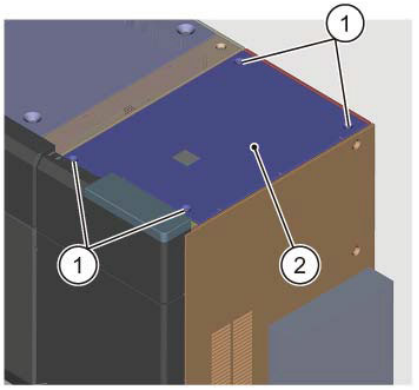


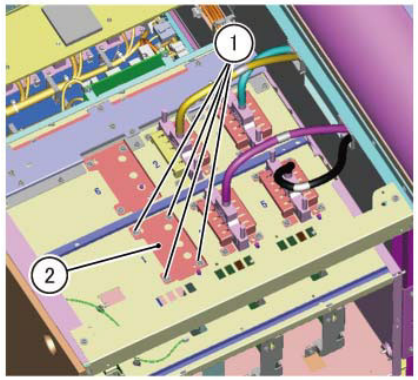
Figure 16 j0kol913003

21. [Right] Go to 9.1.3.3 Spot Color Extension Kit for #1 Engine (3 of 9).

9.1.3.3 Spot Color Extension Kit for #1 Engine (3 of 9)

Installation Procedures (Continue)

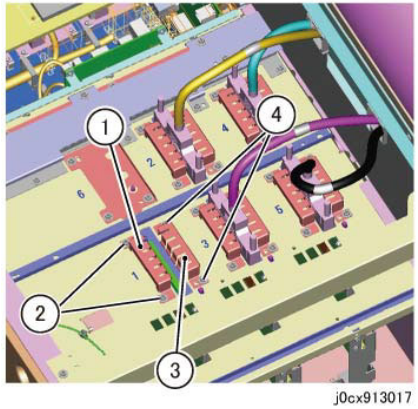
1. [Right] Remove the Blind Panel. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the Blind Panel.



j0cx913015

Figure 1 j0cx913015

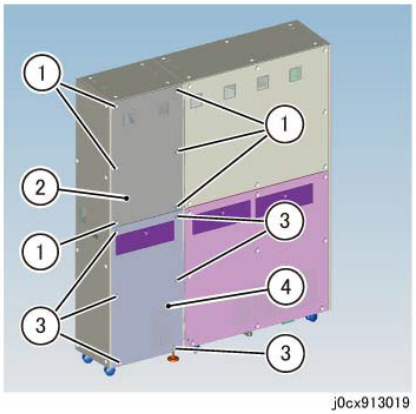
2. [Right] Reuse the Screw (x4) that was removed in Step 1 to install the Plate Spring (x2). (Figure 2)
   (1) Install the Plate Spring.
   (2) Tighten the Screw (x2).
   (3) Install the Plate Spring.
   (4) Tighten the Screw (x2).



j0cx913017

Figure 2 j0cx913017

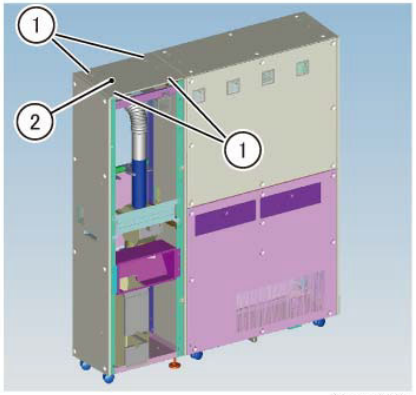
3. [ECO] Detach the ECO Box Unit from the Main Unit of the machine. (REP 4.9.1)
4. [ECO] Remove the ECO2 Rear Upper Cover and ECO2 Rear Lower Cover. (Figure 3)
   (1) Remove the Screw (x6).
   (2) Remove the ECO2 Rear Upper Cover.
   (3) Remove the Screw (x6).
   (4) Remove the ECO2 Rear Lower Cover.



j0cx913019

Figure 3 j0cx913019

5. [ECO] Remove the ECO2 Top Cover. (Figure 4)
   (1) Remove the Screw (x4).
   (2) Remove the ECO2 Top Cover.

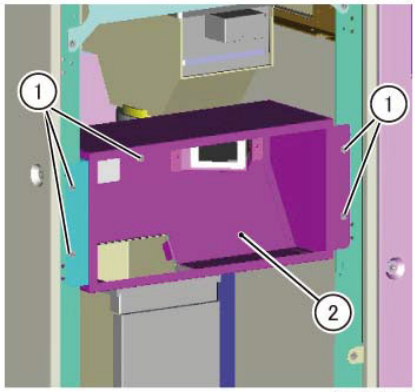


j0cx913021

Figure 4 j0cx913021

6. [ECO] Remove the Blower Joint Duct. (Figure 5)
   (1) Remove the Screw (x5).

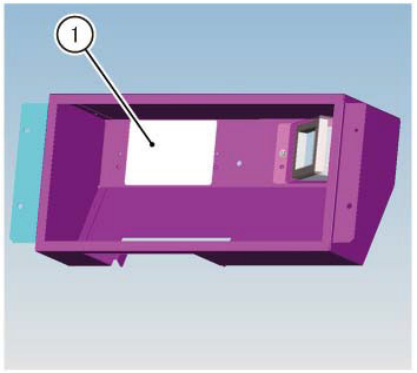
(2) Remove the Blower Joint Duct.



j0cx913023

Figure 5 j0cx913023

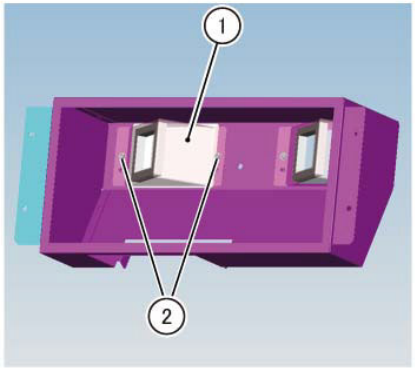
7. [ECO] Peel off the Cap Seal pasted on the Blower Joint Duct. (Figure 6)
   (1) Peel off the Cap Seal.



j0cx913025

Figure 6 j0cx913025

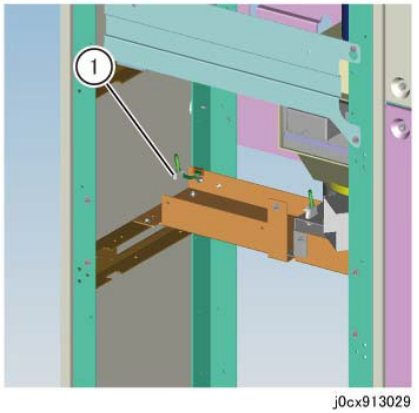
8. [ECO] Install the Duct Joint Cap Assembly to the Blower Joint Duct. (Figure 7)
   (1) Install the Duct Joint Cap Assembly.
   (2) Tighten the Screw (x2).



j0cx913027

Figure 7 j0cx913027

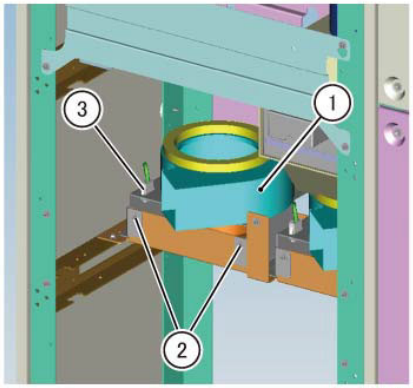
9. [ECO] Peel off the tape securing the Wire Harness. (Figure 8)
   (1) Peel off the tape.



j0cx913029

Figure 8 j0cx913029

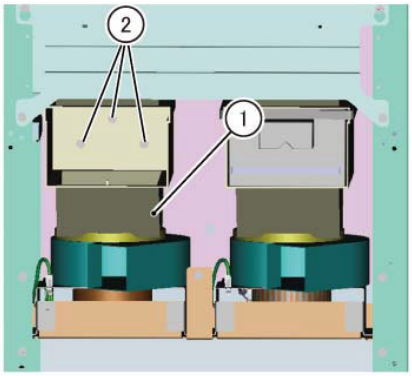
10. [ECO] Install the Blower Fan. (Figure 9)
    (1) Install the Blower Fan.
    (2) Tighten the Screw (x2).
    (3) Connect the connector.



j0cx913031

Figure 9 j0cx913031

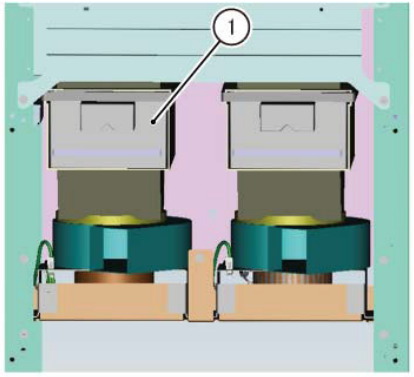
11. [ECO] Install the Case Assembly. (Figure 10)
    (1) Install the Case Assembly.
    (2) Tighten the Screw (x3).



j0cx913033

Figure 10 j0cx913033

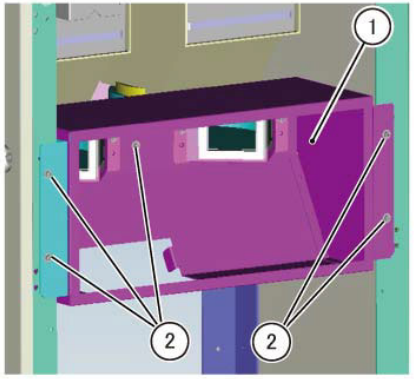
12. [ECO] Insert the Main Filter. (Figure 11)
    (1) Insert the Main Filter.



j0cx913037

Figure 11 j0cx913037

13. [ECO] Install the Blower Joint Duct. (Figure 12)
    (1) Install the Blower Joint Duct.
    (2) Tighten the Screw (x5).



j0cx913039

Figure 12 j0cx913039

14. [ECO] Install the Tie Plate. (Figure 13)
    (1) Install the Tie Plate.
    (2) Tighten the Screw.

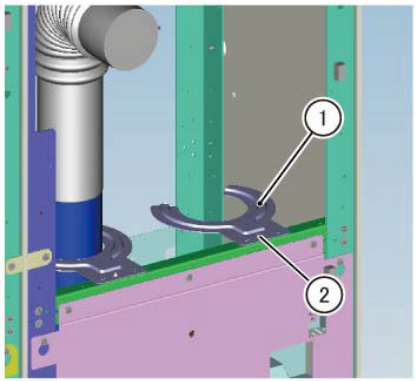


Figure 13 j0cx913035

15. [ECO] Install the CC Duct. (Figure 14)
    (1) Hook the protrusion (x2) of the CC Duct in the hole of the Frame, and temporarily secure the Bracket with the Screw.
    (2) Adjust the Bracket position so that the ECO Box Unit is sandwiched, and secure it with the Screw (x3).

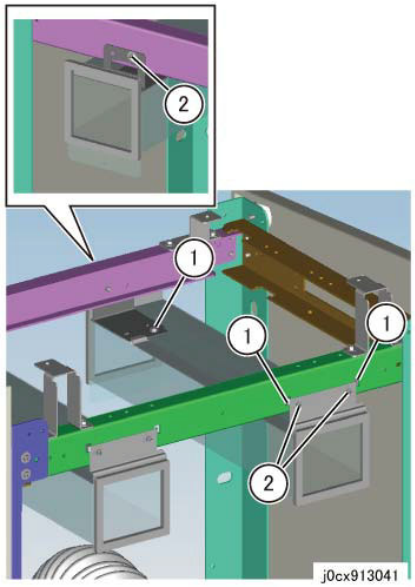


Figure 14 j0cx913041

16. [ECO] Caulk the CC Duct side so that the Hose Hook does not come off. (Figure 15)
    (1) Caulk the CC Duct side.

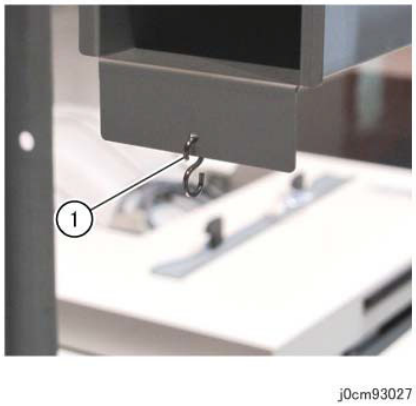


Figure 15 j0cm93027

17. [ECO] Install Duct Hose with the longer one from the white line facing downward, and insert the Hose with the Hook hole facing the Front up to the white line position of the Duct Hose. (Figure 16)
    (1) Install the Duct Hose.
    (2) Insert the Hose.

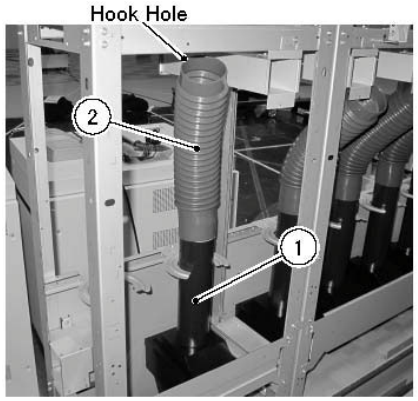


Figure 16 j0kol913025

18. [ECO] Hook the Hose on the Hose Hook. (Figure 17)
    (1) Hook the Hose.

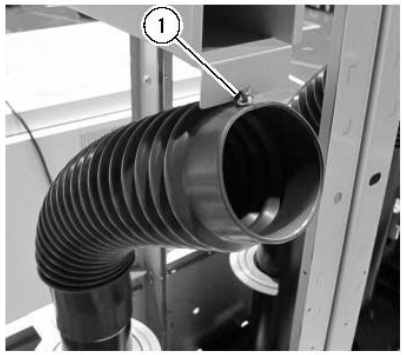


Figure 17 j0kol913026

19. [ECO] Install the ECO2 Top Cover using the Machine Screw (M4 x8: 4). (Figure 18)
    (1) Install the ECO2 Top Cover.
    (2) Tighten the Machine Screw (M4 x8: 4).

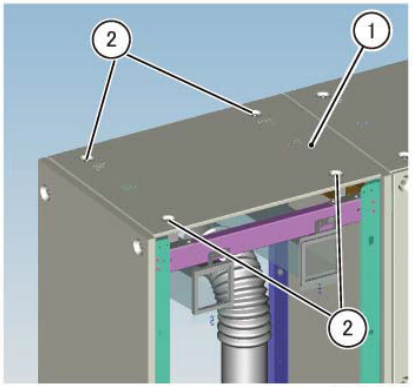


Figure 18 j0cx913043

20. [Left] Go to 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).

9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9)

Installation Procedures (Continue)

1. [Left] Open the IOT-L Front Left/Right Door Assembly. (PL 19.1)
2. [Left] Open the Dispenser Left Cover/Dispenser Right Cover Assembly. (PL 19.2)
3. [Left] Remove the Developer Inner Cover Assembly and IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

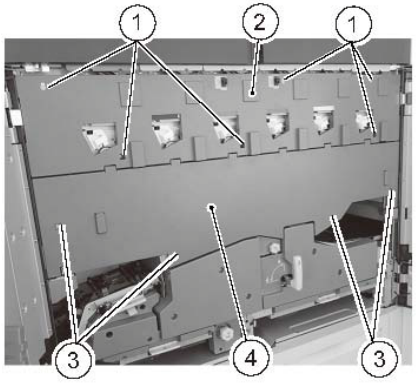


Figure 1 j0kol405001

4. [Left] Remove the Blind Plate Assembly. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Blind Plate Assembly.

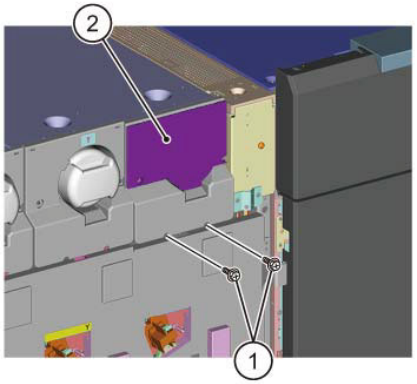


Figure 2 j0kol913004

5. [Left] Remove the Dispenser Inner Cover of Toner Dispenser Assembly (Y). (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Dispenser Inner Cover.

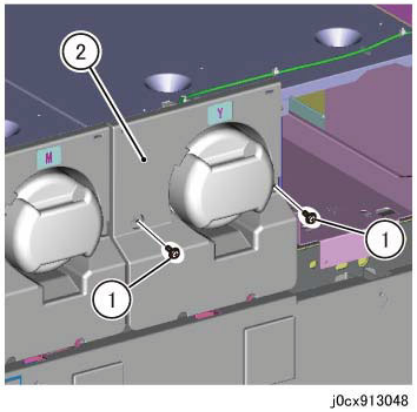


Figure 3 j0cx913048

6. [Left] Remove the IOT-L Top Cover. (Figure 4)
   (1) Remove the Screw (x5).
   (2) Remove the IOT-L Top Cover.

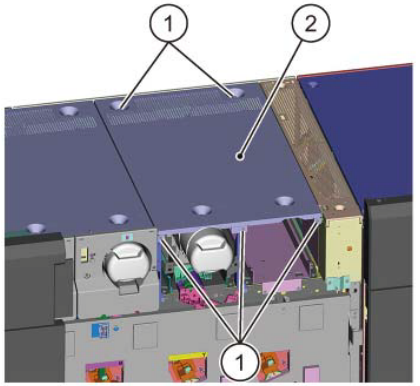


Figure 4 j0kol913005

7. [Left] Remove the ROS Cover (#1). (Figure 5)
   (1) Remove the Screw (x6).
   (2) Remove the ROS Cover (#1).

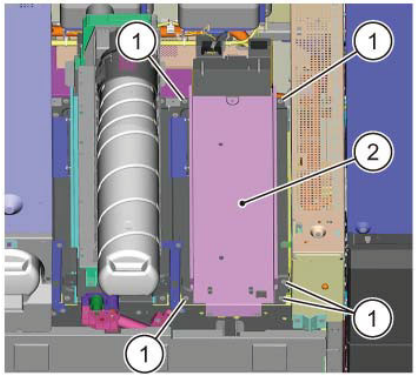


Figure 5 j0kol913006

8. [Left] Lower the Big Module and IBT Module. (Figure 6)
   (1) Lower the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

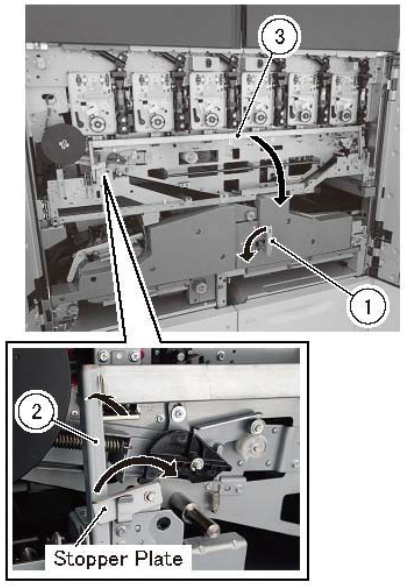


Figure 6 j0kol405002

9. [Left] Remove the IOT-L Rear Right Cover. (Figure 7)
   (1) Loosen the Screw (x2).
   (2) Remove the Screw (x2).
   (3) Remove the IOT-L Rear Right Cover.

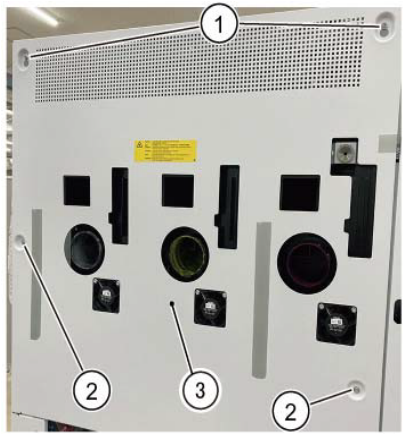


Figure 7 dar419001

10. [Left] Remove the IOT-L Rear Left Cover. (Figure 8)
    (1) Loosen the Screw (x2).
    (2) Remove the Screw.
    (3) Remove the IOT-L Rear Left Cover.

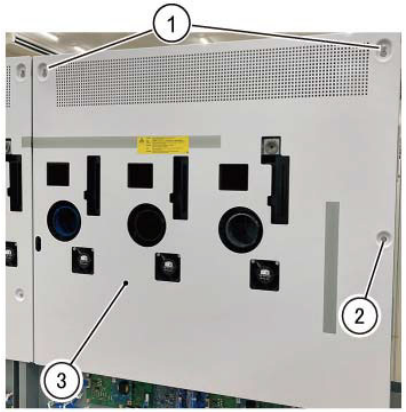


Figure 8 dar419002

11. [Left] Remove the IOT-L Rear Mid Cover. (PL 19.5)
12. [Left] Remove the IOT-L Rear Mid LH Cover. (PL 19.5)
13. [Left] Open the Right PWB Chassis Assembly. (Figure 9)
    (1) Release the wire harness from the clamp.
    (2) Release the wire harness from the clamp (x2).
    (3) Remove the Screw (x6).
    (4) Open the Right PWB Chassis Assembly.

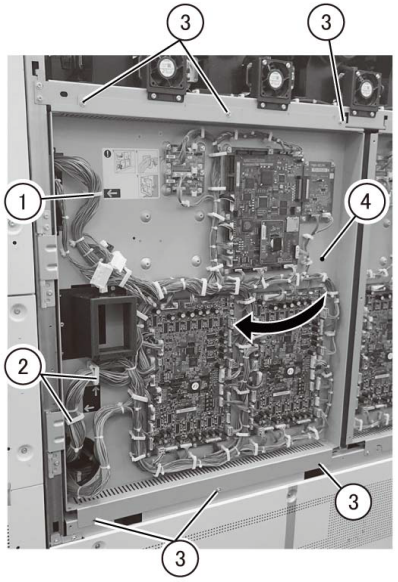


Figure 9 dar404001

14. [Left] Open the Left PWB Chassis Assembly. (Figure 10)
    (1) Remove the Screw (x8).
    (2) Open the Left PWB Chassis Assembly.
    (3) Release the clamp.
    (4) Rotate the Stopper and insert it in the hole of the Bracket.

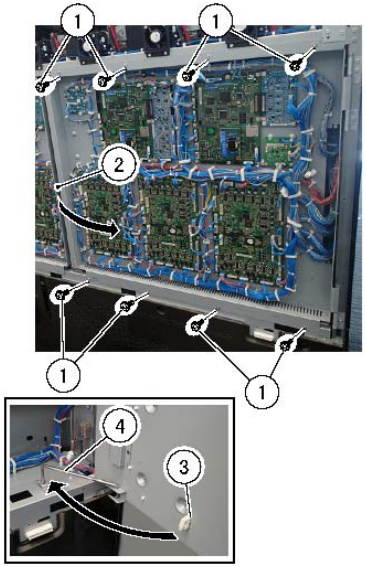


Figure 10 j0cx408001

15. [Left] Remove the Drive Fan Assembly. (Figure 11)
    (1) Remove the Screw and rotate the Plate.
    (2) Disconnect the connector.
    (3) Remove the Screw (x4).
    (4) Remove the Drive Fan Assembly.

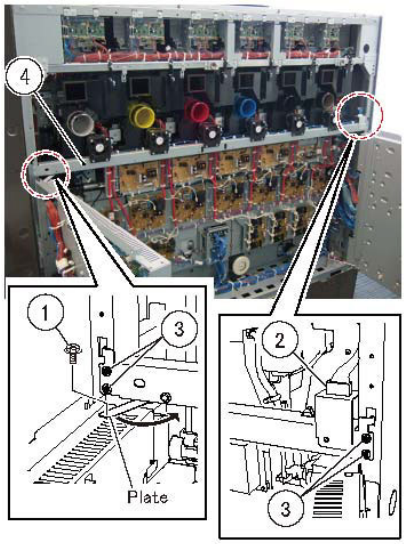


Figure 11 j0kol418004

16. [Left] Remove the Front Plate Assembly (Dummy). (Figure 12)
    (1) Remove the Screw (x2).
    (2) Remove the Front Plate Assembly (Dummy).

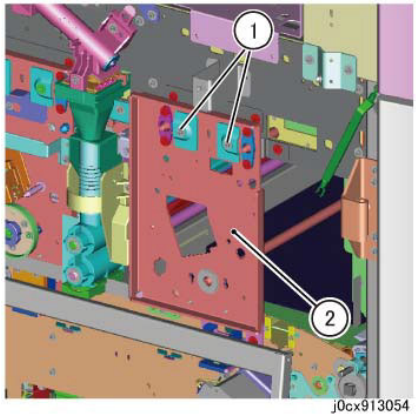


Figure 12 j0cx913054

17. [Left] Remove the Cover. (Figure 13)
    (1) Loosen the Screw.
    (2) Remove the Cover.
    (3) Tighten the Screw.

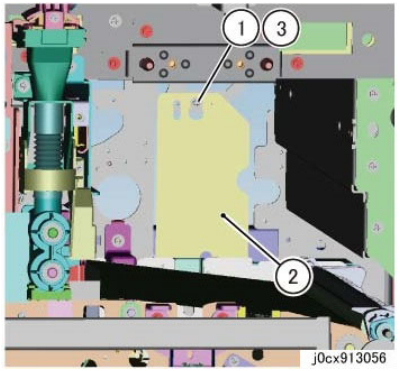


Figure 13 j0cx913056

18. [Left] Send the Connector connected to the ROS (#1) from the Rear Frame hole to the Front. (Figure 14)
    (1) Free the clamp and release the harness.
    (2) Send the removed Connector from the Rear Frame hole to the Front.
    (3) Close the clamp.

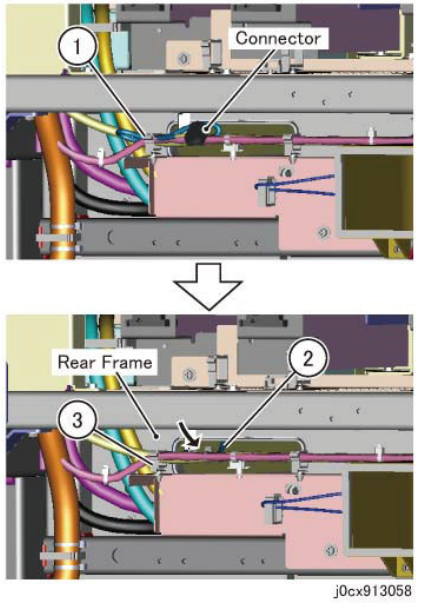


Figure 14 j0cx913058

19. [Left] Insert the supplied ROS Cable 1 Connector into the Rear Frame hole, and secure it with the Clamp. (Figure 15)
    (1) Release the clamp.
    (2) Insert ROS Cable 1 Connector into the Rear Frame hole. As a guide, make sure the label of ROS Cable comes to the position of the Clamp.
    (3) Secure the clamp.

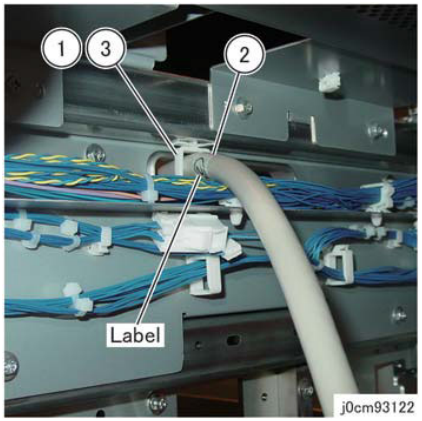


Figure 15 j0cm93122

20. [Left] Send the connector on the opposite side of ROS Cable 1 to the IOT-R side. (Figure 16)
    (1) Send the Connector along the Rear Frame to the IOT-R side.
    (2) Secure ROS Cable 1 by using the clamp.

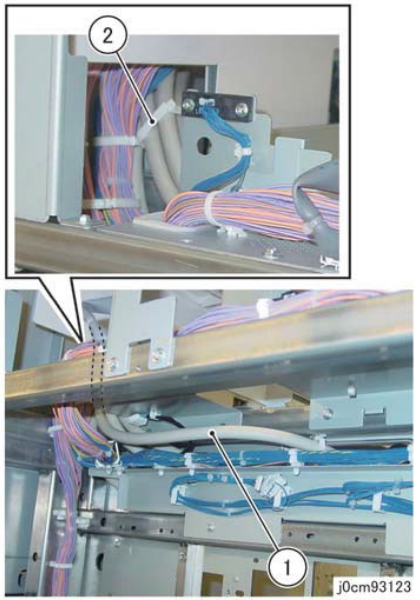


Figure 16 j0cm93123

21. [Right] Connect the added ROS Cable 1 to the No. 1 slot. (Figure 17)
    (1) Connect ROS Cable 1.
    (2) Secure ROS Cable 1 by using the clamp.

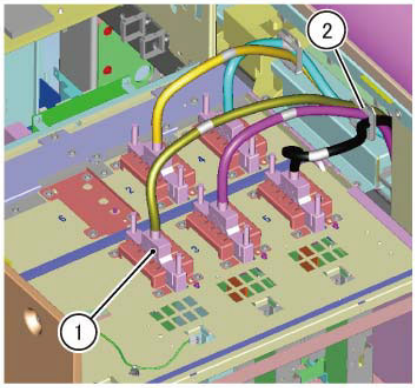


Figure 17 j0cx913060

22. [Right] Reinstall the IOT-R Top Cover that was removed in Step 19 of 9.1.3.2 Spot Color Extension Kit for #1 Engine (2 of 9).

23. [Right] Reinstall the Video Box Rear Cover that was removed in Step 15 of 9.1.3.2 Spot Color Extension Kit for #1 Engine (2 of 9).
24. [Left] Go to 9.1.3.5 Spot Color Extension Kit for #1 Engine (5 of 9).

9.1.3.5 Spot Color Extension Kit for #1 Engine (5 of 9)

Installation Procedures (Continue)

1. [Left] Install the supplied MM Left Rail Assembly. (Figure 1)

   NOTE: *Put paper on the IBT Belt and at the gap between the Rear Frame and IBT Belt in advance to prevent parts falling and the IBT Belt from being damaged.*

   NOTE: *Since the Plus Driver is used when installing the MM Left Rail Assembly, take note of the Screw falling.*

   (1) Pull out the Inner Rail from the MM Left Rail Assembly.
   (2) Determine the position of MM Left Rail Assembly with emboss, and install it.
   (3) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Front.
   (4) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Rear.
   (5) Release the Stopper of the Inner Rail, and push it into the machine.

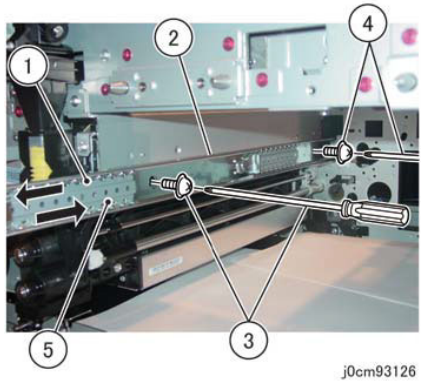


Figure 1 j0cm93126

2. [Left] Install the supplied MM Right Rail Assembly. (Figure 2)
   (1) Pull out the Inner Rail from the MM Right Rail Assembly.
   (2) Determine the position of MM Right Rail Assembly with emboss, and install it.
   (3) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Front.
   (4) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Rear.
   (5) Release the Stopper of the Inner Rail, and push it into the machine.

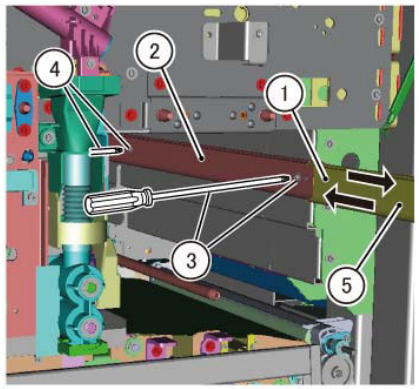


Figure 2 j0cx913062

3. [Left] Open the Cable Cover of the ROS Cover. (Figure 3)
   (1) Loosen the Screw (x2).
   (2) Slide the Cable Cover.

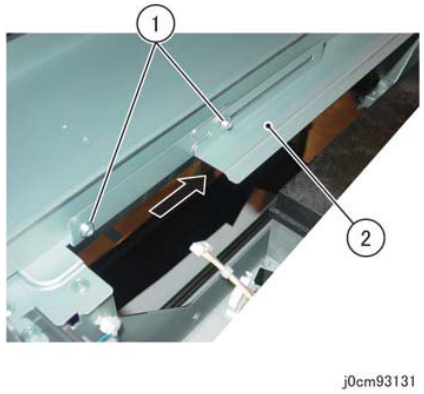


Figure 3 j0cm93131

4. [Left] Peel off the barcode label from the supplied ROS Assembly (#1), and paste it on the Service Log. (Figure 4)

   NOTE: *When holding the ROS Assembly (#1), hold at the position shown.*

   (1) Peel off the Barcode Label.
   (2) Paste the peeled Barcode Label on the Service Log.

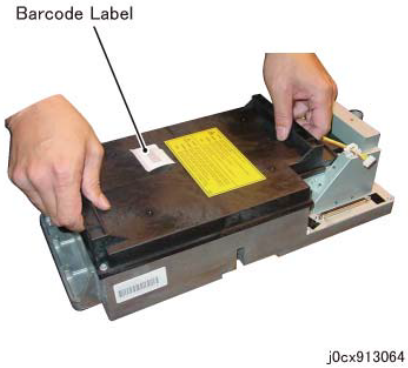


Figure 4 j0cx913064

5. [Left] Install the supplied ROS Assembly (#1) from the Front, and tighten the Machine Screw (M4 x10: 2). (Figure 5)
   (1) Install the ROS Assembly (#1).
   (2) Tighten the Machine Screw (M4 x10: 2).

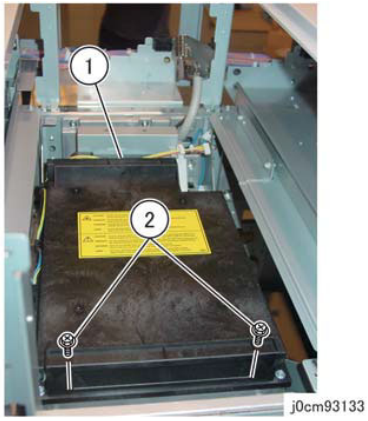
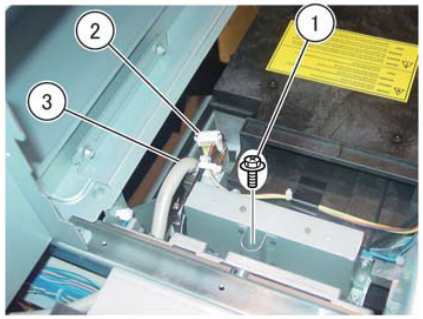


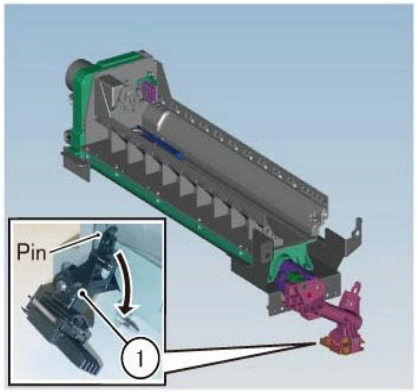
Figure 5 j0cm93133

6. [Left] Tighten the Screw of the ROS Assembly (#1) from the Rear, and connect the Wire Harness and ROS Cable 1 to the ROS Assembly (#1). (Figure 6)
   (1) Tighten the Machine Screw (M4 x10).
   (2) Connect the wire harness.
   (3) Connect ROS Cable 1, and tighten the Screw (x2) of the Connector.



j0cm93134

Figure 6 j0cm93134



j0cx913065

Figure 7 j0cx913065

7. [Left] Reinstall the Cable Cover that was removed in Step 3 of 9.1.3.5 Spot Color Extension Kit for #1 Engine (5 of 9).
8. [Left] Reinstall the ROS Cover that was removed in Step 8 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
9. [Left] Reinstall the IOT Top Cover that was removed in Step 7 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
10. [Left] Reinstall the Toner Dispenser Assembly (Y) that was removed in Step 6 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
11. [Left] Reinstall the Attention Light Assembly that was removed in Step 3 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
12. [Left] Remove the supplied Pipe Auger Assembly of the Dispenser Assembly (#1) from the Pin, and rotate it. (Figure 7)
    (1) Remove the Pipe Auger Assembly from the pin and rotate it.
13. [Left] Install the Dispenser Assembly (#1) and Dispenser Inner Cover (#1), and affix the Toner Label of the color to be used. (Figure 8)
    (1) Install the Dispenser Assembly (#1).
    (2) [Left] Reuse and tighten the Screw (x2) that was removed in Step 5 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
    (3) Tighten the Screw.
    (4) Install the Dispenser Inner Cover (#1).
    (5) Tighten the Machine Screw (M3 x6: 2).
    (6) Paste the supplied Toner Label.
    (7) Paste the supplied Label R. (GLD/SLV/WHT/PINK Only)

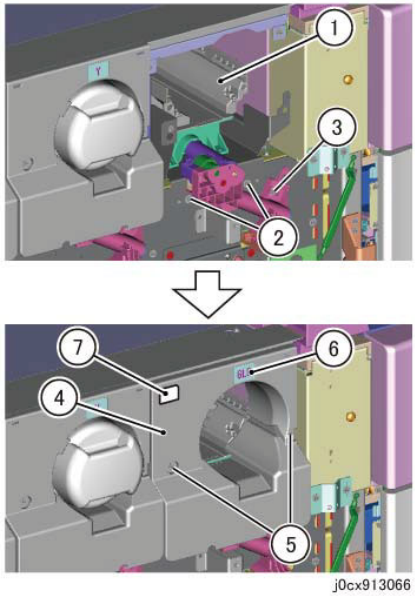


Figure 8 j0cx913066

14. [Left] Set the supplied Toner Cartridge on the Dispenser Assembly (#1).
15. [Left] Remove the paper that is laid on the IBT Belt.
16. [Left] Install the Developer Inner Cover Assembly that was removed in Step 4 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
17. [Left] Pull out the Big Module up to the Service Position. (REP 9.1.1)
18. [Left] Pull out the IBT Module.
19. [Left] In order to prevent light deterioration of the Drum, attach the Protect Sheet to the Developer Inner Cover. (Figure 9)
    (1) Take out the Protect Sheet.
    (2) Attach the Magnet of Protect Sheet to the Developer Inner Cover.

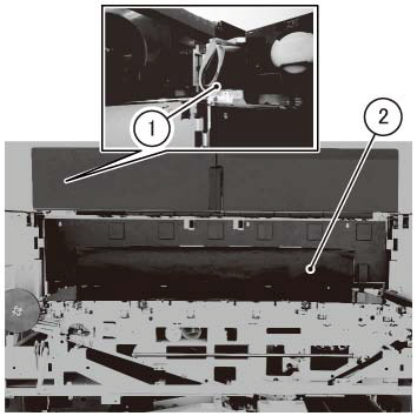


Figure 9 dar911019

20. [Left] Remove the IBT Belt. (REP 6.3.1)
21. [Left] Lower the IBT Belt Frame to the IBT Frame. (Figure 10)
    (1) Hold the IBT Handle with both hands, and lower the IBT Belt Frame to the IBT Frame while pulling the Lever with your finger.

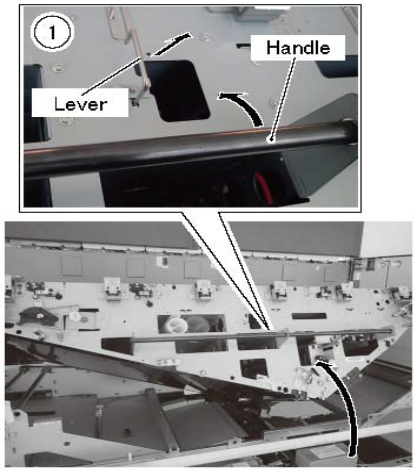
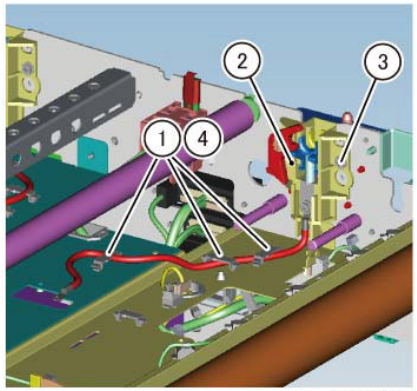


Figure 10 j0kol406039

22. [Left] Install the supplied Rear BTR Holder Assembly. (Figure 11)
    (1) Release the clamp (x3).
    (2) Install the Rear BTR Holder Assembly.

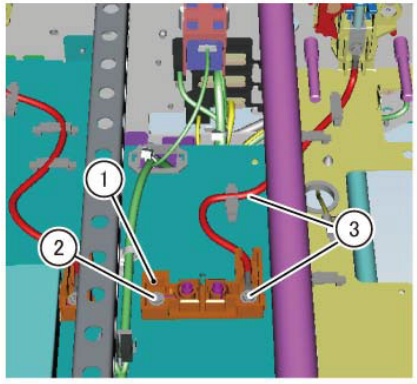
(3) Tighten the Machine Screw (M3 x6).
(4) Secure the cable by using the clamp (x3).



j0cx913071

Figure 11 j0cx913071

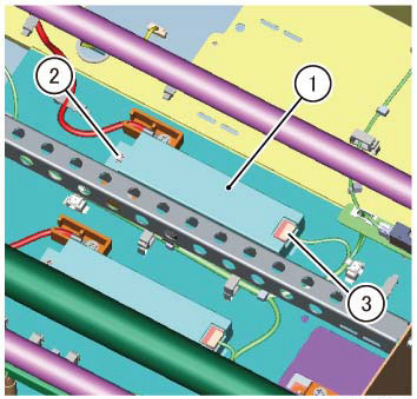
23. [Left] Install the supplied Terminal Housing. (Figure 12)
(1) Install the Terminal Housing.
(2) Tighten the Machine Screw (M3 x6).
(3) Secure the cable with the Machine Screw (M3 x6).



j0cx913073

Figure 12 j0cx913073

24. [Left] Install the supplied 1st BTR HVPS. (Figure 13)
(1) Install the 1st BTR HVPS.
(2) Tighten the Machine Screw (M3 x6).
(3) Connect the connector to the 1st BTR HVPS.



j0cx913075

Figure 13 j0cx913075

25. [Left] Go to 9.1.3.6 Spot Color Extension Kit for #1 Engine (6 of 9).

9.1.3.6 Spot Color Extension Kit for #1 Engine (6 of 9)

Installation Procedures (Continue)

1. [Left] Install the supplied Bearing (x2) and Retract Slide Assembly to the IBT Rear Frame. (Figure 1)
   (1) Attach the Bearing (x2) to the Stud (x2).
   (2) Attach the supplied Spring (Length = 30.2) to the Retract Slide Assembly.
   (3) Install the Retract Slide Assembly.
   (4) Attach the spring at the position shown.

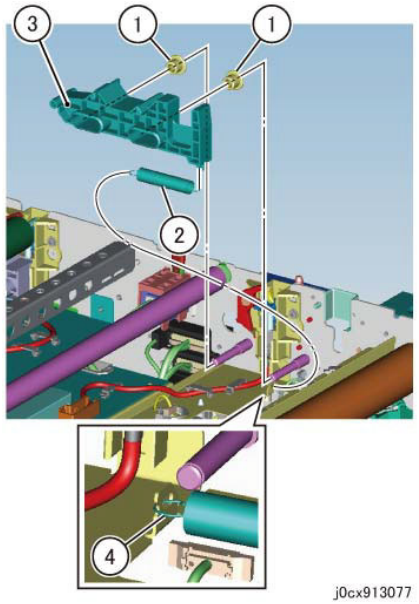


Figure 1 j0cx913077

2. [Left] Check that the Retract Link and Retract Slide Assembly are in the proper positions. (Figure 2)
   (1) The relationship between the positions of the Retract Link and Retract Slide Assembly is that the Bar of "A" Retract Link is trapped by the Bearing. The Bar of "B" Retract Link is trapped by the Retract Slide.
   (2) Move the Retract Slide Assembly to the left and right and check whether the Retract Link is linked in the direction of the arrow.
   (3) If it is not linked, repeat the Step (1), and set it to the proper position.

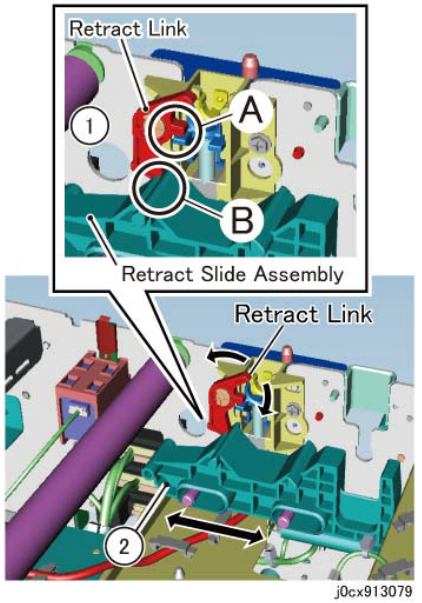


Figure 2 j0cx913079

3. [Left] Attach the supplied Bearing (x2) and KL-Clip (x2) to the Retract Slide Assembly. (Figure 3)
   (1) Attach the Bearing (x2), and secure with the KL-Clip (x2).

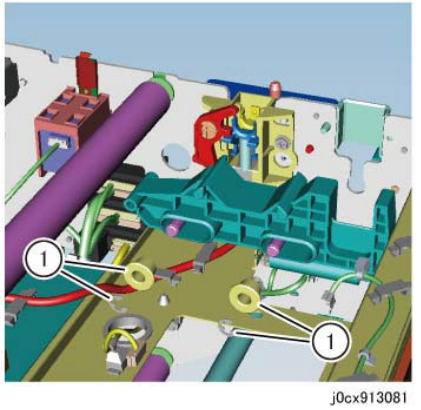


Figure 3 j0cx913081

4. [Left] Install the supplied Retract Slide Assembly to the IBT Front Frame. (Figure 4)
   (1) Attach the Bearing (x2) to the Stud (x2).
   (2) Attach the Spring (Length = 30.2) to the Retract Slide Assembly.

(3) Install the Retract Slide Assembly.
(4) Attach the spring at the position shown.
(5) Attach the Bearing (x2), and secure with the KL-Clip (x2).

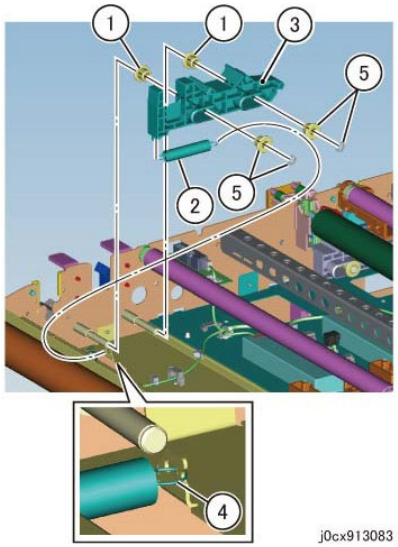


Figure 4 j0cx913083

5. [Left] Install the supplied Retract Shaft Assembly. (Figure 5)
(1) Install the Retract Shaft Assembly.
(2) Install the Bearing and KL-Clip.
(3) Install the Bearing and KL-Clip.
(4) Tighten the Machine Screw (M3 x6: 2).

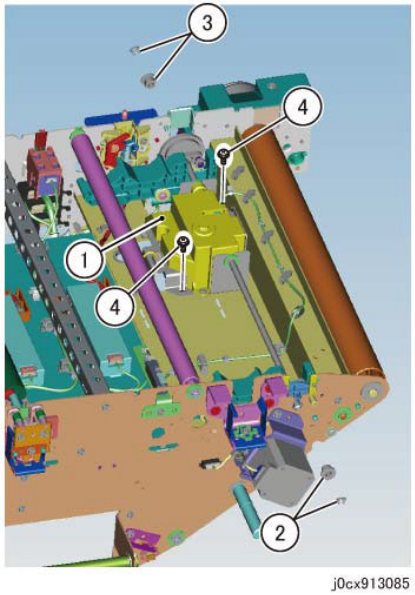


Figure 5 j0cx913085

6. [Left] Connect the Connector to the Retract Shaft Assembly. (Figure 6)
(1) Free the clamp and release the connector.
(2) Connect the freed Connector to the Retract Shaft Assembly.
(3) Close the clamp.

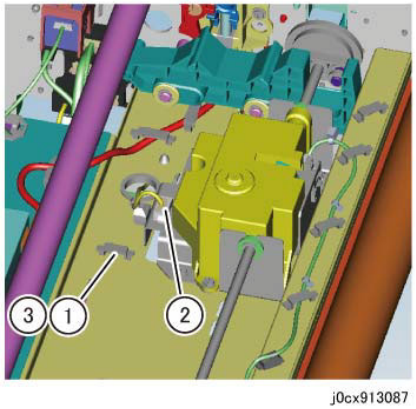


Figure 6 j0cx913087

7. [Left] Connect the Connector to the Sensor of the Retract Shaft Assembly. (Figure 7)

(1) Free the clamp and release the connector.
(2) Connect the released Connector to the Sensor.
(3) Close the clamp.

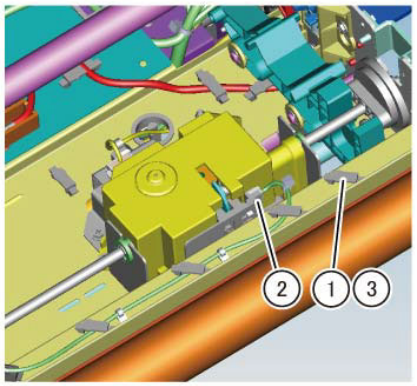


Figure 7 j0cx913089

8. [Left] Install the supplied Terminal Holder and Conductor Assembly. (Figure 8)
(1) Install the Terminal Holder and Conductor Assembly.
(2) Tighten the Machine Screw (M3 x6).

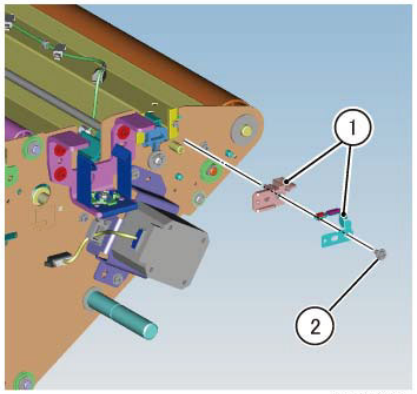


Figure 8 j0cx913091

9. [Left] Install the supplied Retract Roll Assembly and Spring (Length = 28.0). (Figure 9)
(1) Install the Retract Roll Assembly.
(2) Attach the Spring (Length = 28.0).

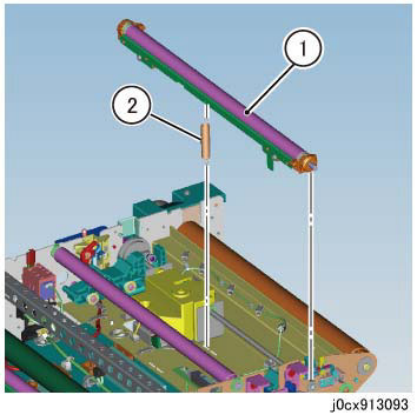


Figure 9 j0cx913093

10. [Left] Attach the supplied Spring to the Bracket Assembly of the IBT Front Frame.
(1) Attach the Spring to the Bracket Assembly. (Figure 10)

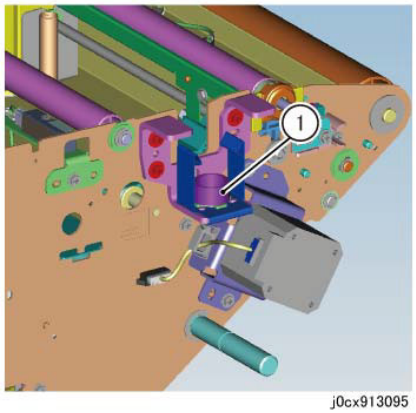


Figure 10 j0cx913095

11. [Left] Install the supplied 1st Roll Assembly to the Front BTR Holder Assembly. (Figure 11)

NOTE: *Do not touch the Roll (sponge) part of the 1st Roll Assembly with bare hands. Hold the Shaft of both ends when working.*

(1) Install the 1st Roll Assembly to the Front BTR Holder Assembly.

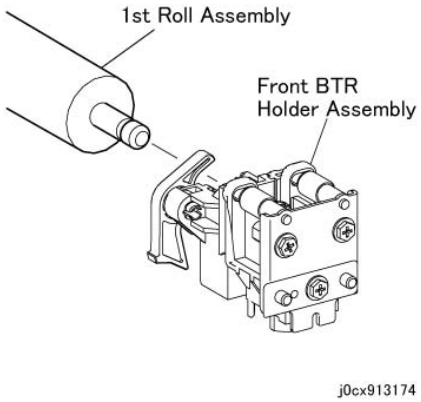


Figure 11 j0cx913174

12. [Left] Install the 1st Roll Assembly and Front BTR Holder Assembly to the Rear BTR Holder Assembly and Front Bracket Assembly. (Figure 12)
    (1) Push the Retract Slide Block at the Rear in the direction of the arrow, and put the Shaft of the 1st Roll Assembly into the Rear BTR Holder Assembly.
    (2) Push the Retract Slide Block at the Front in the direction of the arrow, and install the Front BTR Holder Assembly to the Bracket Assembly.

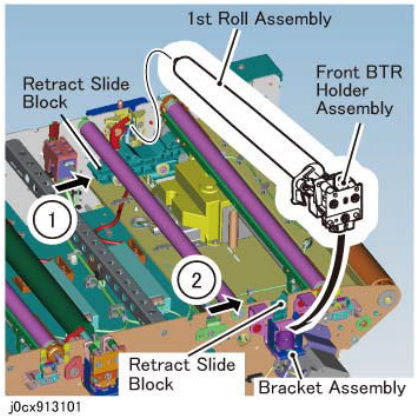


Figure 12 j0cx913101

13. [Left] Check that the Retract Link and Retract Slide Assembly are in the proper positions. (Figure 13)
    (1) The relationship between the positions of the Retract Link and Retract Slide Assembly is that the Bar of "A" Retract Link is trapped by the Bearing. Hook the Bar of B "Retract Link to the Retract Slide.
    (2) Move the Retract Slide Assembly to the left and right and check whether the Retract Link is linked in the direction of the arrow.
    (3) If it is not linked, repeat the Step (1), and set it to the proper position.

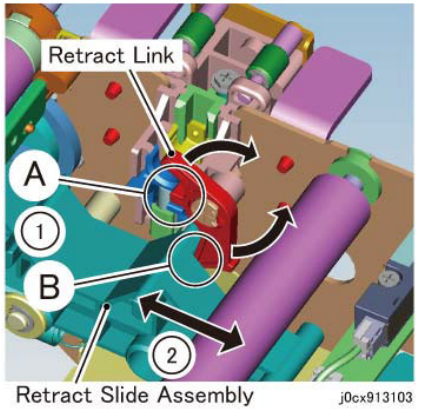


Figure 13 j0cx913103

14. [Left] Push the IBT Module slightly.
15. [Left] Remove the Protect Sheet and Developer Inner Cover.
16. [Left] Install the supplied PCC Duct from the Front. (Figure 14)
    (1) Install the PCC Duct.
    (2) Tighten the Machine Screw (M4 x8: 2) using the Long Driver.

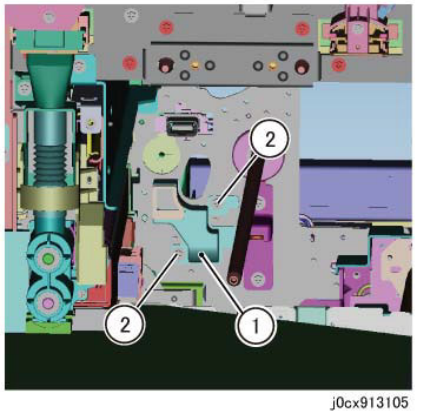


Figure 14 j0cx913105

17. [Left] Install the supplied Main Connector Assembly (#1). (Figure 15)
    (1) Insert the Connector in the hole of the Rear Frame, and install the Main Connector Assembly (#1).

(2) Tighten the Machine Screw (M4 x8: 2) using the Long Driver.

j0cx913107

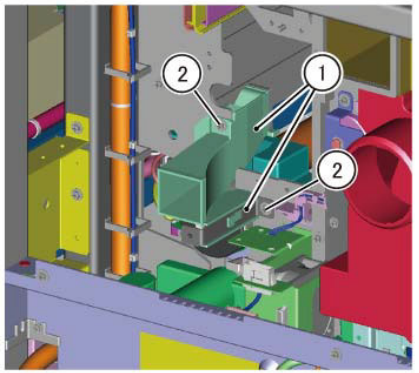
Figure 15 j0cx913107

18. [Left] Go to 9.1.3.7 Spot Color Extension Kit for #1 Engine (7 of 9).

9.1.3.7 Spot Color Extension Kit for #1 Engine (7 of 9)

Installation Procedures (Continue)

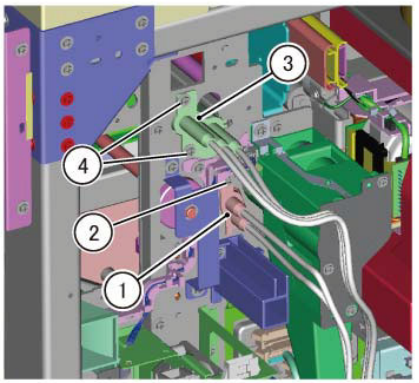
1. [Left] Install the supplied Duct and Bracket. (Figure 1)
   (1) Install the Duct and Bracket.
   (2) Tighten the Machine Screw (M4 x8: 2).



j0cx913109

Figure 1 j0cx913109

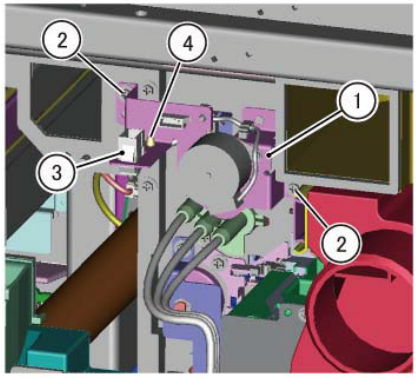
2. [Left] Install the supplied PCC Connector (#1) and the supplied CC Connector (#1) from the Rear. (Figure 2)
   (1) Connect the PCC Connector.
   (2) Tighten the Machine Screw (M4 x8).
   (3) Connect the CC Connector.
   (4) Tighten the Machine Screw (M4 x8: 2).



j0cx913111

Figure 2 j0cx913111

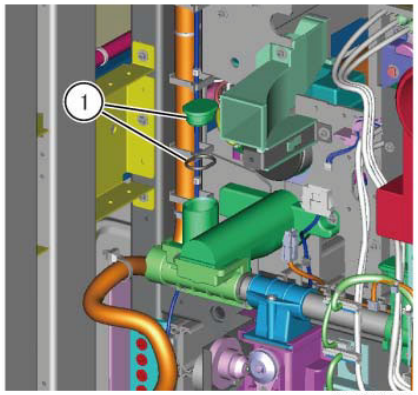
3. [Left] Install the supplied CC Cleaner Motor Assembly (#1). (Figure 3)
   (1) Install the CC Cleaner Motor Assembly (#1).
   (2) Tighten the Machine Screw (M4 x8: 2).
   (3) Insert the Connector of the Main Connector Assembly (#1) in the hole of the Bracket.
   (4) Attach the Push Tie.



j0cx913113

Figure 3 j0cx913113

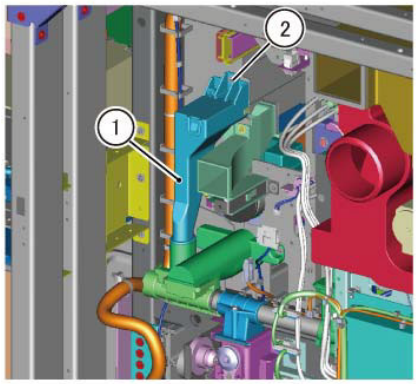
4. [Left] Remove the Cap and O-Ring. (Figure 4)
   (1) Remove the Cap and O-Ring.



j0cx913115

Figure 4 j0cx913115

5. [Left] Install the supplied Joint Assembly. (Figure 5)
   (1) Install the Joint Assembly.
   (2) Tighten the Machine Screw (M4 x8).



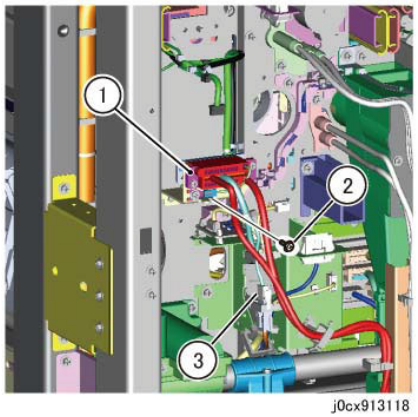
j0cx913116

Figure 5 j0cx913116

6. [Left] Install the supplied Drawer Harness Assembly (#1) from the Rear. (Figure 6)

   NOTE: *Be careful of the connection orientation of the Connector, and make sure that it is connected until it clicks.*

   (1) Install the Drawer Harness Assembly (#1).
   (2) Tighten the Machine Screw (M4 x8).
   (3) Connect the connector.



j0cx913118

Figure 6 j0cx913118

7. [Left] Remove the Plate from the Pipe Assembly (#1). (Figure 7)
   (1) Remove the Screw (x2).
   (2) Remove the Plate.

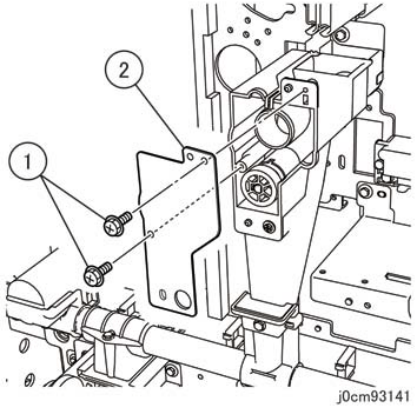


Figure 7 j0cm93141

8. [Left] Remove the Duct Assembly (Y). (Figure 8)
   (1) Remove the Screw (x3).
   (2) Remove the Duct Assembly (Y).

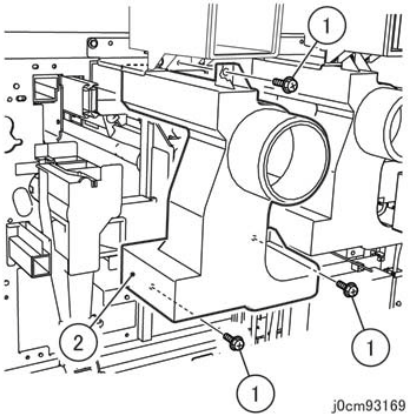


Figure 8 j0cm93169

9. [Left] Install the supplied Cleaner Motor Assembly (#1), and secure with the supplied Clamp (x2). (Figure 9)
   (1) Install the Cleaner Motor Assembly (#1).
   (2) Reuse and tighten the Screw (x2) that was removed in Step 7.
   (3) Connect the connector.
   (4) Secure the wire harness with the supplied clamp (x2).

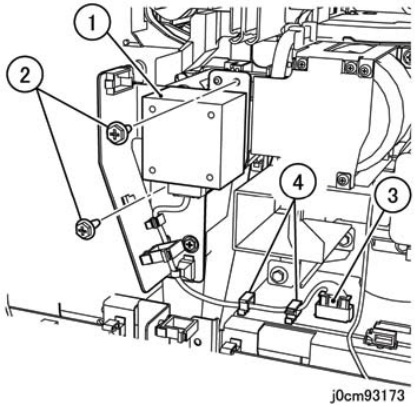


Figure 9 j0cm93173

10. [Left] Remove the Dummy Shaft Rear Assembly. (Figure 10)
    (1) Remove the Machine Screw (M4 x8: 2).
    (2) Remove the Dummy Shaft Rear Assembly.

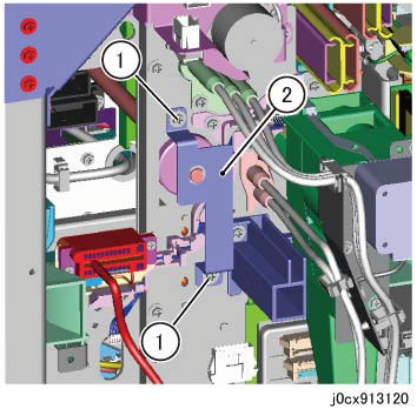
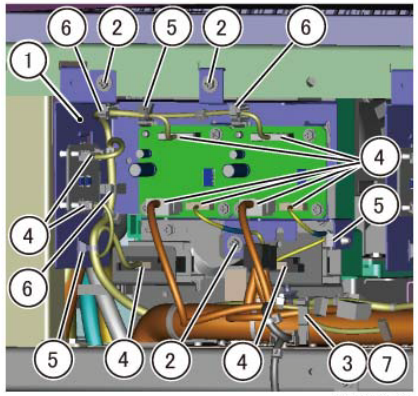


Figure 10 j0cx913120

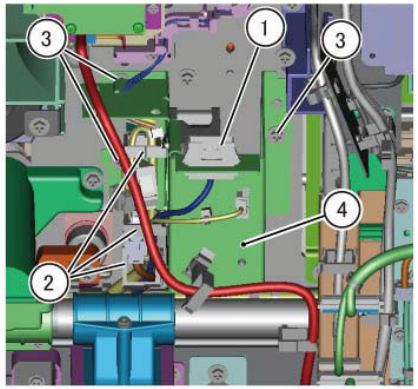
11. [Left] Install the supplied Motor Drive Bracket Assembly. (Figure 11)
    (1) Install the Motor Drive Bracket Assembly.
    (2) Tighten the Machine Screw (M4 x8: 3).
    (3) Release the clamp.
    (4) Connect the Connector (x10).
    (5) Attach the Push Tie (x3).
    (6) Secure the harness with the clamp (x3).
    (7) Secure the harness with the clamp.



j0cx913142

Figure 11 j0cx913142

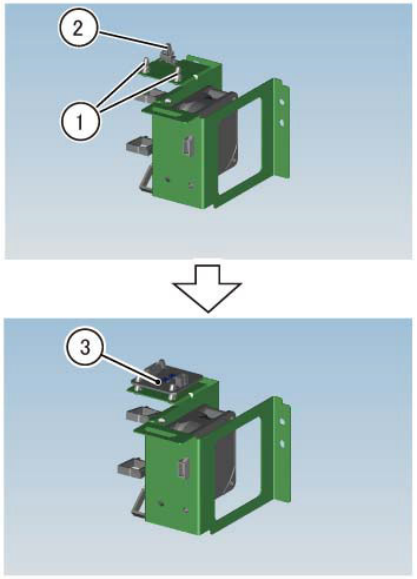
12. [Left] Remove the Fan Bracket Assembly. (Figure 12)
    (1) Disconnect the connector from the Fan Bracket Assembly.
    (2) Release the clamp (x3).
    (3) Remove the Machine Screw (M4 x8: 3).
    (4) Remove the Fan Bracket Assembly.



j0cx913143

Figure 12 j0cx913143

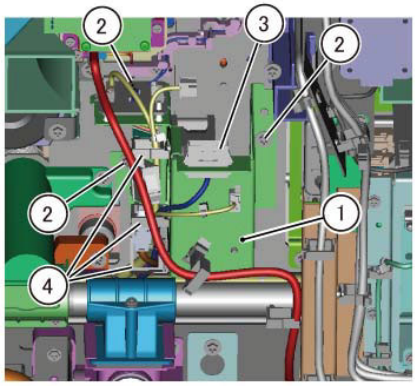
13. [Left] Install the PWB Cap Support (x2), PWB Support, and Drum Sub Crum PWB to the Fan Bracket Assembly. (Figure 13)
    (1) Install the PWB Cap Support (x2).
    (2) Install the PWB Support.
    (3) Install the Drum Sub Crum PWB.



j0cx913144

Figure 13 j0cx913144

14. [Left] Install the Fan Bracket Assembly. (Figure 14)
    (1) Install the Fan Bracket Assembly.
    (2) Attach the Machine Screw (M4 x8: 3).
    (3) Attach the connector to the Fan Bracket Assembly.
    (4) Secure the harness with the clamp (x4).



j0cx913145

Figure 14 j0cx913145

15. [Left] Temporarily install the supplied Drum Drive Assembly (#1) to the Rear Frame. (Figure 15)
    (1) Attach the Drum Drive Assembly (#1).
    (2) Temporarily tighten the Machine Screw (M4 x8: 3).

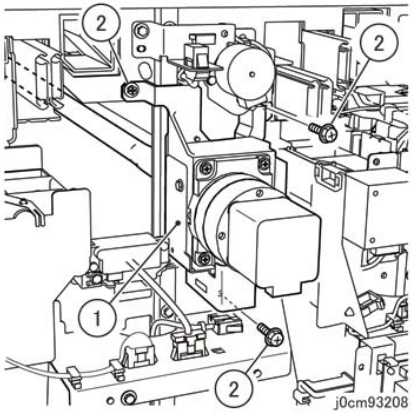


Figure 15 j0cm93208

16. [Left] Peel off the packing tape from the supplied MM Assembly (#1), and install it to the MM Left/ Right Rail. (Figure 16)

    NOTE: *As the MM Assembly is heavy, be careful about your posture when performing the task.*

    NOTE: *When installing the MM Assembly, do not hold to the pin at the Rear Frame as it might damage the pin.*

    (1) Pull out the MM Left Rail and the MM Right Rail.
    (2) Install the MM Assembly (#1).
    (3) Tighten the Shoulder Screw (M4 x10: 2).

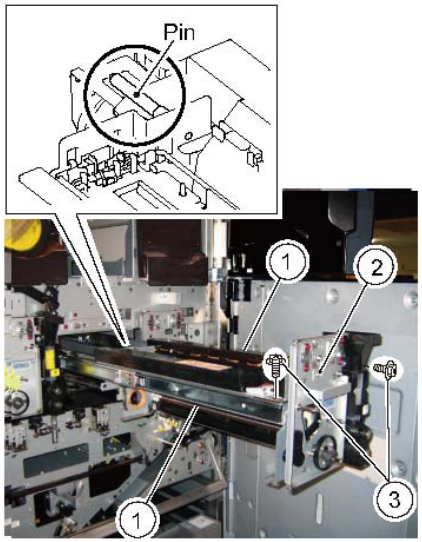


Figure 16 j0kol913007

17. [Left] Release the Stopper (x2) of the Rail, push the MM Assembly (#1) into the machine, and secure it with the Screw (x3). (Figure 17)

    NOTE: *When tightening the Screw (x3) of the MM Assembly (#1), tighten the Screws at the 3 locations evenly.*

    (1) Push the Stopper (x2) of the MM Rail at the same time, and push the MM Assembly (#1).
    (2) Hold the Handle of the Front Plate Assembly, and push the MM Assembly (#1) into the machine.
    (3) Tighten the Screw (x2).
    (4) Secure the Shaft of the Drum Drive Assembly (#1) with the Screw.

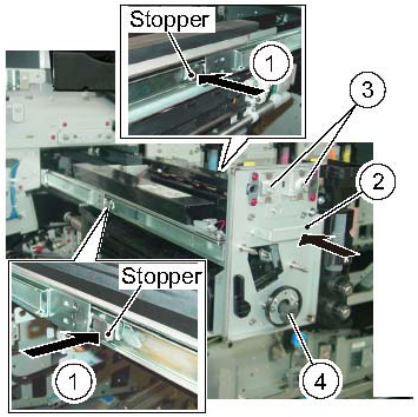


Figure 17 j0kol913008

18. [Left] Fully tighten the Drum Drive Assembly (#1), and connect the Connector (x2). (Figure 18)
    (1) Fully tighten the Screw (x3).
    (2) Connect the Connector to the Drum Drive Assembly (#1).
    (3) Connect the Connector of the Drum Drive Assembly (#1).
    (4) Connect the Connector (x5).

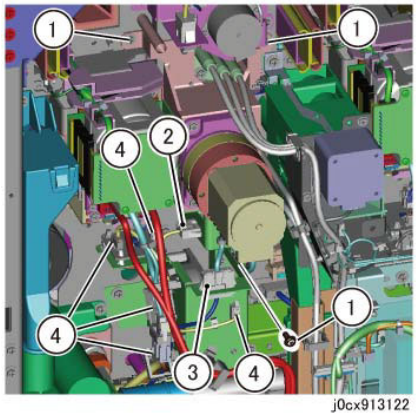


Figure 18 j0cx913122

19. [Left] Install the supplied Bracket Assembly. (Figure 19)
    (1) Install the Bracket Assembly.
    (2) Tighten the Machine Screw (M3 x6: 2).

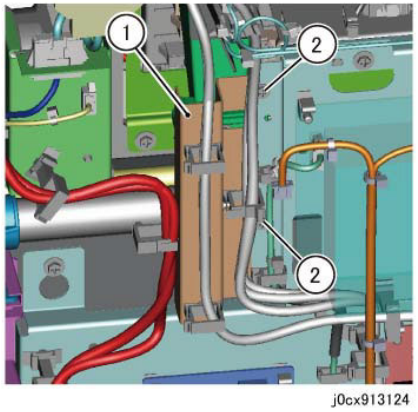


Figure 19 j0cx913124

20. [Left] Install the supplied Clamp. (Figure 20)
    (1) Install the clamp.

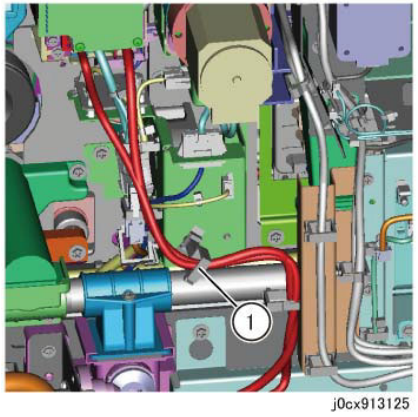


Figure 20 j0cx913125

21. [Left] Install the supplied Deve Bias HVPS (#1) to the Bracket. (Figure 21)
    (1) Install the Deve Bias HVPS (#1).
    (2) Tighten the Machine Screw (M3 x6).
    (3) Connect the Connector from the Connector Assembly.
    (4) Secure the harness by using the clamp.

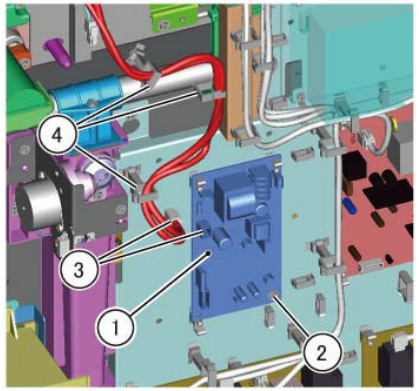


Figure 21 j0cx913126

22. [Left] Release the Clamp (x3) of the Cleaner Motor Assembly (#1), and secure the CC Cable and PCC Cable. (Figure 22)
    (1) Release the clamp (x2).
    (2) Secure the CC Cable with the clamp.
    (3) Release the clamp.
    (4) Secure the PCC Cable with the clamp.

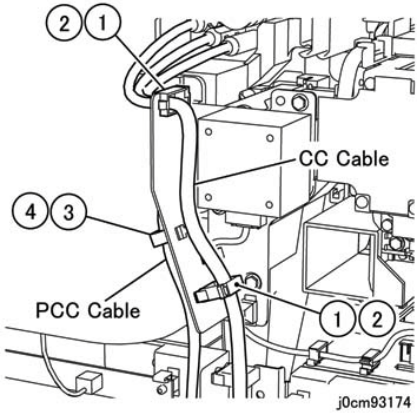


Figure 22 j0cm93174

23. [Left] Secure the CC Cable and PCC Cable with the clamp (x8). (Figure 23)
    (1) Secure the CC Cable with the Clamp (x5).
    (2) Secure the PCC Cable with the clamp (x3).

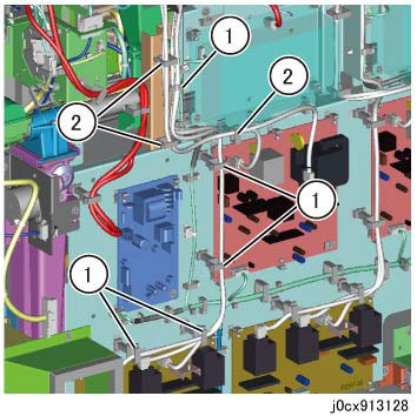


Figure 23 j0cx913128

24. [Left] Reinstall the Duct Assembly (Y) that was removed in Step 8.
25. [Left] Install the supplied PCC HVPS and CC HVPS to the HVPS Bracket. (Figure 24)
    (1) Install the PCC HVPS to the PWB Support (x5).
    (2) Tighten the Machine Screw (M3 x6).
    (3) Install the CC HVPS to the PWB Support (x5).
    (4) Tighten the Machine Screw (M3 x6).

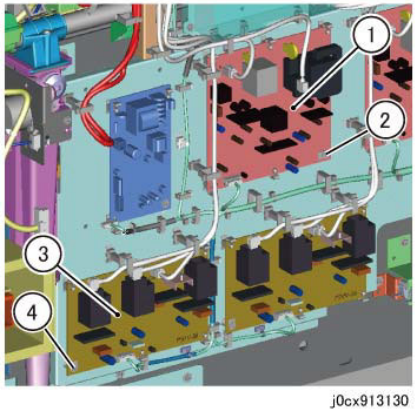


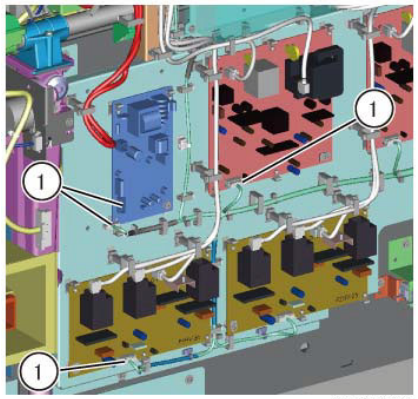
Figure 24 j0cx913130

26. [Left] Go to 9.1.3.8 Spot Color Extension Kit for #1 Engine (8 of 9).

9.1.3.8 Spot Color Extension Kit for #1 Engine (8 of 9)

Installation Procedures (Continue)

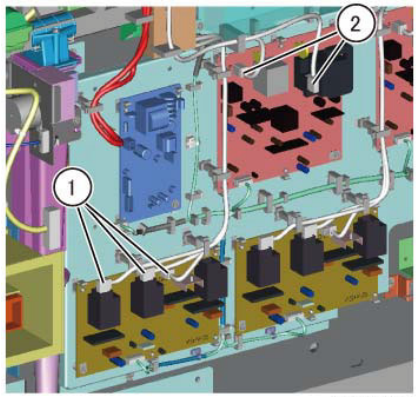
1. [Left] Connect the connector (x3) to each HVPS. (Figure 1)
   (1) Connect the connector (x3) to the Developer HVPS, PCC HVPS, and CC HVPS.



j0cx913132

Figure 1 j0cx913132

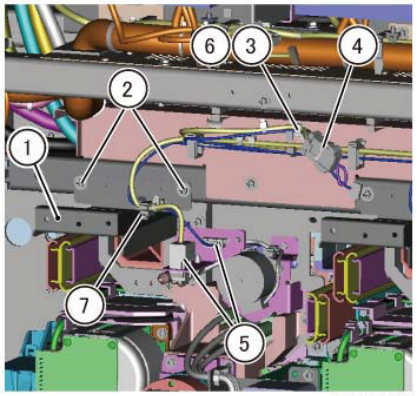
2. [Left] Connect the PCC Cable and CC Cable to each HVPS. (Figure 2)
   (1) Connect the connector (x3) of the CC Cable to the CC HVPS.
   (2) Connect the connector (x2) of the PCC Cable to the PCC HVPS.



j0cx913134

Figure 2 j0cx913134

3. [Left] Install the supplied Duct Bracket to the Rear Frame, and connect the Connector (x2) to the CC Cleaner Motor Assembly (#1). (Figure 3)
   (1) Install the Duct Bracket.
   (2) Tighten the DEL Screw (M4 x8: 2).
   (3) Free the clamp, and release the connector (x2).
   (4) Disconnect the Dummy Connector.
   (5) Connect the Connector (x2) to the CC Cleaner Motor Assembly.
   (6) Close the clamp.
   (7) Release the Clamp, and secure the Wire Harness (between the Cable Tie and Cable Tie) with the Clamp.



j0cx913136

Figure 3 j0cx913136

4. [Left] Install the Duct Assembly (#1) to the Duct Bracket. (Figure 4)

   NOTE: *When installing the Duct Assembly, make sure to insert the tip of the Duct into the square hole of the Rear Frame, and install the Duct Assembly.*

   (1) Install the Duct Assembly (#1).
   (2) Tighten the Machine Screw (M4 x8: 3).

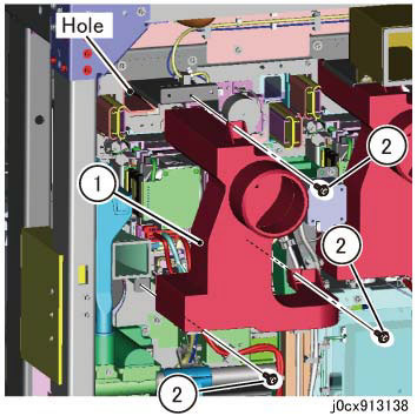


Figure 4 j0cx913138

5. [Left] Install the supplied CC Fan Assembly (#1). (Figure 5)
   (1) Install the CC Fan Assembly (#1).
   (2) Tighten the Machine Screw (M4 x8: 2).
   (3) Tighten the Machine Screw (M4 x8).
   (4) Release the clamp.
   (5) Free the clamp and release the connector.
   (6) Connect the released Connector to the CC Fan Assembly (#1).
   (7) Secure the harness by using the clamp.
   (8) Close the clamp.

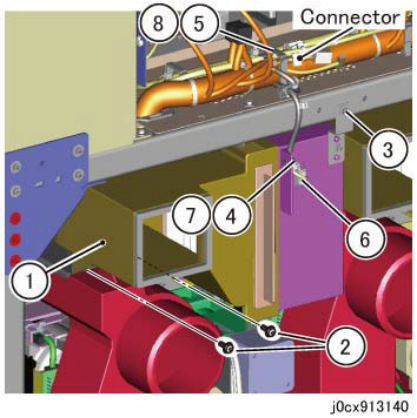


Figure 5 j0cx913140

6. [Left] Reinstall by reverse procedure the Drive Fan Assembly that was removed in Step 16 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).

NOTE: *Be careful not to forget to install the Connector and Plate.*

7. [Left] Install the supplied Rear Fan Drive Assembly (#1) to the Drive Fan Assembly. (Figure 6)
   (1) Connect the Connector of the Rear Fan Drive Assembly (#1).
   (2) Install the Rear Fan Drive Assembly (#1).
   (3) Tighten the Machine Screw (M4 x8: 2).

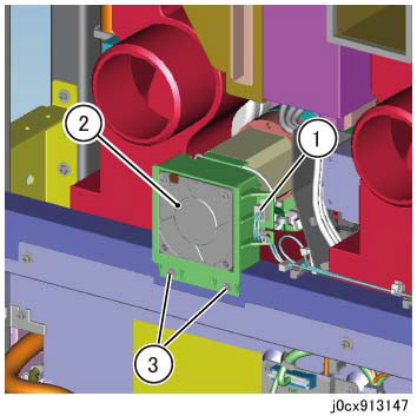


Figure 6 j0cx913147

8. [Left] Reinstall by reverse procedure the Left PWB Chassis and Right PWB Chassis that were opened in Steps 14 and 15 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).

NOTE: *When closing the Right PWB Chassis, be careful of pinching the Wire Harness.*

9. [Left] Pull out the MM Assembly (#1), peel off the barcode label from the right side of the MM Assembly, and paste it on the Service Log. (Figure 7)
   (1) Loosen the Screw (x3).
   (2) Hold the Handle, and pull out the MM Assembly (#1).
   (3) Peel off the Barcode Label.
   (4) Paste the peeled Barcode Label on the Service Log.

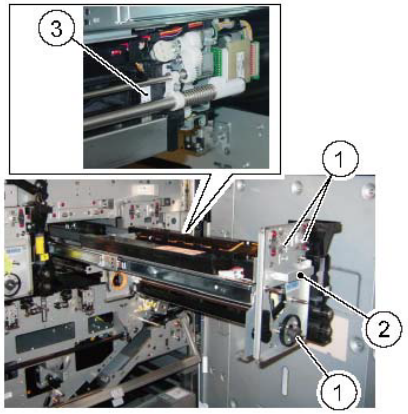


Figure 7 j0kol913009

10. [Left] Install the supplied Drum Cartridge (#1). (Figure 8)
    (1) Pull out the Knob Assembly, and rotate it.
    (2) Pull out the Knob, and rotate it.
    (3) Install the Drum Cartridge (#1). After installation, check that the Tab is in the position shown.

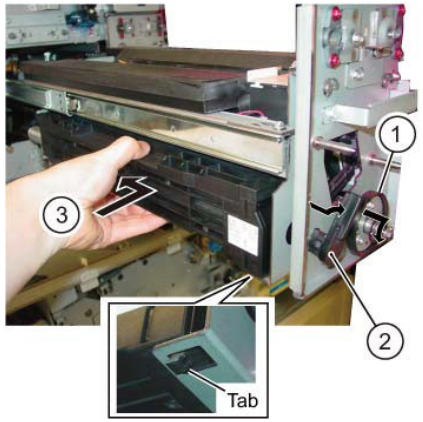


Figure 8 j0kol913010

11. [Left] Set the Knob and Stopper, release the Stopper (x2) of the Left and Right Rail, and push the MM Assembly (#1) into the machine. (Figure 9)
    (1) Rotate while pushing the Knob to restore it.
    (2) Rotate while pulling the Knob Assembly to restore it.
    (3) Push the Stopper (x2) of the Rail (x2) at the same time, and push the MM Assembly (#1) into the machine.

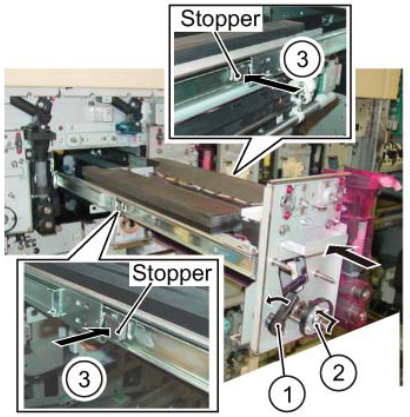


Figure 9 j0kol913011

12. [Left] Tighten the Screw (x3) of the Front Plate Assembly. (Figure 10)

    NOTE: *Paste the Label of the applicable color supplied from the Kit in Step 2, 3.*

    (1) Tighten the Screw (x3).
    (2) Paste the Label of the color to be used.
    (3) Paste the supplied Label R. (GLD/SLV/WHT/PINK only)

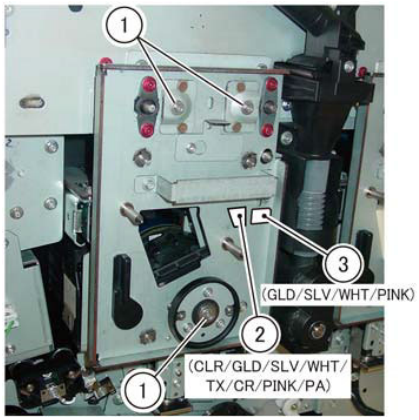


Figure 10 j0kol917004

13. [Left] Install the supplied CC Assembly (#1). (Figure 11)

    NOTE: *When installing the CC Assembly, confirm that it is a CC Assembly for Digital Full Color Production Printer (Label attached to the Cover).*

    (1) Install the CRU Guide (CC Assembly) to the Pin (x2) of the Plate Assembly (#1).
    (2) Lower the Lever of the CC Assembly (#1), and push it into the machine.

(3) Remove the CRU Guide.

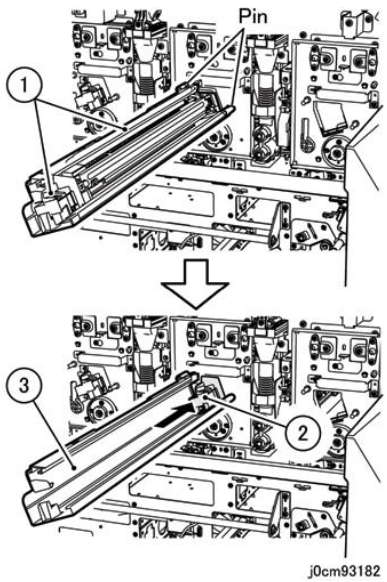


Figure 11 j0cm93182

14. [Left] Remove the Corotron Cover (#1) from the Developer Inner Cover. (Figure 12)
    (1) Remove the Screw (x2).
    (2) Remove the Corotron Cover (#1).

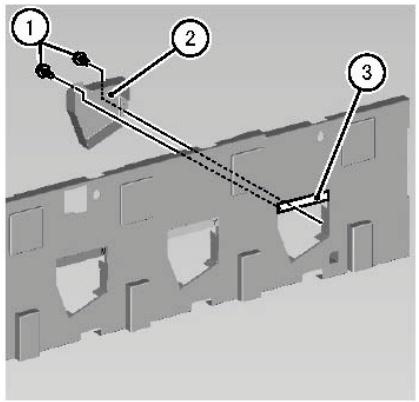


Figure 12 j0kol913021

15. [Left] Reinstall the Developer Inner Cover.
16. [Left] Pull out the IBT Module, and install the IBT Belt. Refer to the (REP 6.3.1 IBT Belt) installation.
17. [Left] Lift the IBT Lever, rotate the Stopper Plate, and set the IBT Belt and Big Module. (Figure 13)
    (1) Lift the IBT Lever.
    (2) Rotate the Stopper Plate while pressing the IBT Lever.
    (3) Rotate the Handle of the Big Module.

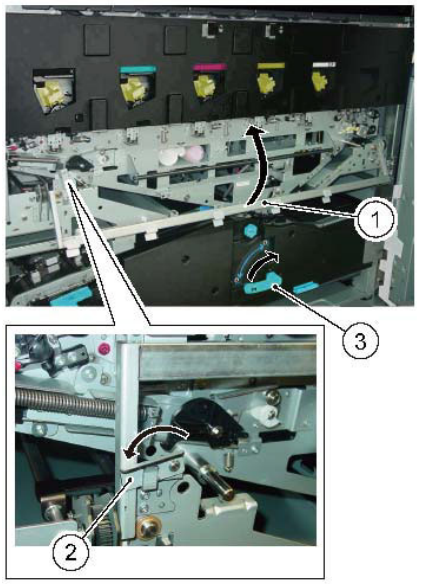


Figure 13 j0kol913012

18. [Left] Reinstall the IBT Front Cover that was removed in Step 4 of 9.1.3.4 Spot Color Extension Kit for #1 Engine (4 of 9).
19. [Left] Store the supplied Bag in the inner pocket of the IOT-L Front Right Door.
20. [Left] Close the IOT-L Front Right Door/IOT-L Front Left Door.
21. [ECO] Go to 9.1.3.9 Spot Color Extension Kit for #1 Engine (9 of 9).

9.1.3.9 Spot Color Extension Kit for #1 Engine (9 of 9)

Installation Procedures (Continue)

1. [Left] Install the IOT-L Rear Left Cover. (Figure 1)
   (1) Install the IOT-L Rear Left Cover.
   (2) Tighten the Screw.
   (3) Tighten the Screw (x2).

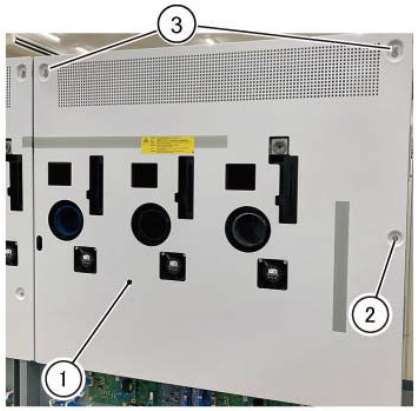


Figure 1 dar913002

2. [Left] Install the IOT-L Rear Right Cover. (Figure 2)
   (1) Install the IOT-L Rear Right Cover.
   (2) Tighten the Screw (x2).
   (3) Tighten the Screw (x2).

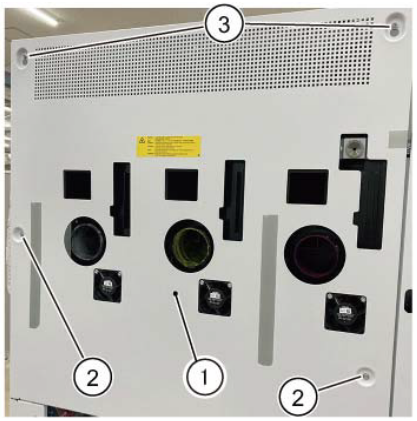


Figure 2 dar913001

3. [ECO] Store the CRU Guide that was removed in Step 13 of 9.1.3.7 Spot Color Extension Kit for #1 Engine (8 of 9) at the location of the ECO Box Unit shown. (Figure 3)

Figure 3 j0kol405010

4. [ECO] Reinstall the ECO Box Unit that was detached in Step 3 of 9.1.3.3 Spot Color Extension Kit for #1 Engine (3 of 9).
5. [ECO] Remove the Hose of ECO Box Unit from the Hose Hook, and insert it in the Duct at the IOT-L side. (Figure 4)
   (1) Insert the Hose.

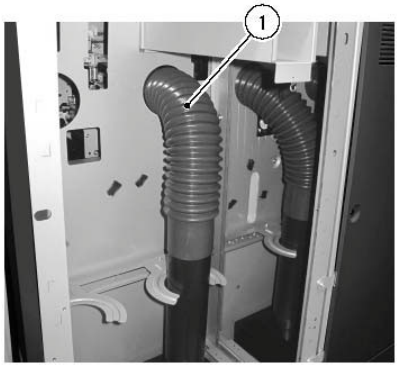


Figure 4 j0kol913024

6. [ECO] Reinstall the ECO2 Rear Upper Cover and ECO2 Rear Lower Cover that were removed in Step 4 of 9.1.3.3 Spot Color Extension Kit for #1 Engine (3 of 9).
7. [Right] Reinstall the ELEC Box Rear Cover that was removed in Step 9 of 9.1.3.1 Spot Color Extension Kit for #1 Engine (1 of 9).

NOTE: *In order to prevent bulging, install while holding down the center part of the Cover.*

8. [Right] Reconnect all cables that are connected externally to the Video Box Unit.
9. [Left] Open the IOT-L Front Left/Right Door Assembly.
10. [Right] Open the Switch Cover, and pull the Service Interlock Switch.
11. [Right] Turn the Main Unit of the machine and PC ON.
12. [Right] Check the following software version, and update it if it is not the latest. (Refer to ADJ 18.1.2)
    - PC-UI Software
    - Auto Download Tool
    - RML File
    - LogHarvest Plus
    - PC-Diag Tool
13. Use the [Auto Download Tool] to upgrade the firmware of the Main Unit and Options. (Refer to ADJ 18.1.2)

    NOTE: *If the Auto Download Tool is unable to upgrade the ILS firmware to the latest version, first upgrade the firmware of the Main Unit and options and then use the Download Tool (manual mode) to upgrade it to the latest version.*
14. [Right] Change the following DC131 NVM value.
    (1) Set the value of 740-195 to 1. (With #1 Engine: Default value 0)
    (2) Change the following NVM values depending on the operations.
    - Number of colors used in #1 Engine (754-964 Default value 0)
      – 1 color: 0
      – 2 colors or more: 1
    - Spot color operation (Gold: 740-465, Silver: 740-466, White:740-467, Pink:540-109 Default value 0)
      – Either #1 or #6 is used: 0
      – Both #1 and #6 are used: 1

      NOTE: *When changing spot color operation, take the following measures.*
      (1) Either #1 or #6 is used -> Both #1 and #6 are used
      - *Change the NVM of spot color operation.*
      - *Turn the power OFF and ON, then copy the HFSI value with DC135.*

      a. Both #1 and #6 are used -> Either #1 or #6 is used
      - *Change the NVM of spot color operation.*
      - *Turn the power OFF and ON, then set the HFSI counter of the engine not used to 0.*

      NOTE: *When replacing the same color, take the following measures.*
      Change NVM (740-329) of #1 Engine color specification to "None (= 0)".
15. [Right] After setting the NVM, exit PC-Diag, and turn the power OFF/ON.
16. After turning ON the power, the process of writing the spot color-dependent NVM from the PC to the IOT will be automatically executed.
17. After the NVM rewrite process is completed, the IOT will automatically restart.

    NOTE: *Check on the PC-UI screen that the correct color is included.*
18. [Right] Enter PC-Diag, and enter the characteristic data (16 digits) of the installed ROS.
    (1) Enter DC961 (ROS Correct), and select ROS data.
    (2) Enter data of the 16 digit number of the ROS bar code label affixed to the Service Log in the ROS data field, and press the [Set] button. (Figure 5)

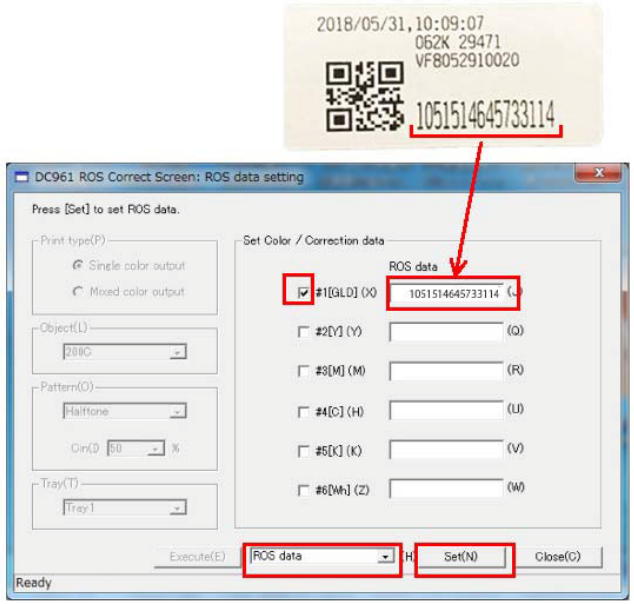
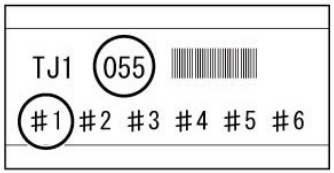


Figure 5 e0kol913016

19. [Left] Use DC950 (ATC Sensor Setup) to input the ATC Sensor Attribute for #1. (Figure 6)
    (1) Enter the value from the Barcode Label that was peeled off from the MM Assembly (#1) in Step 9 of 9.1.3.8 Spot Color Extension Kit for #1 Engine (8 of 9), and then click [Execute].
    In the following example, the value for the #1 Engine is 55, so enter 55 in the #1 Barcode Number.



j0cx913156

Figure 6 j0cx913156

20. [Left] Use DC955 (Automatic Developer Replacement Mode) to load the Developer for #1. (Refer to REP 5.2.5 Developer)

21. [Right] Select DC960 (Install Toner) of PC-Diag, and transfer the spot color toner for #1 Engine to the toner transport path.

    NOTE: *Check the toner supply with one of the following methods.*

    (1) Disconnect the bellows tube, spread paper, etc. to prevent dispersal, and check the Toner droppage. If performing 1 time of DC960 is not enough to drop any Toner, perform the following until the Toner drops. Change the value of NVM below to 1, and execute DC960 again. (DC960 can only be performed 1 time to prevent secondary problems from occurring.) Changing the NVM value allows it to be performed again (this is also limited to 1 time).

    (2) Make sure that the toner cartridge rotates, and the Dispense Motor is rotating (it can be confirmed by rotating the E ring in front of the developer supply port).

    In the case where the DC960 is re-executed due to some trouble, it can be re-executed by changing the following NVM value to 1, but take note of the possibility that faults may occur if a large amount of toner is sent into the developer.

    - For Engine #1: NVM [754-434]

22. [Right] Set up the gradation of the Spot Color for #1 Engine.

    (1) Open DC938 [PCON CHECK], select [5C #1] ([6C] is also possible if spot color is also installed in #6 Engine) in the color mode pull-down menu, select [Procon Setup], and execute.

    (2) From the Procon Monitor Value pull-down, check the various ADC Gradation Patch Density (Uncoated)/(Coated) values and verify that the value of No. 20 is smaller than the target of +20.

    i. If the value is larger than the target of +20, execute [Procon Setup] 2 additional times with DC938 [PCON CHECK], and check the value of No. 20 again.

    ii. If the value still does not fall within the proper range, check the value of No. 20 after executing DC895 [DMAX SETUP].

    (3) Use DC612 (Color Test Pattern Print) to output the [ProconPG] pattern and check that there is no problem with the reproducibility of gradation.

23. Select DC685 of PC-Diag, and adjust the Lead Regi of #1 Engine Spot Color.

    Proceed to the next step without display of any fault.

    If a Fault occurs, go to Chapter 2 Fault FIP to take corrective action.

    (1) Select [Color Regi for Measurement] in DC612, and print. (Recommended paper: 1 sheet of A3 J Paper)

    (2) Check that the printed Color Regi is not badly misaligned. If it is badly misaligned, perform DC685 again.

    (3) Select [Grid] and [2 Sided] in DC129, and print. After printing, check the following.

    - Lead Registration
    - Side Registration
    - Dual Registration (check for any misalignment between the grids on both sides.)

    For details, refer to ADJ 15.6.6, ADJ 15.6.7.

24. [Right] Check the overall operation.

25. [Server] Connect the HSS Cable (9 m). (Figure 7)

26. [Server] Secure the HSS Cable (9 m) (x3) and Net Cable with the Clamp (x7) of ECO Right Cover. (Figure 8)

Figure 7 j0cx913159

27. [Right] Install the Print Server Support Cover. (Figure 9)

    (1) Install the Print Server Support Cover.

    (2) Tighten the Screw (x2).

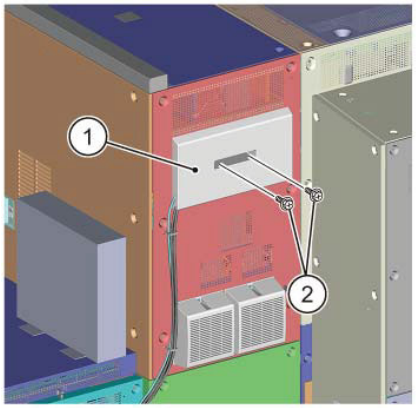


Figure 8 j0kol913013

28. [Server] Turn ON the power of Fiery Server.

29. [Server] Check the overall operation.

9.1.4.1 Spot Color Extension Kit for #6 Engine (1 of 9)

Before Starting

- This Kit can be installed to the 4 Color Type models of Digital Full Color Production Printer.
- When installing this Kit, the Speciality Color Engine Kit (Underlay), Specialty Color Extention Kit, Marking Module Kit, and Toner Module Kit for the color to be added are required. Prepare the Kits and perform the installation in sequence.

Note

At the beginning of the procedure, [Right], [Left], [ECO], [Server] is written.

When 2 persons are working, we recommend that 1 person do the [Right] work and 1 other person work on the other 3 tasks, and then collaborate in order to proceed efficiently.

- [Right]: Work on the IOT-Right section.
- [Left]: Work on the IOT-Left section.
- [ECO]: Work on the Eco-Box section.
- [Server]: Work on the Server.

Product Code

- Speciality Color Engine Kit (Underlay) : BP-PM13
- Specialty Color Extension Kit : BP-PM11
- Toner Enabling Kit (Gold): BP-PM17
- Toner Enabling Kit (Silver) : BP-PM18
- Toner Enabling Kit (White) :BP-PM21
- Toner Enabling Kit (Pink) : BP-PM19
- Marking Module Kit : BP-PM14
- White Marking Module Kit : BP-PM15

Installation Procedure

1. Open the package and check the bundled items.
   - Speciality Color Engine Kit (Underlay) (Figure 1, Figure 2, Figure 3, Figure 4)

Table 1

No	Name	Qty
1	ROS Assembly	1
2	Rear Drive Fan Assembly	1
3	Wire Harness (DISPSM)	1
4	Deve Bias HVPS Assembly	1
5	Drum Drive Assembly	1
6	Drawer Harness Assembly	1
7	Motor Drive Bracket Assembly	1
8	Main Connector Assembly	1
9	ReC Roll HVPS	1
10	CC HVPS	1
11	PCC HVPS	1
12	Plate Spring	2
13	Tie Plate	1
14	1st BTR HVPS	1
15	Duct Joint Cap Assembly	1
16	Blower Fan	1
17	Case Assembly	1
18	CC Assembly	1
19	Retract Shaft Assembly	1
20	Retract Arm Assembly	1
21	1st Roll Assembly	1
22	Eliminator Roll Assembly	1
23	Rear BTR Holder Assembly	1
24	Wire Harness	1
25	PCC-Connector	1
26	Duct Assembly	1
27	Main Filter	1
28	Bracket	1
29	Hose Hook	1
30	CC Duct	1
31	Bracket	1
32	MM Right Rail Assembly	1
33	MM Left Rail Assembly	1
34	Shaft	1
35	Duct Hose	1
36	Hose	1

Table 1

No	Name	Qty
37	Duct Bracket	1
38	CC Fan Assembly	1
39	Duct	1
40	ROS Cable 6	1
41	CC-Connector	1
42	PCC Duct	1
43	CC Cleaner Motor Assembly	1
44	Terminal Housing	1
45	Terminal Assembly	1
46	Earth Bracket	1
47	Front BTR Holder Assembly	1
48	Retract Slide Block	2
49	Spring	1
50	Cleaner Motor Assembly	1
51	Bearing (for Retract Slide Block)	8
52	Bearing (for Retract Shaft Assembly)	2
53	Spring (for Eliminator Roll Assembly/Retract Arm Assembly)	2
54	Spring (for Retract Arm Assembly/Retract Slide Block)	4
55	PWB Support	4
56	PWB Support	3
57	PWB Support	3
58	PWB Support	2
59	KL-Clip	2
60	E-Ring	6
61	Machine Screw (M4 x8)	23
62	Machine Screw (M3 x6)	31
63	DEL Screw (M4 x8)	11
64	DEL Screw (M4 x6)	4
65	DEL Screw (M3 x6)	5
66	Tapping Screw WP (M3 x8)	1

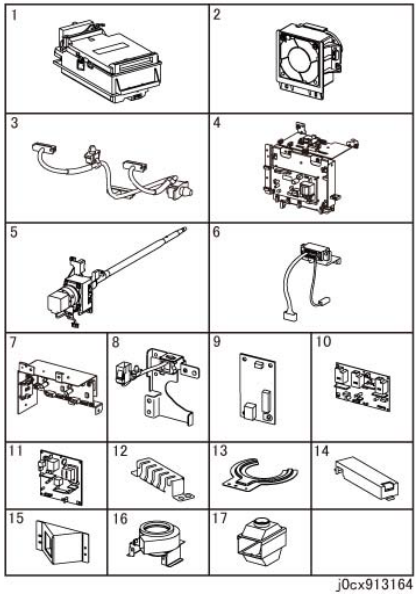


Figure 1 j0cx913164

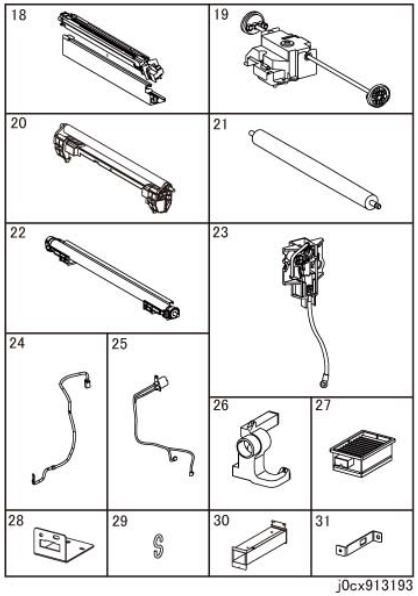


Figure 2 j0cx913193

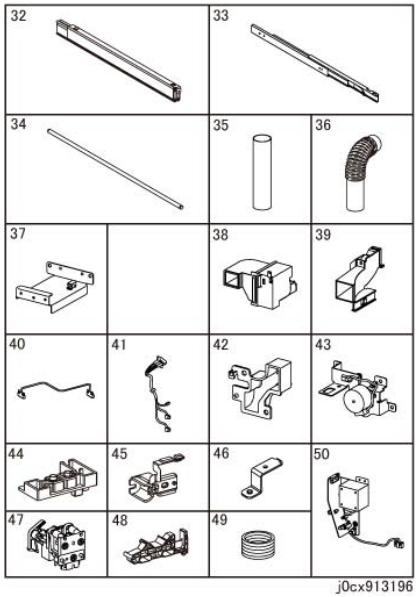


Figure 3 j0cx913196

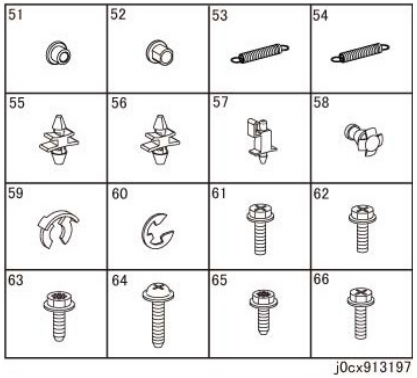


Figure 4 j0cx913197

- Specialty Color Extention Kit (Figure 5)

Table 2

No	Name	Qty
1	LVPS S24	1
2	Bracket	1

Table 2

No	Name	Qty
3	FLY 8 PWB	1
4	Halftone PWB Assembly	1
5	DST 4 PWB	1
6	Bag	1
7	PWB Support	3
8	Machine Screw (M3 x6)	16

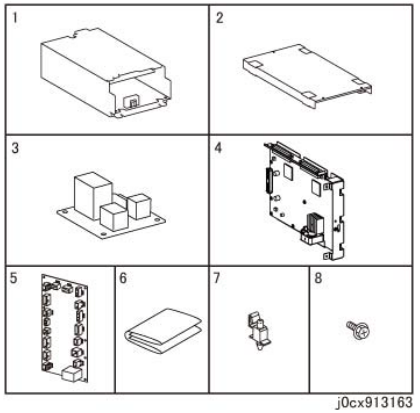


Figure 5 j0cx913163

- Toner Enabling Kit(GLD/SLV/WHT/PINK) (Figure 6)

Table 3

No	Name	Qty
1	Toner Cartridge (GLD/SLV/WHT/PINK)	1
2	Dispenser Inner Cover (GLD/SLV/WHT/PINK)	1
3	Label L (GLD/SLV/WHT/PINK)	2
4	Label R (GLD/SLV/WHT/PINK)	2
5	Label (GLD/SLV/WHT/PINK)	1
6	Toner Label (GLD/SLV/WHT/PINK)	1
7	Screw (M3 x6)	4

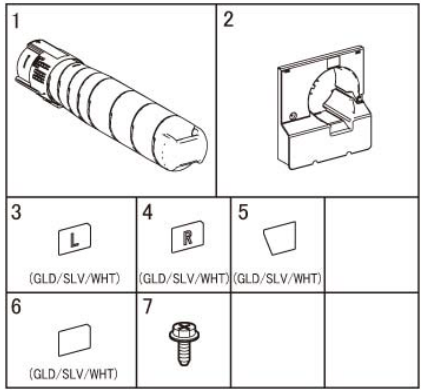


Figure 6 dar914001

- Marking Module Kit (Figure 7)

Table 4

No	Name	Qty
1	MM Assembly (GLD/SLV/WHT/PINK)	1
2	Shoulder Screw	2
3	Dispenser Assembly (GLD/SLV/WHT/PINK)	1
4	Drum Cartridge	1
5	Screw (M4x8)	2

*: Label is affixed for identification of WHT only. (Figure 8)

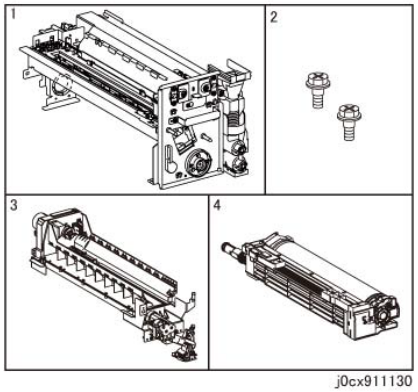


Figure 7 j0cx911130

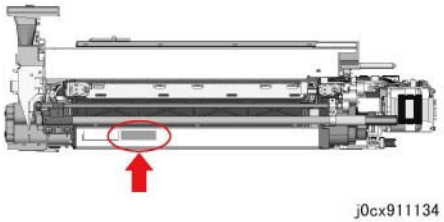


Figure 8 j0cx911134

WARNING

Turn OFF the Fiery Server and unplug the Power Cord.

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

CAUTION

Always wear a wrist band to protect electrical parts from static damage. If a wrist band is not available, touch some metallic parts before servicing to discharge the static electricity.

CAUTION

Turning OFF the main switch before removing or attaching the HSS Cable (9 m).

2. [Right] Remove the Print Server Support Cover. (Figure 9)

NOTE: *Do not turn ON the main switch with the Print Server Support Cover removed. If not, it can cause damage to the board or operation failure.*

(1) Remove the Screw (x2).
(2) Remove the Print Server Support Cover.

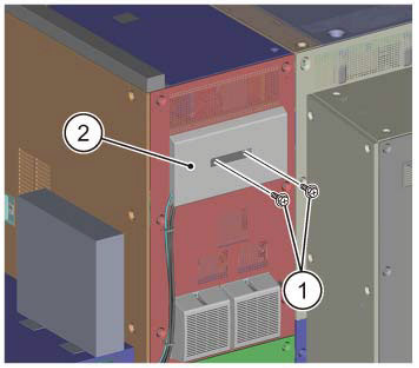


Figure 9 j0kol913001

3. [Right/Server] Disconnect all cables that are connected externally to the Video Box Unit.

4. [Server] Release the HSS Cable (9 m) (x2) from the Clamp (x7).
5. [Right] Release the Net Cable from the Clamp (x6).
6. [Right] Open the IOT-R Front Left Cover.
7. [Right] Remove the ELEC Box Front Plate. (Figure 10)
   (1) Remove the Screw (x3).
   (2) Remove the ELEC Box Front Plate.

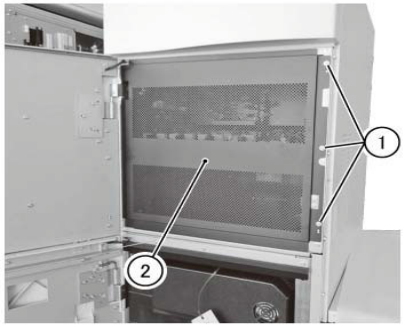


Figure 10 dar418003

8. [Right] Remove the Screw (x2). (Figure 11)
   (1) Remove the Screw (x2).

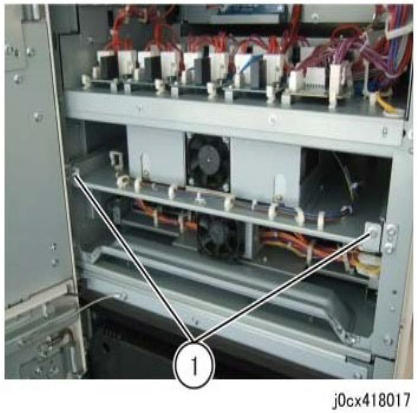


Figure 11 j0cx418017

9. [Right] Remove the ELEC Box Rear Cover. (Figure 12)
   (1) Remove the Screw (x6).
   (2) Remove the ELEC Box Rear Cover.

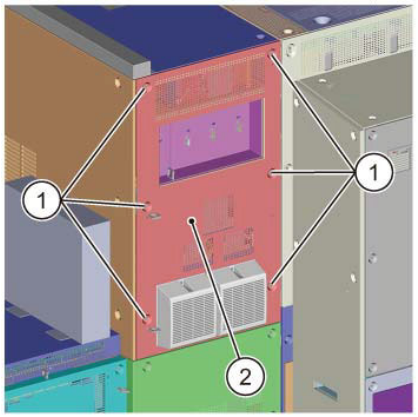


Figure 12 j0kol913002

10. [Right] Disconnect the connector (x5). (Figure 13)
    (1) Disconnect the connector (x4).
    (2) Disconnect the connector.
    (3) Release the wire harness from the clamp.

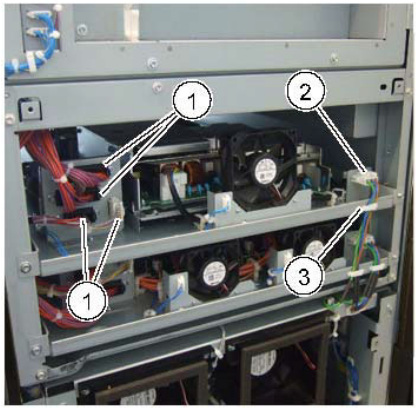


Figure 13 j0kol418005

11. [Right] Pull the LVPS H1U Chassis Assembly horizontally until it is stopped by the Stopper. (Figure 14)
    (1) Remove the Screw (x2).
    (2) Pull out the LVPS H1U Chassis Assembly.

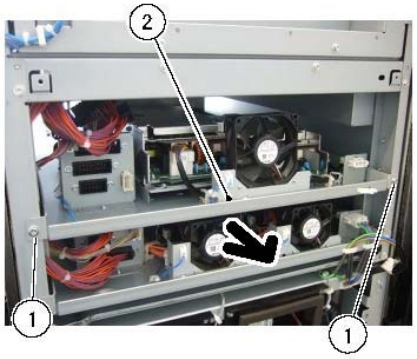


Figure 14 j0kol418006

12. [Right] Release the wire harness for LVPS S24 from the clamp (x2). (Figure 15)
    (1) Release the wire harness from the clamp (x2).
    (2) Remove the clamp.

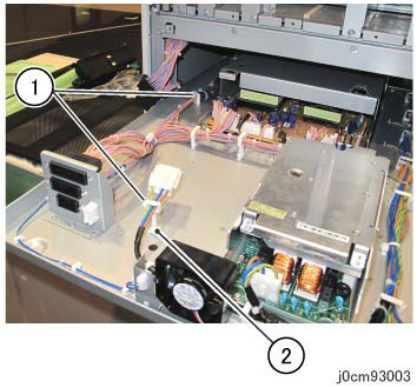


Figure 15 j0cm93003

13. [Right] Install the Bracket in the kit with the Machine Screw (M3 x6: 4). (Figure 16)
    (1) Install the Bracket.
    (2) Tighten the Machine Screw (M3 x6: 4).

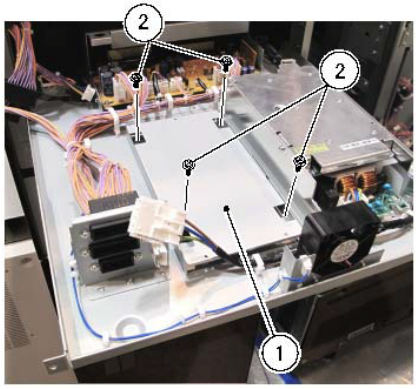


Figure 16 j0kol913018

14. [Right] Go to 9.1.4.2 Spot Color Extension Kit for #6 Engine (2 of 9).

9.1.4.2 Spot Color Extension Kit for #6 Engine (2 of 9)

Installation Procedures (Continue)

1. [Right] Connect the Connector (x2) to LVPS S24. (Figure 1)
   (1) Connect the connector (x2).

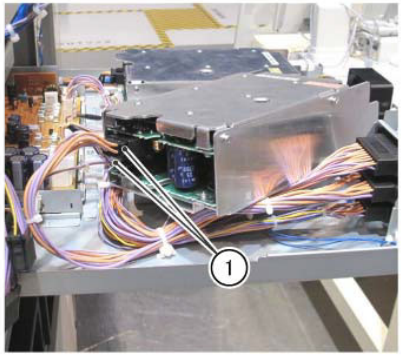


Figure 1 j0cm93006

2. [Right] Install LVPS S24 with the Machine Screw (M3 x6: 3). (Figure 2)
   (1) Install LVPS S24.
   (2) Tighten the Machine Screw (M3 x6: 3).

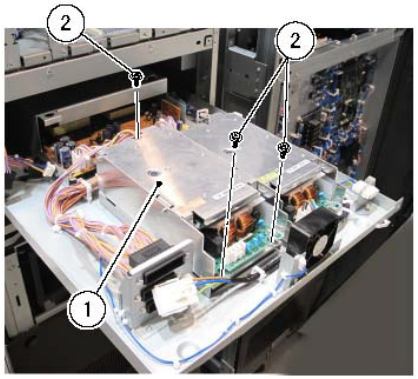


Figure 2 j0kol913019

3. [Right] Disconnect the Shorting Connector, and connect the Connector to LVPS S24. (Figure 3)
   (1) Disconnect the Shorting Connector.
   (2) Connect the connector.

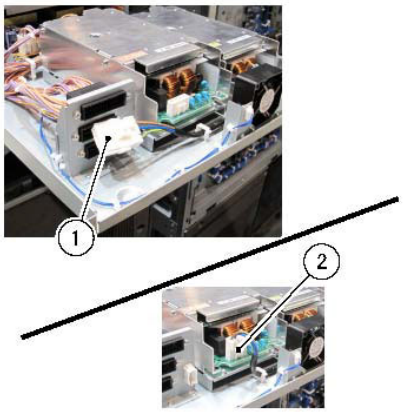


Figure 3 j0kol913020

4. [Right] Secure the wire harness with the clamp (x2), and connect the Connector. (Figure 4)
   (1) Secure the wire harness with the clamp (x2).
   (2) Connect the #6 labeled Connector (3 Pin).

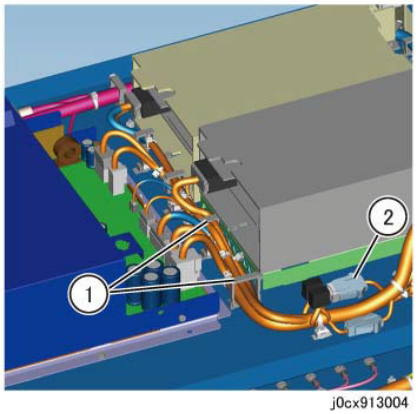


Figure 4 j0cx913004

5. [Right] Perform Step 6 to Step 9 of 9.1.4.1 Spot Color Extension Kit for #6 Engine (1 of 9) in reverse order to reinstall the removed parts.
6. [Right] Release the wire harness from the clamp. (Figure 5)
   (1) Release the wire harness from the clamp.

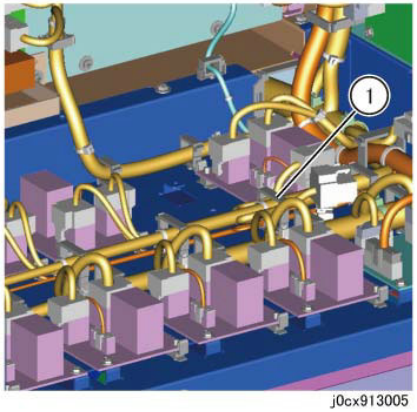


Figure 5 j0cx913005

7. [Right] Install the FLY 8 PWB with the Screw (M3 x6). (Figure 6)
   (1) Install the PWB Support (x3).
   (2) Install the FLY 8 PWB.
   (3) Tighten the Machine Screw (M3 x6).

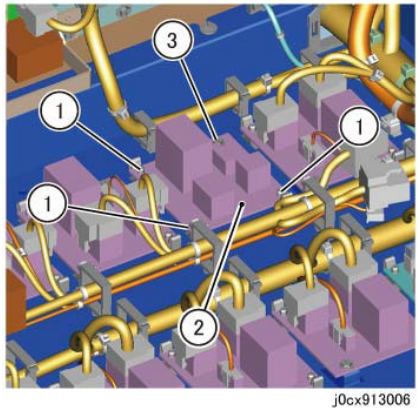


Figure 6 j0cx913006

8. [Right] Connect the Connector (x3) to the FLY 8 PWB. (Figure 7)
   (1) Connect the Connector (x3).

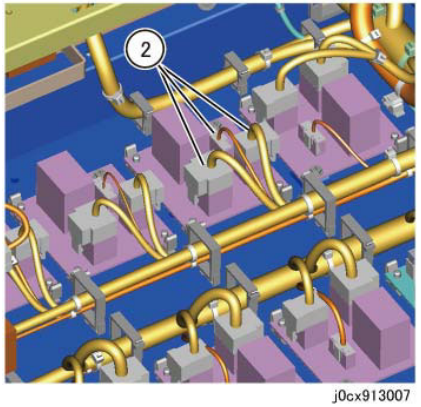


Figure 7 j0cx913007

9. [Right] Release the wire harness for DST4 PWB from the clamp (x4). (Figure 8)
   (1) Release the wire harness from the clamp (x4).

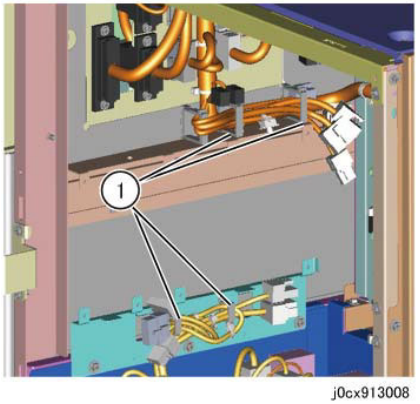


Figure 8 j0cx913008

10. [Right] Install the DST4 PWB with the Screw (M3 x6) (x8). (Figure 9)
    (1) Install the DST4 PWB.
    (2) Tighten the Screw (M3 x6) (x8).

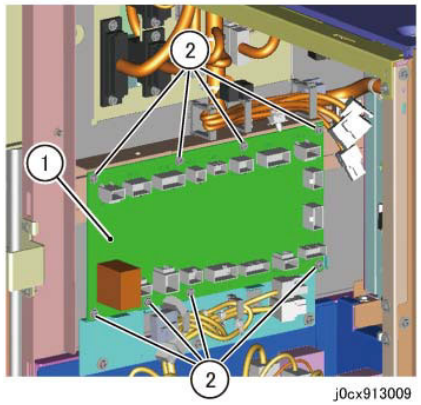


Figure 9 j0cx913009

11. [Right] Connect the Connector (x10) to the DST4 PWB. (Figure 10)
    (1) Connect the Connector (x10).
    (2) Insert the Push Tie (x1).
    (3) Close the clamp (x4).

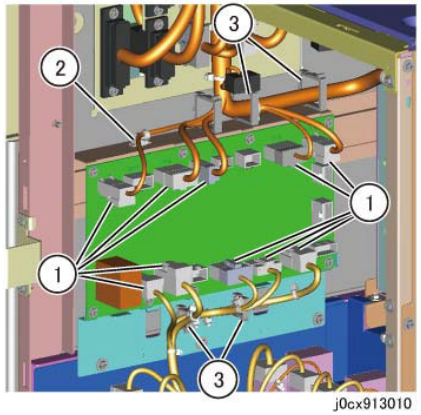


Figure 10 j0cx913010

12. [Right] Reinstall the ELEC Box Front Plate that was removed in Step 5 of 9.1.4.1 Spot Color Extension Kit for #6 Engine (1 of 9).
13. [Right] Close the IOT-R Front Left Cover.
14. [Right] Disconnect the connector (x3). (Figure 11)
    (1) Release the wire harness from the clamp.
    (2) Disconnect the connector (x3).

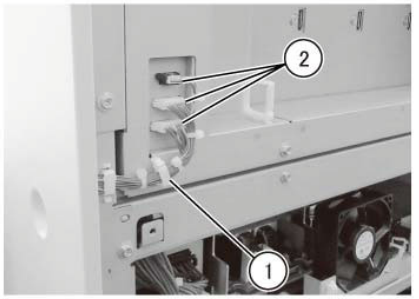


Figure 11 dar418008

15. [Right] Remove the Video Box Rear Cover. (Figure 12)
    (1) Remove the Screw (x9).
    (2) Remove the Video Box Rear Cover.

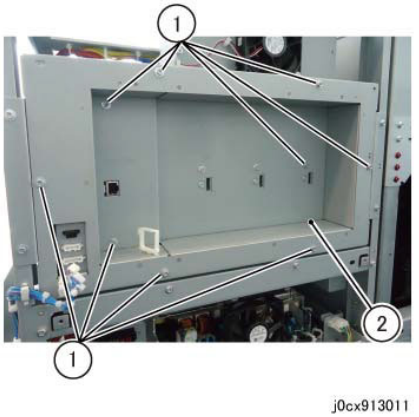


Figure 12 j0cx913011

16. [Right] Remove the Blind Panel. (Figure 13)
    (1) Remove the Screw (x2).
    (2) Remove the Blind Panel.

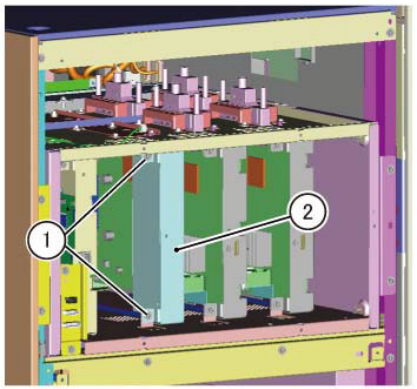


Figure 13 j0cx913012

17. [Right] Reuse the Screw (x2) that was removed in Step 16 to install the Halftone PWB Assembly. (Figure 14)
    (1) Insert the Halftone PWB Assembly.
    (2) Tighten the Screw (x2).

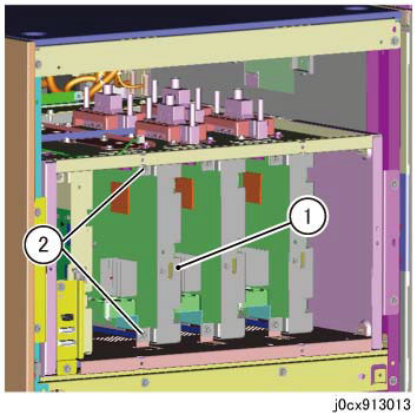


Figure 14 j0cx913013

18. [Right] Perform Step 14 and Step 15 in reverse to reinstall the removed parts.
19. [Right] Remove the Top Corner Cover. (Figure 15)
    (1) Remove the Screw (x2).
    (2) Remove the Top Corner Cover.

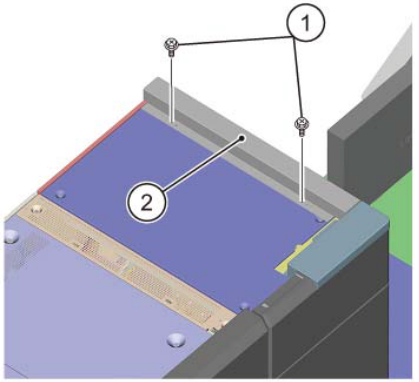


Figure 15 j0kol913014

20. [Right] Remove the IOT-R Top Cover. (Figure 16)
    (1) Remove the Screw (x4).
    (2) Remove the IOT-R Top Cover.

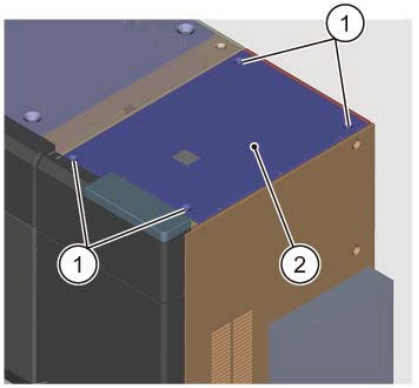


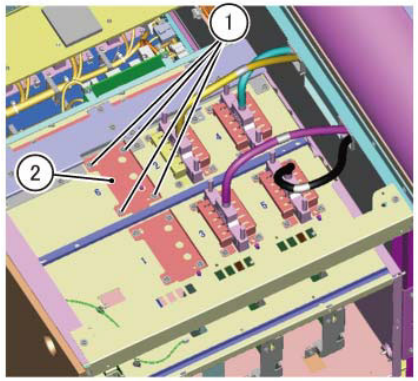
Figure 16 j0kol913003

21. [Right] Go to 9.1.4.3 Spot Color Extension Kit for #6 Engine (3 of 9).

9.1.4.3 Spot Color Extension Kit for #6 Engine (3 of 9)

Installation Procedures (Continue)

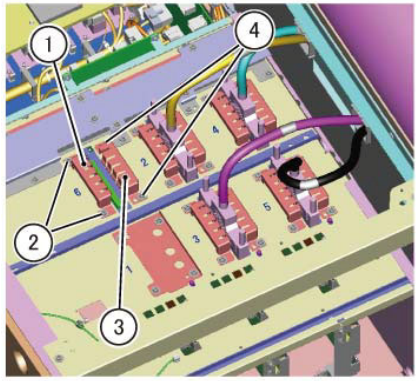
1. [Right] Remove the Blind Panel. (Figure 1)
   (1) Remove the Screw (x4).
   (2) Remove the Blind Panel.



j0cx913016

Figure 1 j0cx913016

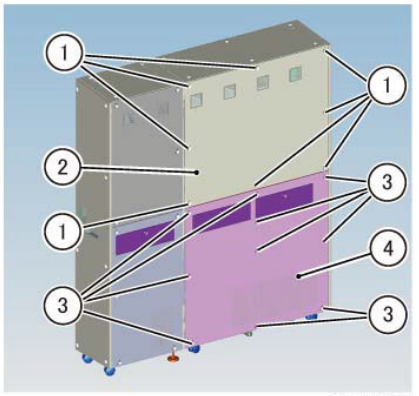
2. [Right] Reuse the Screw (x4) that was removed in Step 1 to install the Plate Spring (x2). (Figure 2)
   (1) Install the Plate Spring.
   (2) Tighten the Screw (x2).
   (3) Install the Plate Spring.
   (4) Tighten the Screw (x2).



j0cx913018

Figure 2 j0cx913018

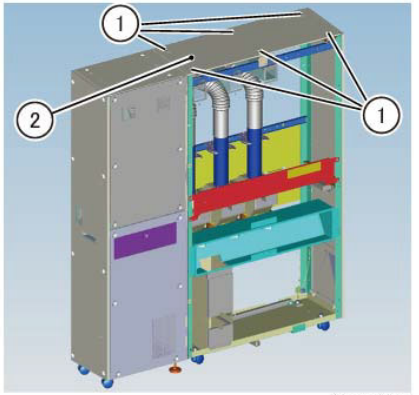
3. [ECO] Detach the ECO Box Unit from the Main Unit of the machine. (REP 4.9.1)
4. [ECO] Remove the ECO Rear Upper Cover and ECO Rear Lower Cover. (Figure 3)
   (1) Remove the Screw (x6).
   (2) Remove the ECO Rear Upper Cover.
   (3) Remove the Screw (x6).
   (4) Remove the ECO Rear Lower Cover.



j0cx913020

Figure 3 j0cx913020

5. [ECO] Remove the ECO Top Cover. (Figure 4)
   (1) Remove the Screw (x6).
   (2) Remove the ECO Top Cover.

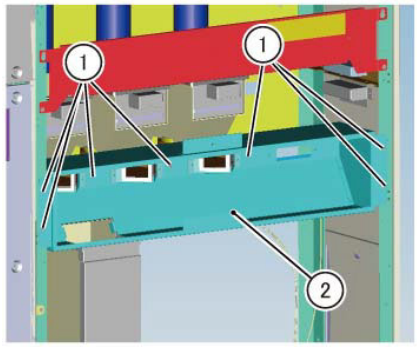


j0cx913022

Figure 4 j0cx913022

6. [ECO] Remove the Blower Joint Duct. (Figure 5)
   (1) Remove the Screw (x7).

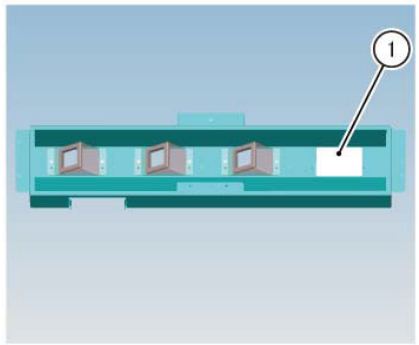
(2) Remove the Blower Joint Duct.



j0cx913024

Figure 5 j0cx913024

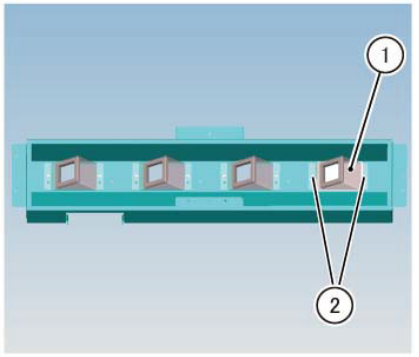
7. [ECO] Peel off the Cap Seal pasted on the Blower Joint Duct. (Figure 6)
   (1) Peel off the Cap Seal.



j0cx913026

Figure 6 j0cx913026

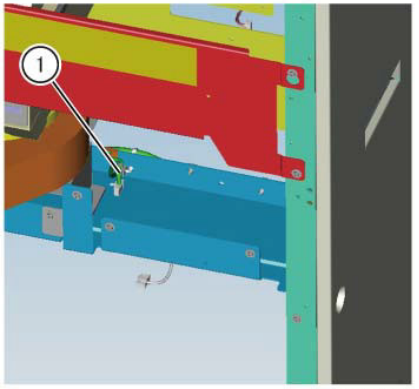
8. [ECO] Install the Duct Joint Cap Assembly to the Blower Joint Duct. (Figure 7)
   (1) Install the Duct Joint Cap Assembly.
   (2) Tighten the Screw (x2).



j0cx913028

Figure 7 j0cx913028

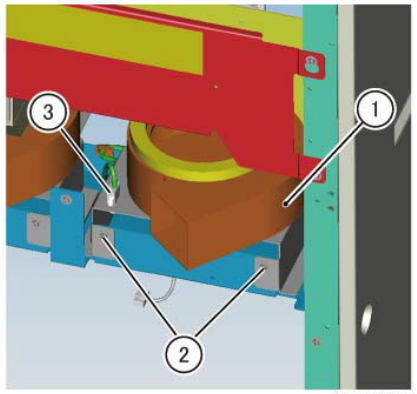
9. [ECO] Peel off the tape securing the Wire Harness. (Figure 8)
   (1) Peel off the tape.



j0cx913030

Figure 8 j0cx913030

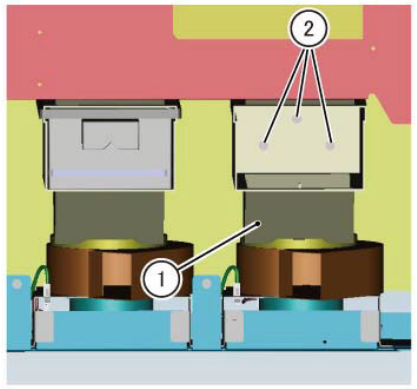
10. [ECO] Install the Blower Fan. (Figure 9)
    (1) Install the Blower Fan.
    (2) Tighten the Screw (x2).
    (3) Connect the connector.



j0cx913032

Figure 9 j0cx913032

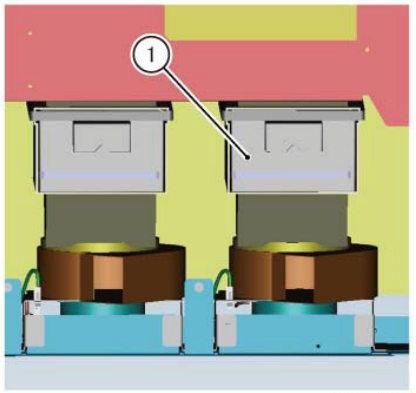
11. [ECO] Install the Case Assembly. (Figure 10)
    (1) Install the Case Assembly.
    (2) Tighten the Screw (x3).



j0cx913034

Figure 10 j0cx913034

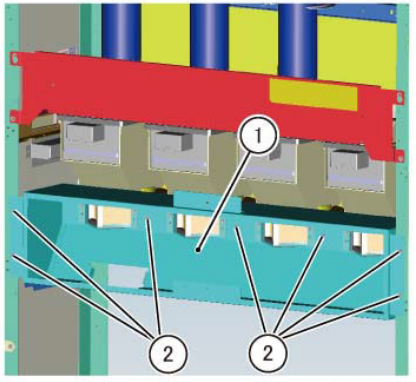
12. [ECO] Insert the Main Filter. (Figure 11)
    (1) Insert the Main Filter.



j0cx913038

Figure 11 j0cx913038

13. [ECO] Install the Blower Joint Duct. (Figure 12)
    (1) Install the Blower Joint Duct.
    (2) Tighten the Screw (x7).



j0cx913040

Figure 12 j0cx913040

14. [ECO] Install the Tie Plate. (Figure 13)
    (1) Install the Tie Plate.
    (2) Tighten the Screw.

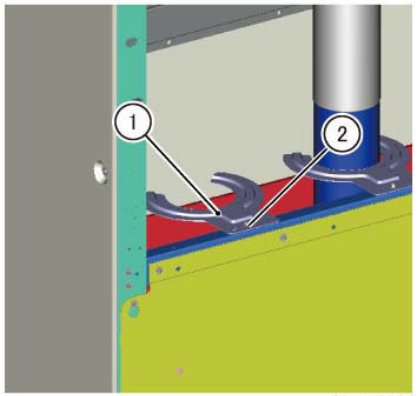


Figure 13 j0cx913036

15. [ECO] Install the CC Duct. (Figure 14)
    (1) Hook the protrusion (x2) of the CC Duct in the hole of the Frame, and temporarily secure the Bracket with the Screw.
    (2) Adjust the Bracket position so that the ECO Box Unit is sandwiched, and secure it with the Screw (x3).

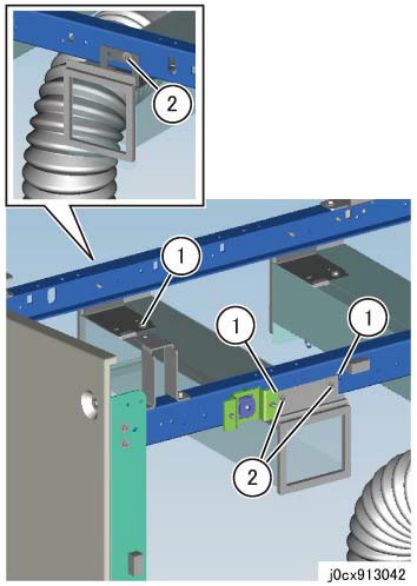


Figure 14 j0cx913042

16. [ECO] Caulk the CC Duct side so that the Hose Hook does not come off. (Figure 15)
    (1) Caulk the CC Duct side.

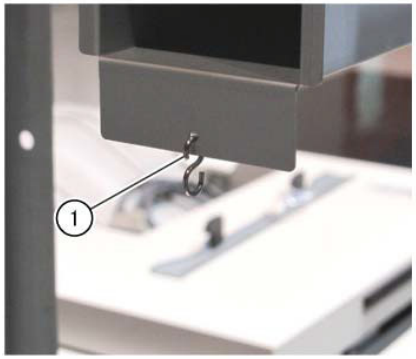


Figure 15 j0cm93027

17. [ECO] Install Duct Hose with the longer one from the white line facing downward, and insert the Hose with the Hook hole facing the Front up to the white line position of the Duct Hose. (Figure 16)
    (1) Install the Duct Hose.
    (2) Insert the Hose.

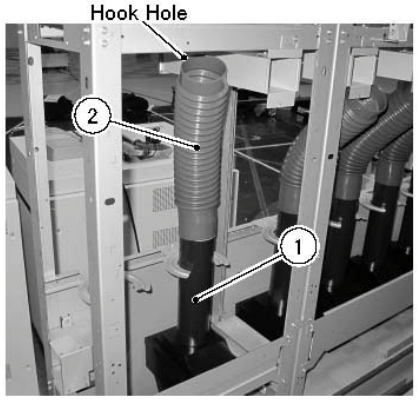


Figure 16 j0kol913025

18. [ECO] Hook the Hose on the Hose Hook. (Figure 17)
    (1) Hook the Hose.

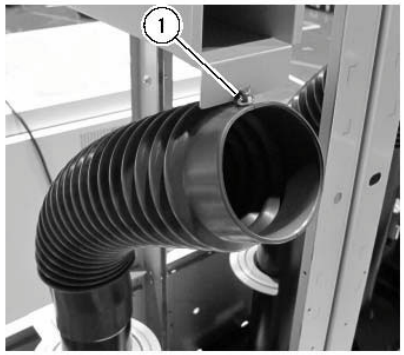


Figure 17 j0kol913026

19. [ECO] Install the ECO Top Cover using the Machine Screw (M4 x8: 6). (Figure 18)
    (1) Install the ECO Top Cover.
    (2) Tighten the Machine Screw (M4 x8: 6).

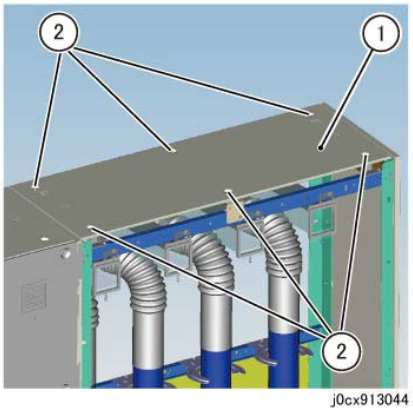


Figure 18 j0cx913044

20. [Left] Go to 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).

9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9)

Installation Procedures (Continue)

1. [Left] Open the IOT-L Front Left/Right Door Assembly. (PL 19.1)
2. [Left] Open the Dispenser Left Cover/Dispenser Right Cover Assembly. (PL 19.2)
3. [Left] Remove the Developer Inner Cover Assembly and IBT Front Cover. (Figure 1)
   (1) Loosen the Screw (x6).
   (2) Remove the Developer Inner Cover.
   (3) Loosen the Screw (x4).
   (4) Remove the IBT Front Cover.

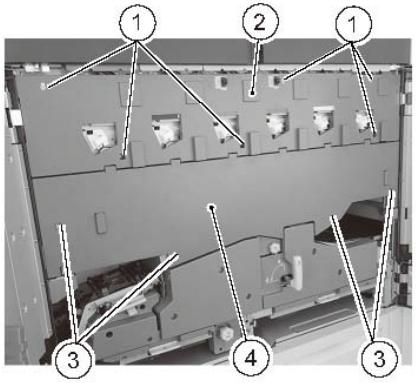


Figure 1 j0kol405001

4. [Left] Remove the Blind Plate Assembly. (Figure 2)
   (1) Remove the Screw (x2).
   (2) Remove the Blind Plate Assembly.

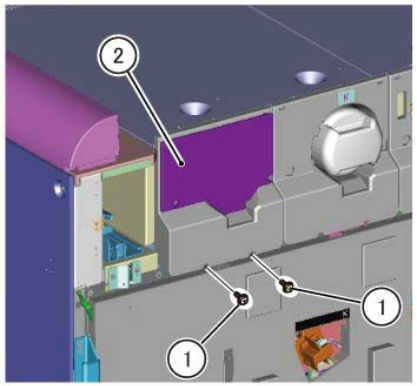


Figure 2 j0cx913047

5. [Left] Remove the Dispenser Inner Cover of Toner Dispenser Assembly (K). (Figure 3)
   (1) Remove the Screw (x2).
   (2) Remove the Dispenser Inner Cover.

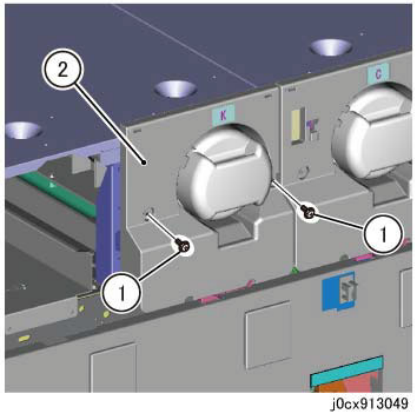


Figure 3 j0cx913049

6. [Left] Remove the IOT-L Top Cover. (Figure 4)
   (1) Remove the Screw (x5).
   (2) Remove the IOT-L Top Cover.

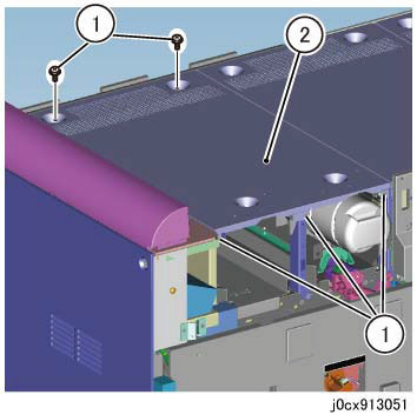


Figure 4 j0cx913051

7. [Left] Remove the ROS Cover (#6). (Figure 5)
   (1) Remove the Screw (x6).
   (2) Remove the ROS Cover (#6).

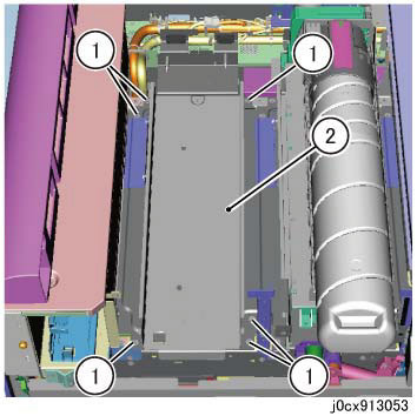


Figure 5 j0cx913053

8. [Left] Remove the ROS Duct. (Figure 6)
   (1) Remove the ROS Duct.

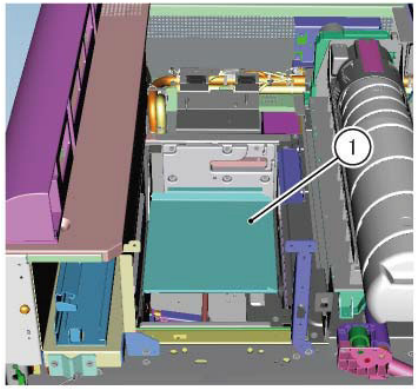


Figure 6 j0cx913172

9. [Left] Lower the Big Module and IBT Module. (Figure 7)
   (1) Lower the Handle of the Big Module.
   (2) Lightly push the IBT Lever to rotate the Stopper Plate.
   (3) Lower the IBT Lever.

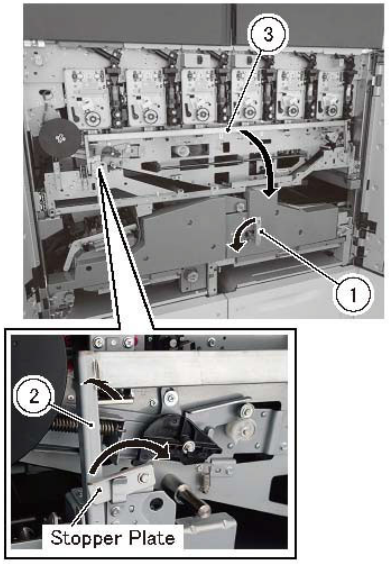


Figure 7 j0kol405002

10. [Left] Remove the IOT-L Rear Right Cover. (Figure 8)
    (1) Loosen the Screw (x2).
    (2) Remove the Screw (x2).
    (3) Remove the IOT-L Rear Right Cover.

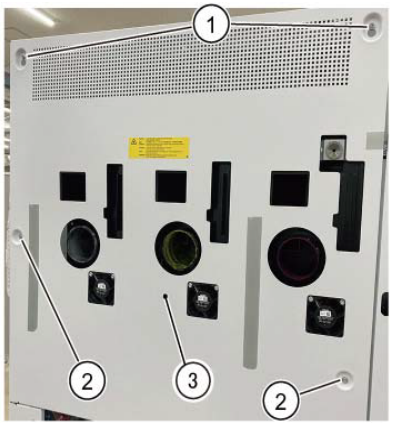


Figure 8 dar419001

11. [Left] Remove the IOT-L Rear Left Cover. (Figure 9)
    (1) Loosen the Screw (x2).
    (2) Remove the Screw.
    (3) Remove the IOT-L Rear Left Cover.

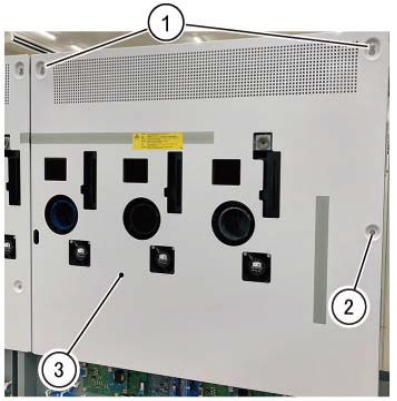


Figure 9 dar419002

12. [Left] Remove the IOT-L Rear Mid Cover. (PL 19.5)
13. [Left] Remove the IOT-L Rear Mid LH Cover. (PL 19.5)
14. [Left] Open the Right PWB Chassis Assembly. (Figure 10)
    (1) Release the wire harness from the clamp.
    (2) Release the wire harness from the clamp (x2).

(3) Remove the Screw (x6).
(4) Open the Right PWB Chassis Assembly.

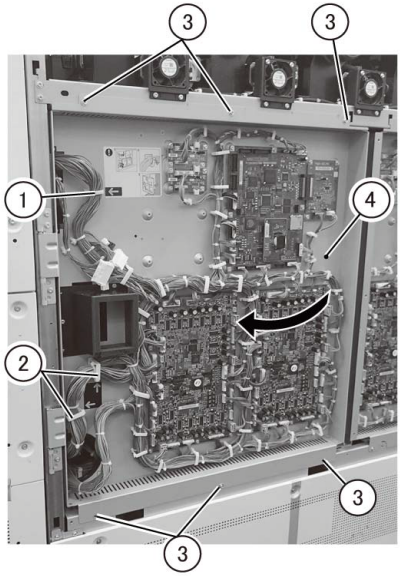


Figure 10 dar404001

15. [Left] Open the Left PWB Chassis Assembly. (Figure 11)
    (1) Remove the Screw (x8).
    (2) Open the Left PWB Chassis Assembly.
    (3) Release the clamp.
    (4) Rotate the Stopper and insert it in the hole of the Bracket.

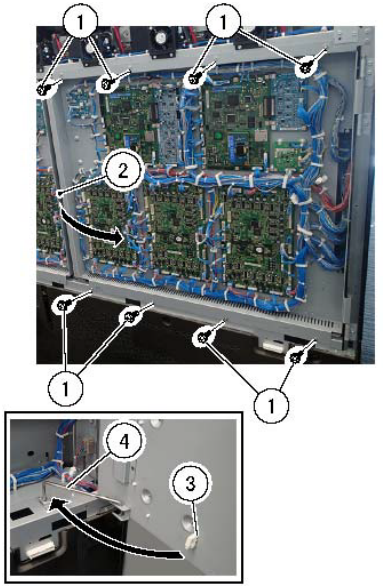


Figure 11 j0kol408001

16. [Left] Remove the Drive Fan Assembly. (Figure 12)
    (1) Remove the Screw and rotate the Plate.
    (2) Disconnect the connector.
    (3) Remove the Screw (x4).
    (4) Remove the Drive Fan Assembly.

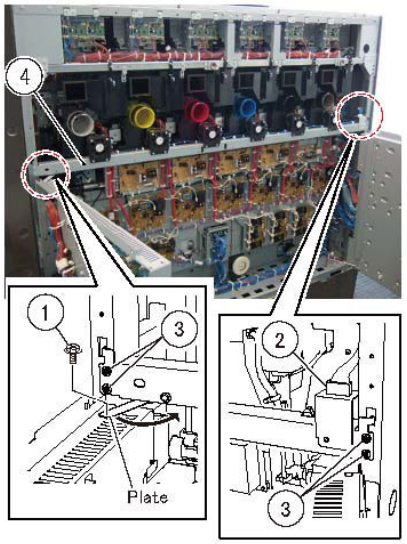


Figure 12 j0kol418004

17. [Left] Remove the Wheel Assembly from the IBT Module. (Figure 13)
    (1) Remove the Hexalobular TP Screw (x2).
    (2) Remove the Wheel Assembly.

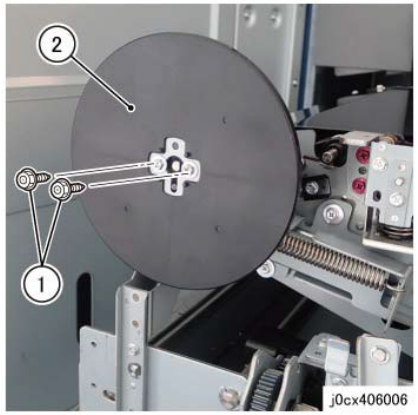


Figure 13 j0cx406006

18. [Left] Remove the Front Plate Assembly (Dummy). (Figure 14)
    (1) Remove the Screw (x2).
    (2) Remove the Front Plate Assembly (Dummy).

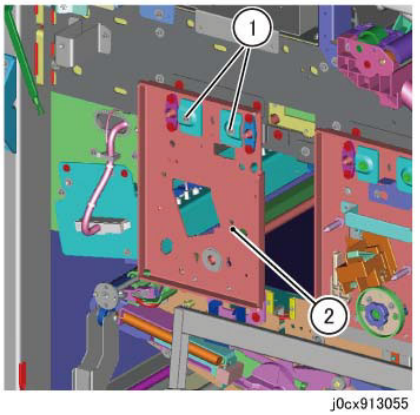


Figure 14 j0cx913055

19. [Left] Remove the Cover. (Figure 15)
    (1) Loosen the Screw.
    (2) Remove the Cover.
    (3) Tighten the Screw.

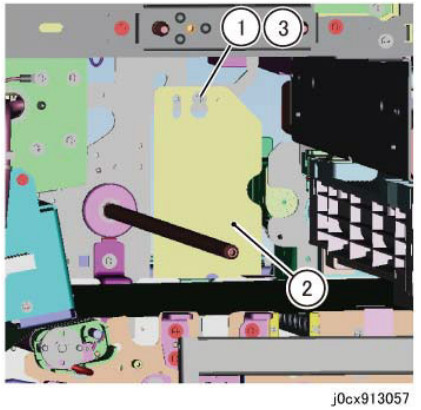


Figure 15 j0cx913057

20. [Left] Send the Connector connected to the ROS (#6) from the Rear Frame hole to the Front. (Figure 16)
    (1) Free the clamp and release the harness.
    (2) Send the removed Connector from the Rear Frame hole to the Front.
    (3) Close the clamp.

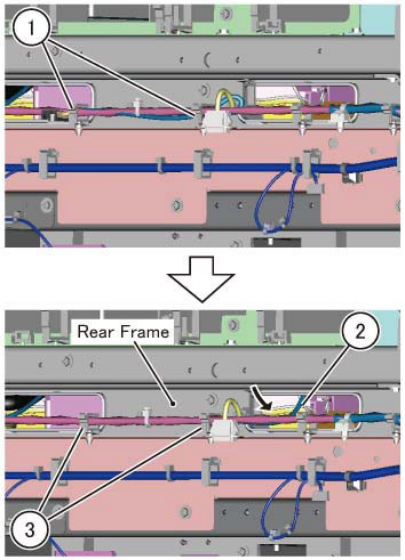


Figure 16 j0cx913059

21. [Left] Insert the supplied ROS Cable 6 Connector into the Rear Frame hole, and secure it with the Clamp. (Figure 17)
    (1) Release the clamp.
    (2) Insert ROS Cable 6 Connector into the Rear Frame hole. As a guide, make sure the label of ROS Cable comes to the position of the Clamp.
    (3) Secure the clamp.

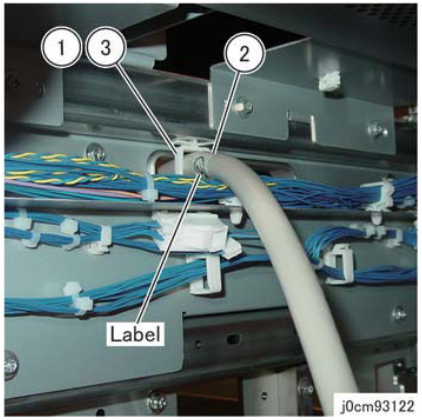


Figure 17 422

22. [Left] Send the connector on the opposite side of ROS Cable 6 to the IOT-R side. (Figure 18)
    (1) Send the Connector along the Rear Frame to the IOT-R side.
    (2) Secure ROS Cable 6 by using the clamp.

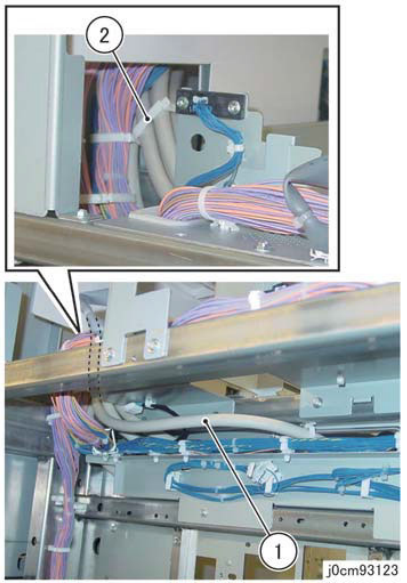


Figure 18 j0cm93123

23. [Right] Connect the added ROS Cable 6 to the No. 6 slot. (Figure 19)
    (1) Connect ROS Cable 6.
    (2) Secure ROS Cable 6 by using the clamp.

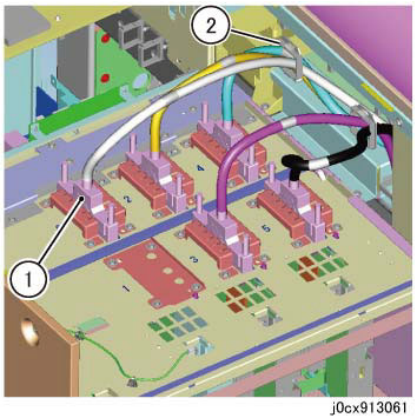


Figure 19 j0cx913061

24. [Right] Reinstall the IOT-R Top Cover that was removed in Step 18 of 9.1.4.2 Spot Color Extension Kit for #6 Engine (2 of 9).
25. [Right] Reinstall the Video Box Rear Cover that was removed in Step 14 of 9.1.4.2 Spot Color Extension Kit for #6 Engine (2 of 9).
26. [Left] Go to 9.1.4.5 Spot Color Extension Kit for #6 Engine (5 of 9).

9.1.4.5 Spot Color Extension Kit for #6 Engine (5 of 9)

Installation Procedures (Continue)

1. [Left] Install the supplied MM Left Rail Assembly. (Figure 1)

   NOTE: *Put paper on the IBT Belt and at the gap between the Rear Frame and IBT Belt in advance to prevent parts falling and the IBT Belt from being damaged.*

   NOTE: *Since the Plus Driver is used when installing the MM Left Rail Assembly, take note of the Screw falling.*

   (1) Pull out the Inner Rail from the MM Left Rail Assembly.
   (2) Determine the position of MM Left Rail Assembly with emboss, and install it.
   (3) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Front.
   (4) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Rear.
   (5) Release the Stopper of the Inner Rail, and push it into the machine.

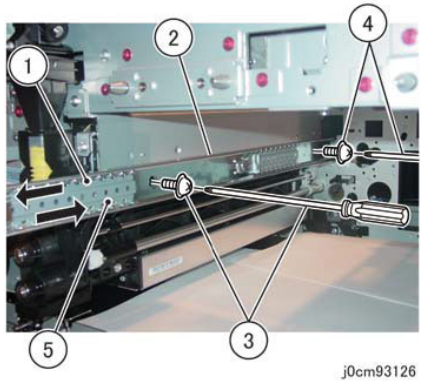


Figure 1 j0cm93126

2. [Left] Install the supplied MM Right Rail Assembly. (Figure 2)
   (1) Pull out the Inner Rail from the MM Right Rail Assembly.
   (2) Determine the position of MM Right Rail Assembly with emboss, and install it.
   (3) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Front.
   (4) Using the Plus Driver, tighten the DEL Screw (M4 x6) at the Rear.
   (5) Release the Stopper of the Inner Rail, and push it into the machine.

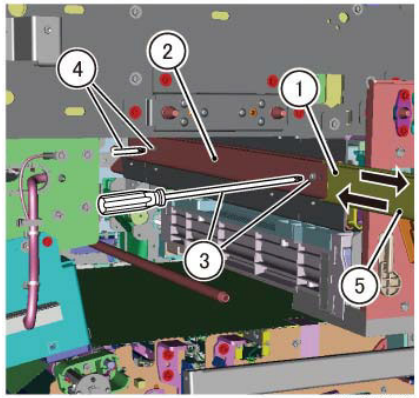


Figure 2 j0cx913063

3. [Left] Open the Cable Cover of the ROS Cover. (Figure 3)
   (1) Loosen the Screw (x2).
   (2) Slide the Cable Cover.

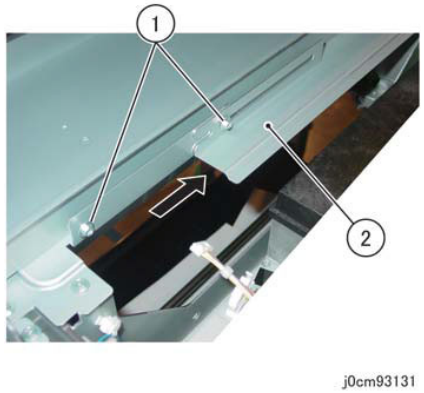


Figure 3 j0cm93131

4. [Left] Peel off the barcode label from the supplied ROS Assembly (#6), and paste it on the Service Log. (Figure 4)

   NOTE: *When holding the ROS Assembly (#6), hold at the position shown.*

   (1) Peel off the Barcode Label.
   (2) Paste the peeled Barcode Label on the Service Log.

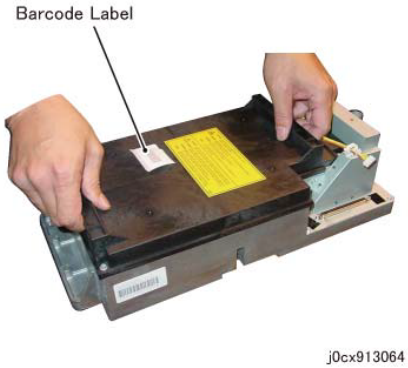


Figure 4 j0cx913064

5. [Left] Install the supplied ROS Assembly (#6) from the Front, and tighten the Machine Screw (M4 x10: 2). (Figure 5)
   (1) Install the ROS Assembly (#6).
   (2) Tighten the Machine Screw (M4 x10: 2).

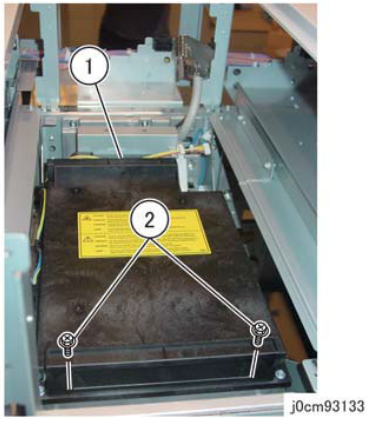
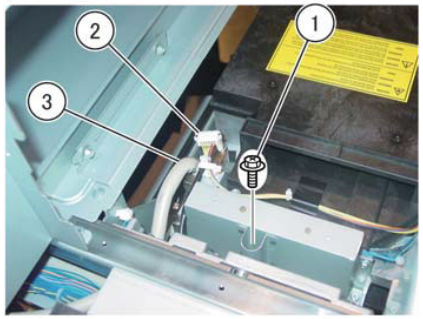


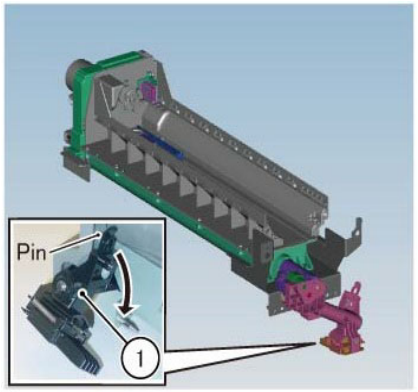
Figure 5 j0cm93133

6. [Left] Tighten the Screw of the ROS Assembly (#6) from the Rear, and connect the Wire Harness and ROS Cable 6 to the ROS Assembly (#6). (Figure 6)
   (1) Tighten the Machine Screw (M4 x10).
   (2) Connect the wire harness.
   (3) Connect ROS Cable 6, and tighten the Screw (x2) of the Connector.



j0cm93134

Figure 6 j0cm93134



j0cx913065

Figure 7 j0cx913065

7. [Left] Reinstall the Cable Cover that was removed in Step 3 of 9.1.4.5 Spot Color Extension Kit for #6 Engine (5 of 9).
8. [Left] Reinstall the ROS Cover that was removed in Step 8 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).

   NOTE: *When installing the ROS Cover, peel off the plastic sheet Duct secured with double-sided tape behind the Cover.*
9. [Left] Reinstall the IOT Top Cover that was removed in Step 7 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).
10. [Left] Reinstall the Toner Dispenser Assembly (K) that was removed in Step 6 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).
11. [Left] Reinstall the Attention Light Assembly that was removed in Step 3 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).
12. [Left] Remove the supplied Pipe Auger Assembly of the Dispenser Assembly (#6) from the Pin, and rotate it. (Figure 7)
    (1) Remove the Pipe Auger Assembly from the pin and rotate it.
13. [Left] Install the Dispenser Assembly (#6) and Dispenser Inner Cover (#6), and affix the Toner Label of the color to be used. (Figure 8)
    (1) Install the Dispenser Assembly (#6).
    (2) [Left] Reuse and tighten the Screw (x2) that was removed in Step 5 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).
    (3) Tighten the Screw.
    (4) Install the Dispenser Inner Cover (#6).
    (5) Tighten the Machine Screw (M3 x6: 2).
    (6) Paste the supplied Toner Label.
    (7) Paste the supplied Label L. (GLD/SLV/WHT/PINK only)

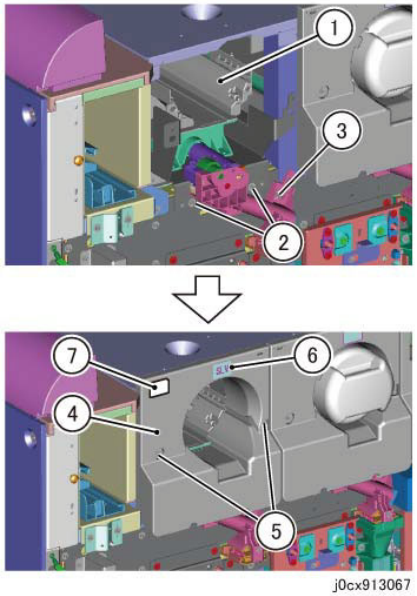


Figure 8 j0cx913067

14. [Left] Set the supplied Toner Cartridge on the Dispenser Assembly (#6).
15. [Left] Remove the paper that is laid on the IBT Belt.
16. [Left] Install the Developer Inner Cover Assembly that was removed in Step 4 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).
17. [Left] Pull out the Big Module up to the Service Position. (REP 9.1.1)
18. [Left] Pull out the IBT Module.
19. [Left] In order to prevent light deterioration of the Drum, attach the Protect Sheet to the Developer Inner Cover. (Figure 9)
    (1) Take out the Protect Sheet.
    (2) Attach the Magnet of Protect Sheet to the Developer Inner Cover.

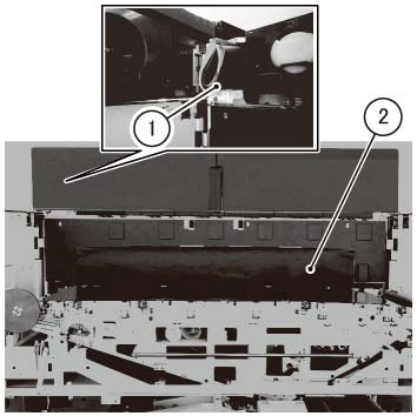


Figure 9 dar911019

20. [Left] Remove the IBT Belt. (REP 6.3.1)
21. [Left] Lower the IBT Belt Frame to the IBT Frame. (Figure 10)
    (1) Hold the IBT Handle with both hands, and lower the IBT Belt Frame to the IBT Frame while pulling the Lever with your finger.

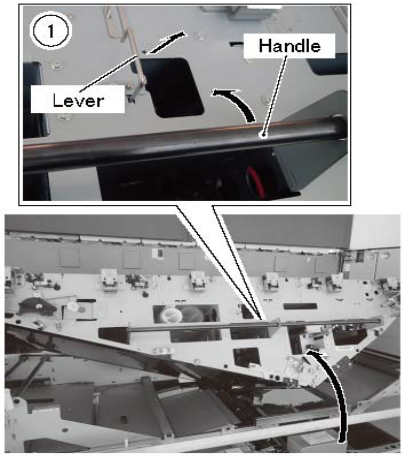


Figure 10 j0kol406039

22. [Left] Install the supplied Earth Bracket.
    (1) Install the Earth Bracket.
    (2) Tighten the DEL Screw (M3 x6: 1).

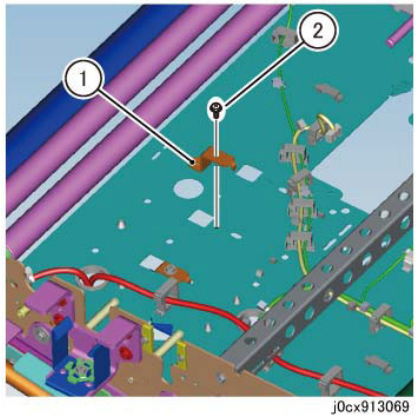


Figure 11 j0cx913069

23. [Left] Install the supplied R5 HVPS.
    (1) Install the Support (x3).
    (2) Install R5 HVPS.
    (3) Tighten the Machine Screw (M3 x6: 1).

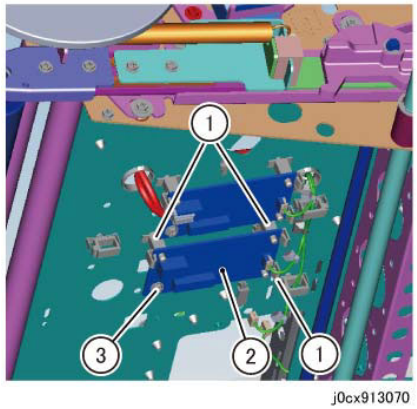


Figure 12 j0cx913070

24. [Left] Install the supplied Rear BTR Holder Assembly. (Figure 13)
    (1) Release the clamp (x2).
    (2) Install the Rear BTR Holder Assembly.
    (3) Tighten the Machine Screw (M3 x6).
    (4) Secure the cable by using the clamp (x2).

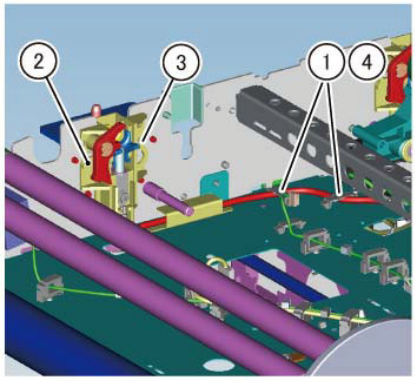


Figure 13 j0cx913072

25. [Left] Install the supplied Terminal Housing. (Figure 14)
    (1) Install the Terminal Housing.
    (2) Tighten the Machine Screw (M3 x6).
    (3) Secure the cable with the Machine Screw (M3 x6).

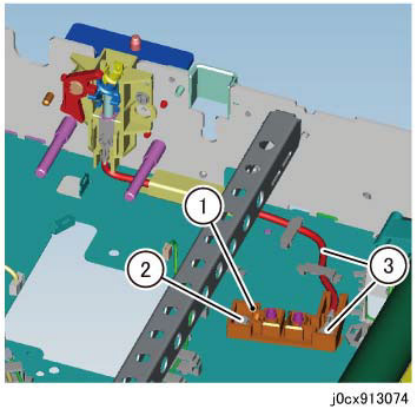


Figure 14 j0cx913074

26. [Left] Install the supplied 1st BTR HVPS. (Figure 15)
    (1) Install the 1st BTR HVPS.
    (2) Tighten the Machine Screw (M3 x6).
    (3) Connect the connector to the 1st BTR HVPS.

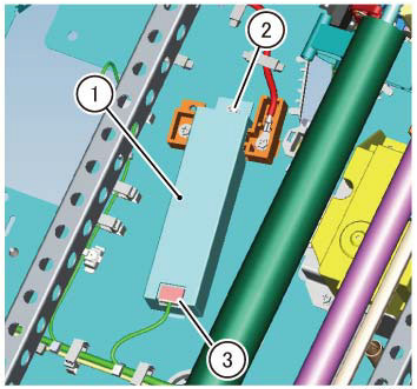


Figure 15 j0cx913076

27. [Left] Go to 9.1.4.6 Spot Color Extension Kit for #6 Engine (6 of 9).

9.1.4.6 Spot Color Extension Kit for #6 Engine (6 of 9)

Installation Procedures (Continue)

1. [Left] Install the supplied Bearing (x2) and Retract Slide Assembly to the IBT Rear Frame. (Figure 1)
   (1) Attach the Bearing (x2) to the Stud (x2).
   (2) Attach the supplied Spring (Length = 30.2) to the Retract Slide Assembly.
   (3) Install the Retract Slide Assembly.
   (4) Attach the spring at the position shown.

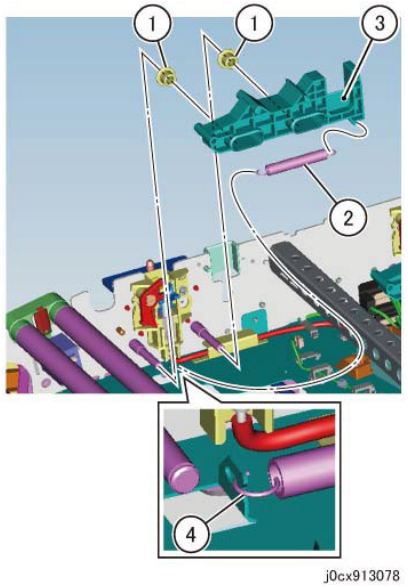


Figure 1 j0cx913078

2. [Left] Check that the Retract Link and Retract Slide Assembly are in the proper positions. (Figure 2)
   (1) The relationship between the positions of the Retract Link and Retract Slide Assembly is that the Bar of "A" Retract Link is trapped by the Bearing. Hook the Bar of B "Retract Link to the Retract Slide.
   (2) Move the Retract Slide Assembly to the left and right and check whether the Retract Link is linked in the direction of the arrow.
   (3) If it is not linked, repeat the Step (1), and set it to the proper position.

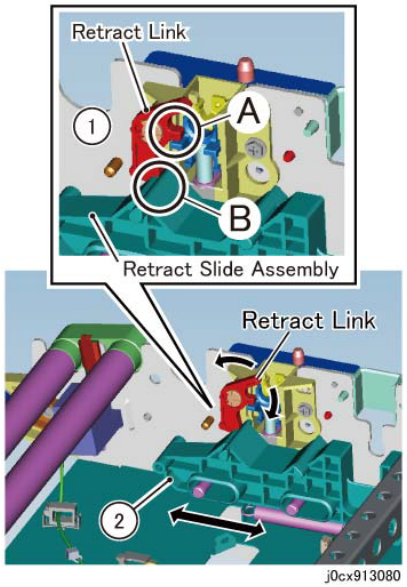


Figure 2 j0cx913080

3. [Left] Attach the supplied Bearing (x2) and KL-Clip (x2) to the Retract Slide Assembly. (Figure 3)
   (1) Attach the Bearing (x2), and secure with the KL-Clip (x2).

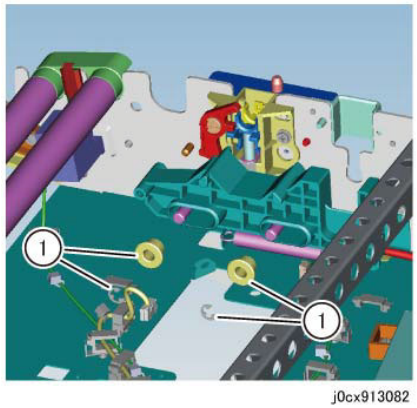


Figure 3 j0cx913082

4. [Left] Install the supplied Retract Slide Assembly to the IBT Front Frame. (Figure 4)
   (1) Attach the Bearing (x2) to the Stud (x2).
   (2) Attach the Spring (Length = 30.2) to the Retract Slide Assembly.
   (3) Install the Retract Slide Assembly.
   (4) Attach the spring at the position shown.
   (5) Attach the Bearing (x2), and secure with the KL-Clip (x2).

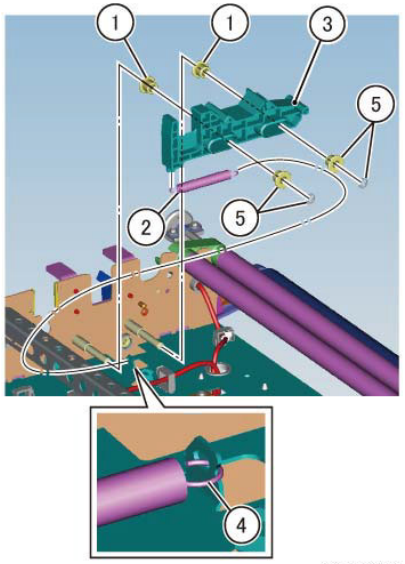


Figure 4 j0cx913084

5. [Left] Install the supplied Retract Shaft Assembly. (Figure 5)
   (1) Install the Retract Shaft Assembly.
   (2) Install the Bearing and KL-Clip.
   (3) Install the Bearing and KL-Clip.
   (4) Tighten the Machine Screw (M3 x6: 2).

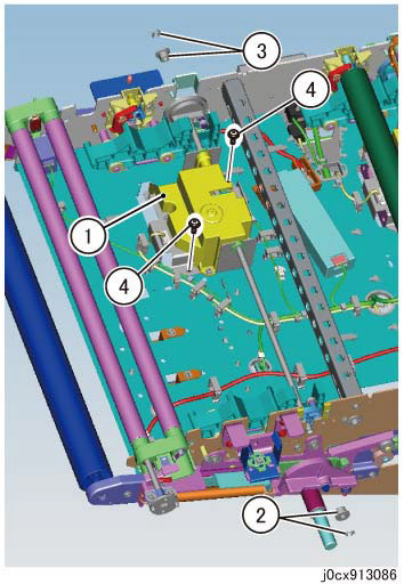


Figure 5 j0cx913086

6. [Left] Connect the Connector to the Retract Shaft Assembly. (Figure 6)
   (1) Free the clamp and release the connector.
   (2) Connect the freed Connector to the Retract Shaft Assembly.
   (3) Close the clamp.

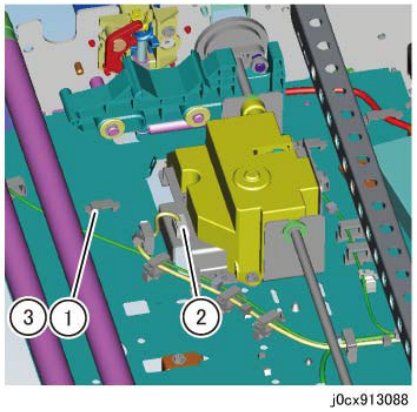


Figure 6 j0cx913088

7. [Left] Connect the Connector to the Sensor of the Retract Shaft Assembly. (Figure 7)
   (1) Free the clamp and release the connector.
   (2) Release the clamp.
   (3) Connect the released Connector to the Sensor.
   (4) Close the clamp.
   (5) Close the clamp.

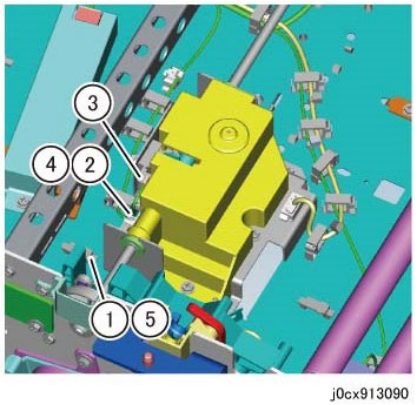


Figure 7 j0cx913090

8. [Left] Install the supplied Terminal Holder, Conductor Assembly, and Wire Harness. (Figure 8)
   (1) Install the Terminal Holder.
   (2) Tighten the DEL Screw (M3 x6: 1).
   (3) Install the Conductor Assembly.
   (4) Attach the round terminal side of the Wire Harness.
   (5) Tighten the Machine Screw (M3 x6: 1).
   (6) Secure the wire harness with the clamp, and insert in the hole.

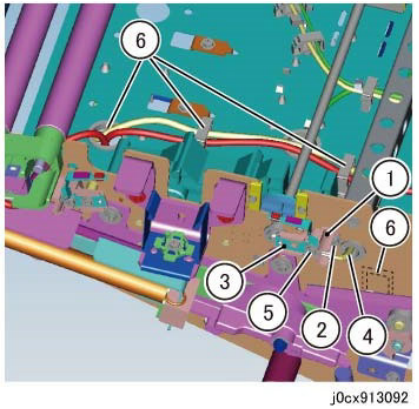


Figure 8 j0cx913092

9. [Left] Install the wire harness to the R5 HVPS. (Figure 9)

(1) Install the wire harness to the R5 HVPS.

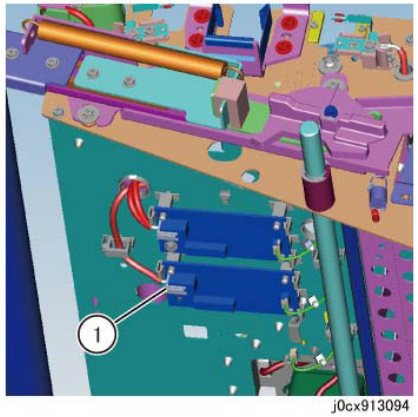


Figure 9 j0cx913094

10. [Left] Install the supplied Eliminator Roll Assembly and Spring (Length = 28.0). (Figure 10)
    (1) Install the Eliminator Roll Assembly.
    (2) Attach the Spring (Length = 28.0).

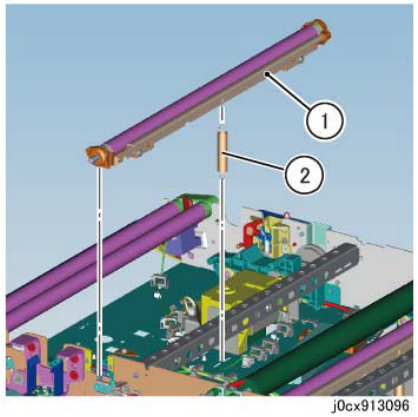


Figure 10 j0cx913096

11. [Left] Install the supplied Retract Arm Assembly and Shaft. (Figure 11)
    (1) Install the Retract Arm Assembly.
    (2) Insert the Shaft from the IBT Front Frame, and secure the Retract Arm Assembly.
    (3) Install the E-Ring (x2).

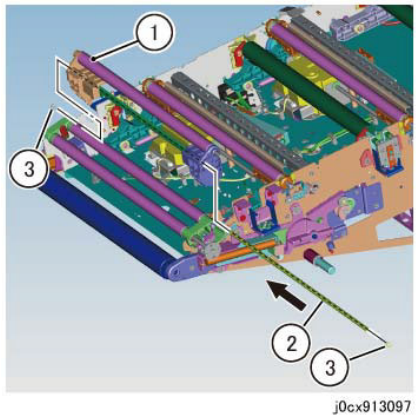


Figure 11 j0cx913097

12. [Left] Secure the supplied Spring at the Retract Arm Assembly and IBT Frame. (Figure 12)
    (1) Attach the Spring (x2).

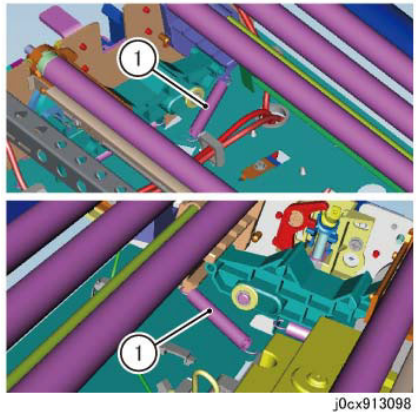


Figure 12 j0cx913098

13. [Left] Secure the supplied Spring at the Retract Arm Assembly and IBT Frame. (Figure 13)
    (1) Attach the Spring.

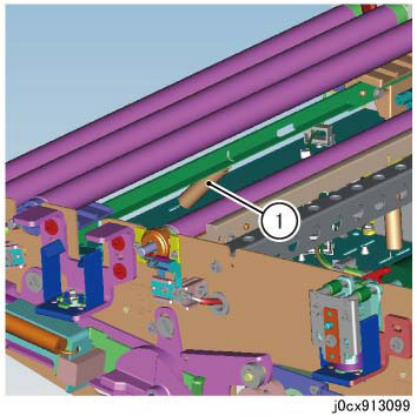


Figure 13 j0cx913099

14. [Left] Attach the supplied Spring to the Bracket Assembly of the IBT Front Frame. (Figure 14)
    (1) Attach the Spring to the Bracket Assembly.

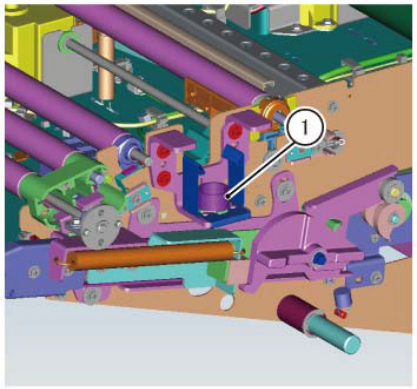


Figure 14 j0cx913100

15. [Left] Install the supplied 1st Roll Assembly to the Front BTR Holder Assembly. (Figure 15)

    NOTE: *Do not touch the Roll (sponge) part of the 1st Roll Assembly with bare hands. Hold the Shaft of both ends when working.*

    (1) Install the 1st Roll Assembly to the Front BTR Holder Assembly.

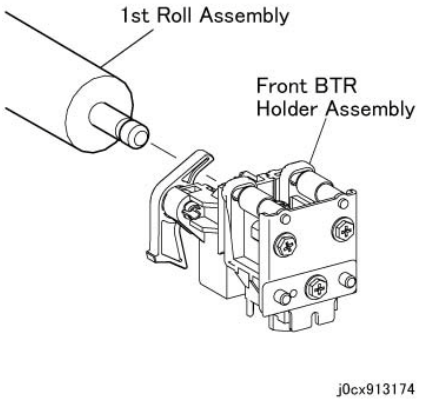


Figure 15 j0cx913174

16. [Left] Install the 1st Roll Assembly and Front BTR Holder Assembly to the Rear BTR Holder Assembly and Front Bracket Assembly. (Figure 16)
    (1) Push the Retract Slide Block at the Rear in the direction of the arrow, and put the Shaft of the 1st Roll Assembly into the Rear BTR Holder Assembly.
    (2) Push the Retract Slide Block at the Front in the direction of the arrow, and install the Front BTR Holder Assembly to the Bracket Assembly.

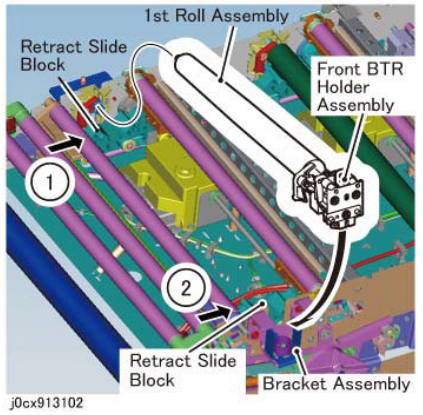


Figure 16 j0cx913102

17. [Left] Check that the Retract Link and Retract Slide Assembly are in the proper positions. (Figure 17)
    (1) The relationship between the positions of the Retract Link and Retract Slide Assembly is that the Bar of "A" Retract Link is trapped by the Bearing. Hook the Bar of B "Retract Link to the Retract Slide.
    (2) Move the Retract Slide Assembly to the left and right and check whether the Retract Link is linked in the direction of the arrow.

(3) If it is not linked, repeat the Step (1), and set it to the proper position.

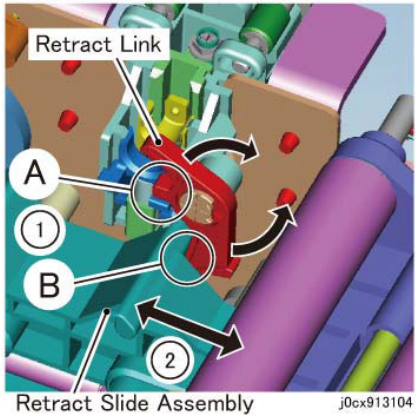


Figure 17 j0cx913104

18. [Left] Push the IBT Module slightly.
19. [Left] Remove the Protect Sheet and Developer Inner Cover.
20. [Left] Install the supplied PCC Duct from the Front. (Figure 18)
    (1) Install the PCC Duct.
    (2) Tighten the Machine Screw (M4 x8: 2) using the Long Driver.

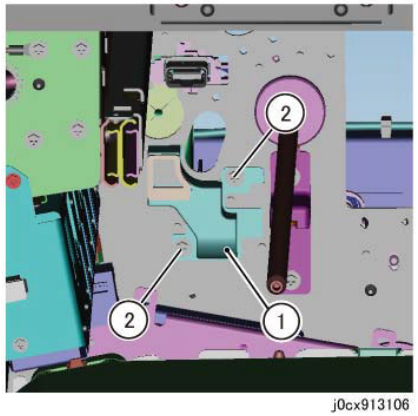


Figure 18 j0cx913106

21. [Left] Install the supplied Main Connector Assembly (#6). (Figure 19)
    (1) Insert the Connector in the hole of the Rear Frame, and install the Main Connector Assembly (#6).
    (2) Tighten the Machine Screw (M4 x8: 2) using the Long Driver.

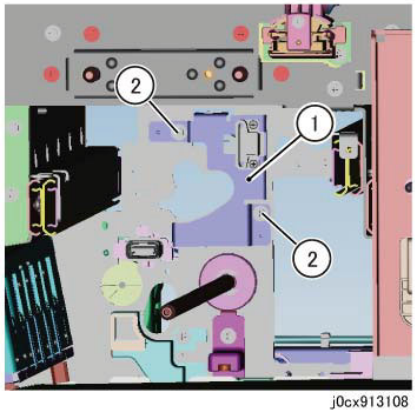


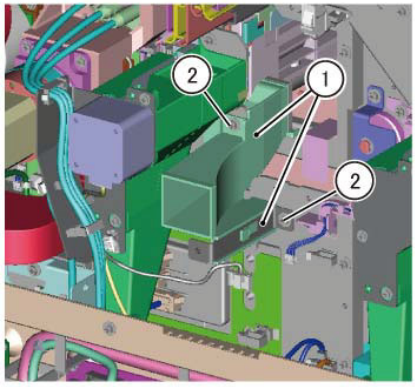
Figure 19 j0cx913108

22. [Left] Go to 9.1.4.7 Spot Color Extension Kit for #6 Engine (7 of 9).

9.1.4.7 Spot Color Extension Kit for #6 Engine (7 of 9)

Installation Procedures (Continue)

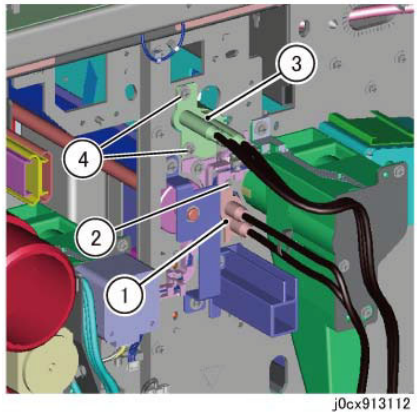
1. [Left] Install the supplied Duct and Bracket. (Figure 1)
   (1) Install the Duct and Bracket.
   (2) Tighten the Machine Screw (M4 x8: 2).



j0cx913110

Figure 1 j0cx913110

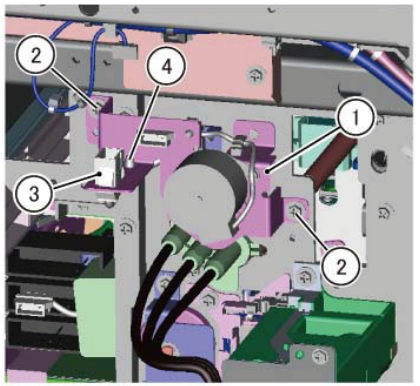
2. [Left] Install the supplied PCC Connector (#6) and the supplied CC Connector (#6) from the Rear. (Figure 2)
   (1) Connect the PCC Connector.
   (2) Tighten the Machine Screw (M4 x8).
   (3) Connect the CC Connector.
   (4) Tighten the Machine Screw (M4 x8: 2).



j0cx913112

Figure 2 j0cx913112

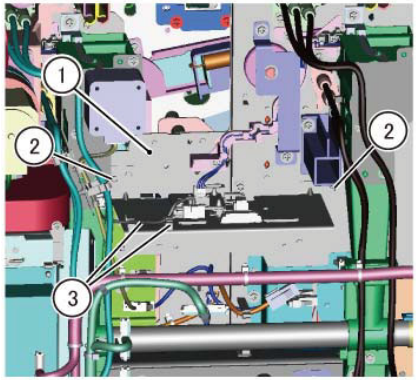
3. [Left] Install the supplied CC Cleaner Motor Assembly (#6). (Figure 3)
   (1) Install the CC Cleaner Motor Assembly (#6).
   (2) Tighten the Machine Screw (M4 x8: 2).
   (3) Insert the Connector of the Main Connector Assembly (#6) in the hole of the Bracket.
   (4) Attach the Push Tie.



j0cx913114

Figure 3 j0cx913114

4. [Left] Install the supplied Bracket. (Figure 4)
   (1) Install the Bracket.
   (2) Tighten the Machine Screw (M4 x8: 2).
   (3) Secure the wire harness with the clamp, and insert in the hole.



j0cx913117

Figure 4 j0cx913117

5. [Left] Install the supplied Drawer Harness Assembly (#6) from the Rear. (Figure 5)

NOTE: *Be careful of the connection orientation of the Connector, and make sure that it is connected until it clicks.*

(1) Install the Drawer Harness Assembly (#6).
(2) Tighten the Machine Screw (M4 x8).
(3) Connect the connector.

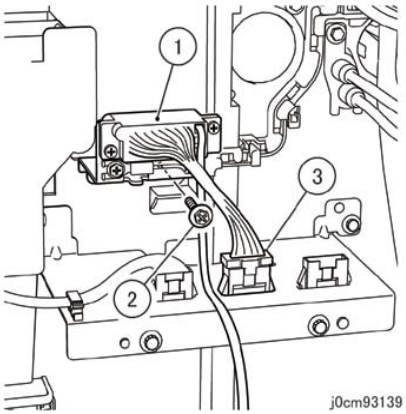


Figure 5 j0cm93139

6. [Left] Remove the Plate from the Pipe Assembly (#6). (Figure 6)
   (1) Remove the Screw (x2).
   (2) Remove the Plate.

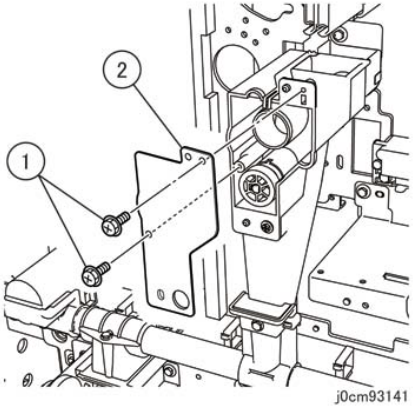


Figure 6 j0cm93141

7. [Left] Install the supplied Cleaner Motor Assembly (#6). (Figure 7)
   (1) Install the Cleaner Motor Assembly (#6).
   (2) Reuse and tighten the Screw (x2) that was removed in Step 6.
   (3) Release the clamp.
   (4) Connect the connector.

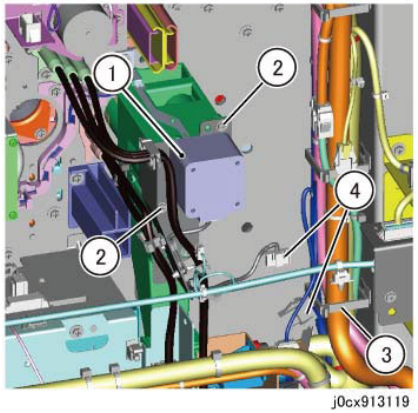


Figure 7 j0cx913119

8. [Left] Remove the Dummy Shaft Rear Assembly. (Figure 8)
   (1) Remove the Machine Screw (M4 x8: 2).
   (2) Remove the Dummy Shaft Rear Assembly.

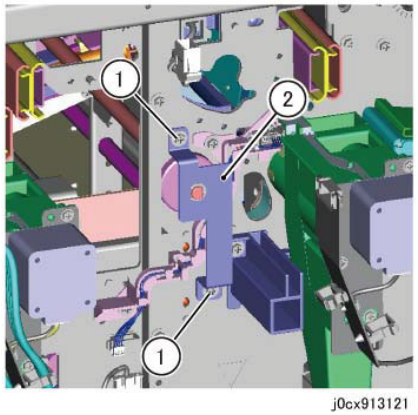


Figure 8 j0cx913121

9. [Left] Install the supplied Motor Drive Bracket Assembly. (Figure 9)
   (1) Install the Motor Drive Bracket Assembly.
   (2) Tighten the Machine Screw (M4 x8: 3).
   (3) Release the clamp (x3).
   (4) Connect the Connector (x10).
   (5) Attach the Push Tie (x3).

(6) Secure the harness with the clamp (x3).
(7) Secure the harness with the clamp (x3).

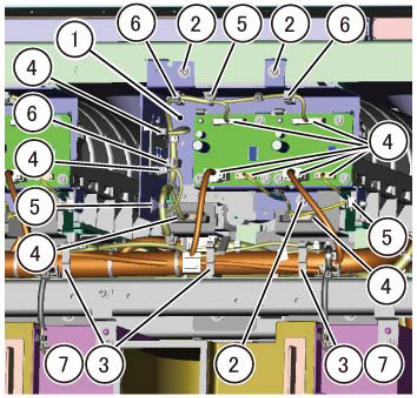


Figure 9 j0cx913146

10. [Left] Temporarily install the supplied Drum Drive Assembly (#6) to the Rear Frame. (Figure 10)
(1) Attach the Drum Drive Assembly (#6).
(2) Temporarily tighten the Machine Screw (M4 x8: 3).

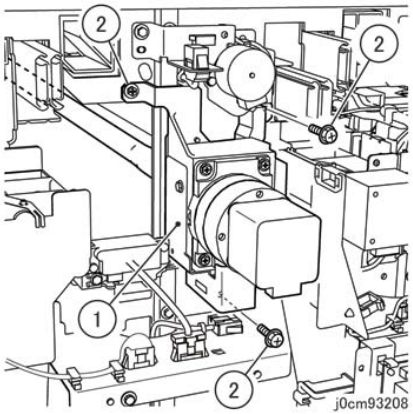


Figure 10 j0cm93208

11. [Left] Peel off the packing tape from the supplied MM Assembly (#6), and install it to the MM Left/ Right Rail. (Figure 11)

NOTE: *As the MM Assembly is heavy, be careful about your posture when performing the task.*

NOTE: *When installing the MM Assembly, do not hold to the pin at the Rear Frame as it might damage the pin.*

(1) Pull out the MM Left Rail and the MM Right Rail.
(2) Install the MM Assembly (#6).
(3) Tighten the Shoulder Screw (M4 x10: 2).

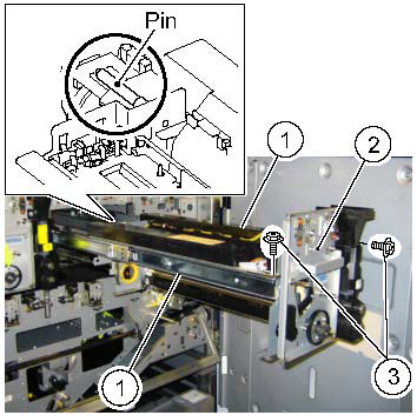


Figure 11 j0kol911068

12. [Left] Release the Stopper (x2) of the Rail, push the MM Assembly (#6) into the machine, and secure it with the Screw (x3). (Figure 12)

NOTE: *When tightening the Screw (x3) of the MM Assembly (#6), tighten the Screws at the 3 locations evenly.*

(1) Push the Stopper (x2) of the MM Rail at the same time, and push the MM Assembly (#6).
(2) Hold the Handle of the Front Plate Assembly, and push the MM Assembly (#6) into the machine.
(3) Tighten the Screw (x2).
(4) Secure the Shaft of the Drum Drive Assembly (#6) with the Screw.

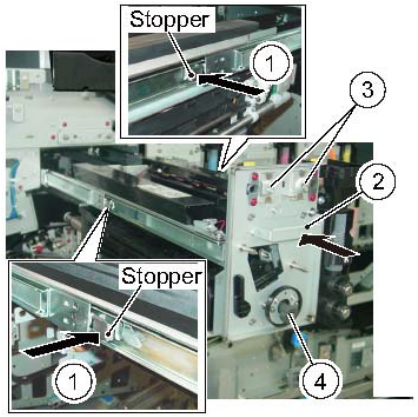


Figure 12 j0kol913008

13. [Left] Fully tighten the Drum Drive Assembly (#6), and connect the Connector (x2). (Figure 13)
    (1) Fully tighten the Screw (x3).
    (2) Install the PWB Support, PWB Cap Support (x2), and Drum Sub Crum PWB.
    (3) Connect the Connector to the Drum Drive Assembly (#6).
    (4) Connect the Connector of the Drum Drive Assembly (#6).
    (5) Connect the Connector (x4).

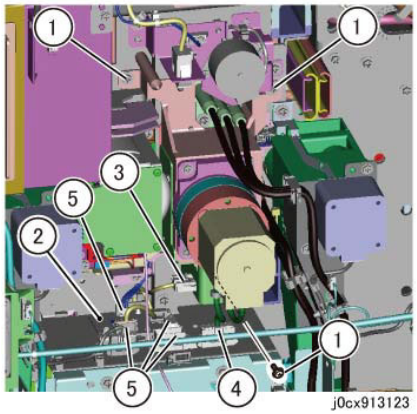


Figure 13 j0cx913123

14. [Left] Install the supplied Deve Bias HVPS Assembly (#6) to the Bracket. (Figure 14)
    (1) Install the Deve Bias HVPS Assembly (#6).
    (2) Tighten the Machine Screw (M4 x8: 4).
    (3) Connect the Connector from the Connector Assembly.
    (4) Secure the harness by using the clamp.

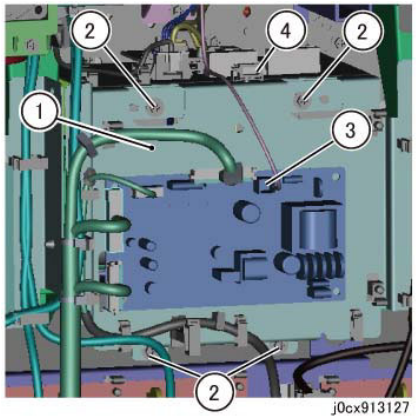


Figure 14 j0cx913127

15. [Left] Release the Clamp (x3) of the Cleaner Motor Assembly (#6), and secure the CC Cable and PCC Cable. (Figure 15)
    (1) Release the clamp (x2).
    (2) Secure the CC Cable with the clamp.
    (3) Release the clamp.
    (4) Secure the PCC Cable with the clamp.

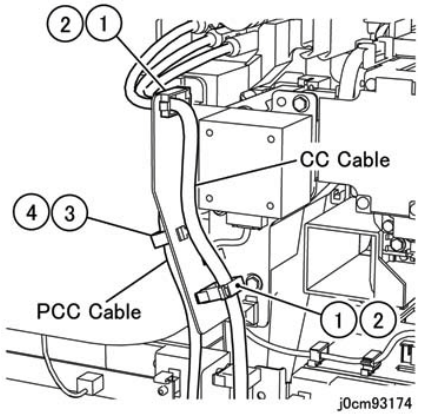


Figure 15 j0cm93174

16. [Left] Secure the CC Cable and PCC Cable with the clamp (x10). (Figure 16)
    (1) Secure the CC Cable with the Clamp (x7).
    (2) Secure the PCC Cable with the clamp (x3).

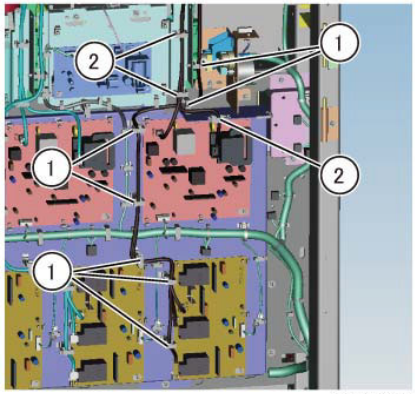


Figure 16 j0cx913129

17. [Left] Install the supplied PCC HVPS and CC HVPS to the HVPS Bracket. (Figure 17)
    (1) Install the PCC HVPS to the PWB Support (x5).
    (2) Tighten the Machine Screw (M3 x6).
    (3) Install the CC HVPS to the PWB Support (x5).
    (4) Tighten the Machine Screw (M3 x6).

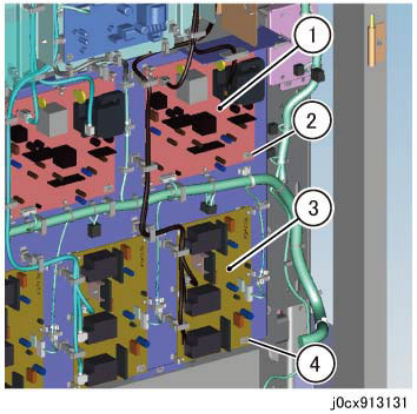


Figure 17 j0cx913131

18. [Left] Go to 9.1.4.8 Spot Color Extension Kit for #6 Engine (8 of 9).

9.1.4.8 Spot Color Extension Kit for #6 Engine (8 of 9)

Installation Procedures (Continue)

1. [Left] Connect the connector (x3) to each HVPS. (Figure 1)
   (1) Connect the connector (x3) to the Developer HVPS, PCC HVPS, and CC HVPS.

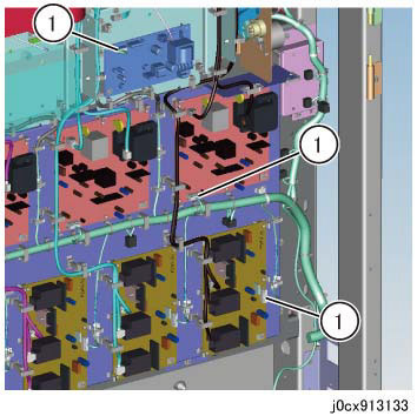


Figure 1 j0cx913133

2. [Left] Connect the PCC Cable and CC Cable to each HVPS. (Figure 2)
   (1) Connect the connector (x3) of the CC Cable to the CC HVPS.
   (2) Connect the connector (x2) of the PCC Cable to the PCC HVPS.

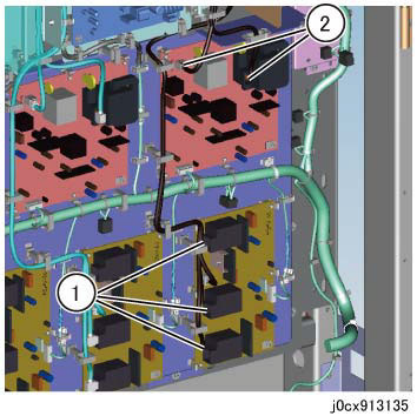


Figure 2 j0cx913135

3. [Left] Install the supplied Duct Bracket to the Rear Frame, and connect the Connector (x2) to the CC Cleaner Motor Assembly (#6). (Figure 3)
   (1) Install the Duct Bracket.
   (2) Tighten the DEL Screw (M4 x8: 2).

(3) Free the clamp, and release the connector (x2).
(4) Disconnect the Dummy Connector.
(5) Connect the Connector (x2) to the CC Cleaner Motor Assembly.
(6) Close the clamp.
(7) Release the Clamp, and secure the Wire Harness (between the Cable Tie and Cable Tie) with the Clamp.

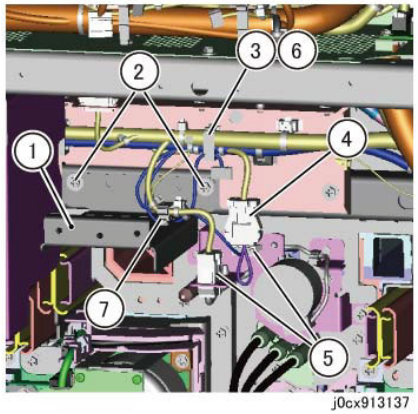


Figure 3 j0cx913137

4. [Left] Install the Duct Assembly (#6) to the Duct Bracket. (Figure 4)

NOTE: *When installing the Duct Assembly, make sure to insert the tip of the Duct into the square hole of the Rear Frame, and install the Duct Assembly.*

(1) Install the Duct Assembly (#6).
(2) Tighten the Machine Screw (M4 x8: 3).

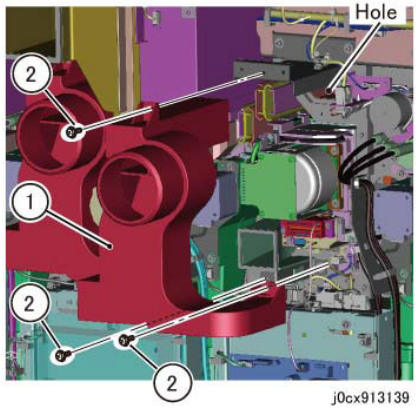


Figure 4 j0cx913139

5. [Left] Install the supplied CC Fan Assembly (#6). (Figure 5)
(1) Install the CC Fan Assembly (#6).
(2) Tighten the Machine Screw (M4 x8: 2).
(3) Tighten the Machine Screw (M4 x8).
(4) Release the clamp.
(5) Free the clamp and release the connector.
(6) Connect the released Connector to the CC Fan Assembly (#6).
(7) Secure the harness by using the clamp.
(8) Close the clamp.

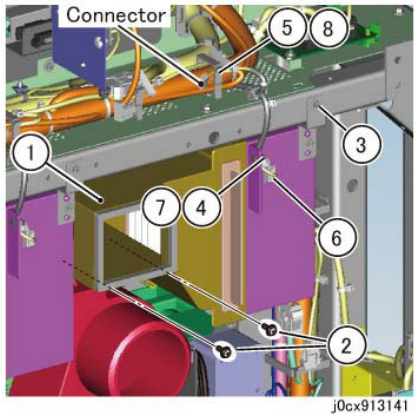


Figure 5 j0cx913141

6. [Left] Reinstall by reverse procedure the Drive Fan Assembly that was removed in Step 17 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).

NOTE: *Be careful not to forget to install the Connector and Plate.*

7. [Left] Install the supplied Rear Fan Drive Assembly (#6) to the Drive Fan Assembly. (Figure 6)
(1) Connect the Connector of the Rear Fan Drive Assembly (#6).
(2) Pass the Harness through the Harness Guide (x2) on the back of the Rear Fan Drive Assembly (#6).
(3) Install the Rear Fan Drive Assembly (#6).
(4) Tighten the Machine Screw (M4 x8: 2).

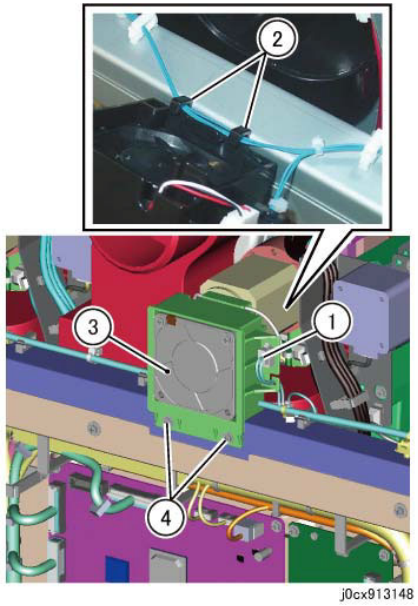


Figure 6 j0cx913148

8. [Left] Reinstall by reverse procedure the Left PWB Chassis and Right PWB Chassis that were opened in Steps 15 and 16 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).

   NOTE: *When closing the Right PWB Chassis, be careful of pinching the Wire Harness.*

9. [Left] Pull out the MM Assembly (#6), peel off the barcode label from the right side of the MM Assembly, and paste it on the Service Log. (Figure 7)
   (1) Loosen the Screw (x3).
   (2) Hold the Handle, and pull out the MM Assembly (#6).
   (3) Peel off the Barcode Label.
   (4) Paste the peeled Barcode Label on the Service Log.

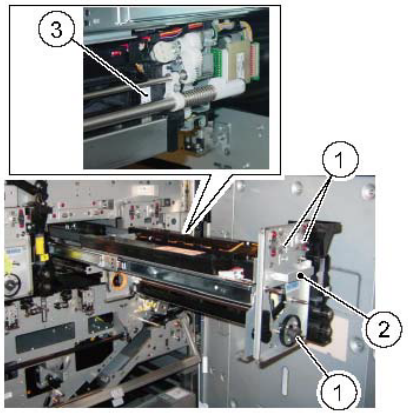


Figure 7 j0kol913009

10. [Left] Install the supplied Drum Cartridge (#6). (Figure 8)
    (1) Pull out the Knob Assembly, and rotate it.
    (2) Pull out the Knob, and rotate it.
    (3) Install the Drum Cartridge (#6). After installation, check that the Tab is in the position shown.

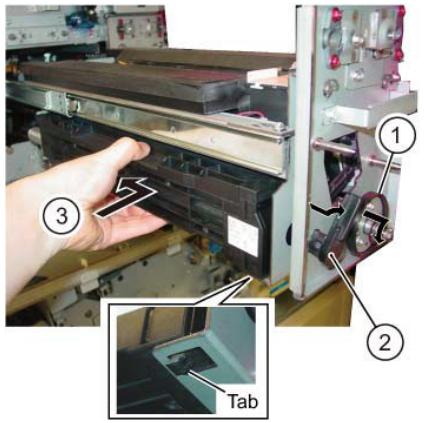


Figure 8 j0kol913010

11. [Left] Set the Knob and Stopper, release the Stopper (x2) of the Left and Right Rail, and push the MM Assembly (#6) into the machine. (Figure 9)
    (1) Rotate while pushing the Knob to restore it.
    (2) Rotate while pulling the Knob Assembly to restore it.
    (3) Push the Stopper (x2) of the Rail (x2) at the same time, and push the MM Assembly (#6) into the machine.

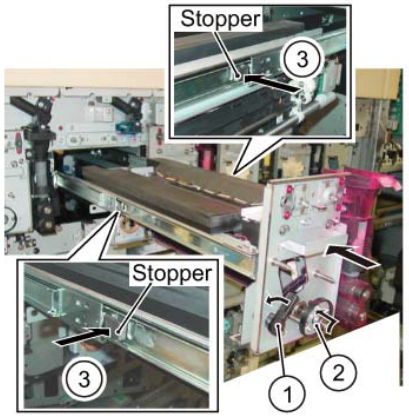


Figure 9 j0kol913011

12. [Left] Tighten the Screw (x3) of the Front Plate Assembly. (Figure 10)

    NOTE: *Paste the Label of the applicable color supplied from the Kit in Step 2, 3.*

    (1) Tighten the Screw (x3).
    (2) Paste the Label of the color to be used.
    (3) Paste the supplied Label L. (GLD/SLV/WHT/PINK)

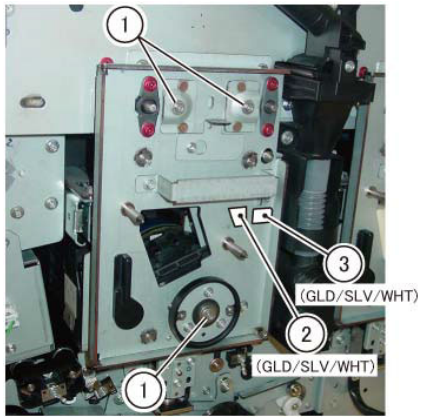


Figure 10 j0cx914002

13. [Left] Install the supplied CC Assembly (#6). (Figure 11)

    NOTE: *When installing the CC Assembly, confirm that it is a CC Assembly for Digital Full Color Production Printer (Label attached to the Cover).*

    (1) Install the CRU Guide (CC Assembly) to the Pin (x2) of the Plate Assembly (#6).
    (2) Lower the Lever of the CC Assembly (#6), and push it into the machine.
    (3) Remove the CRU Guide.

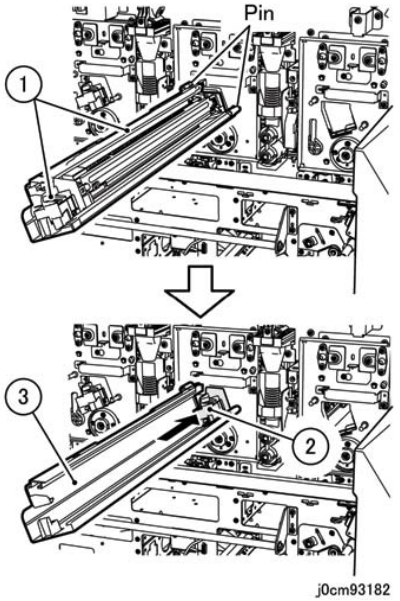


Figure 11 j0cm93182

14. [Left] Remove the Corotron Cover (#6) from the Developer Inner Cover. (Figure 12)
    (1) Remove the Screw (x2).
    (2) Remove the Corotron Cover (#6).

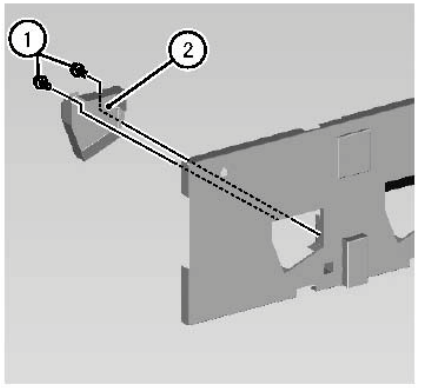


Figure 12 j0kol914001

15. [Left] Reinstall the Developer Inner Cover.

16. [Left] Pull out the IBT Module, and install the IBT Belt. Refer to the (REP 6.3.1 IBT Belt) installation.
17. [Left] Lift the IBT Lever, rotate the Stopper Plate, and set the IBT Belt and Big Module. (Figure 13)
    (1) Lift the IBT Lever.
    (2) Rotate the Stopper Plate while pressing the IBT Lever.
    (3) Rotate the Handle of the Big Module.

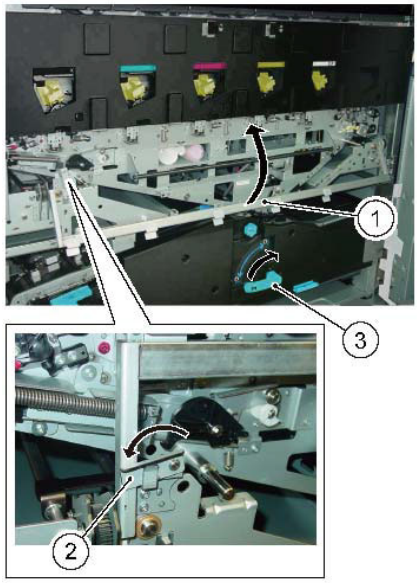


Figure 13 j0kol913012

18. [Left] Reinstall the IBT Front Cover that was removed in Step 4 of 9.1.4.4 Spot Color Extension Kit for #6 Engine (4 of 9).
19. [Left] Store the supplied Bag in the inner pocket of the IOT-L Front Right Door.
20. [Left] Close the IOT-L Front Right Door/IOT-L Front Left Door.
21. [ECO] Go to 9.1.4.9 Spot Color Extension Kit for #6 Engine (9 of 9).

9.1.4.9 Spot Color Extension Kit for #6 Engine (9 of 9)

Installation Procedures (Continue)

1. [Left] Install the IOT-L Rear Left Cover. (Figure 1)
    (1) Install the IOT-L Rear Left Cover.
    (2) Tighten the Screw.
    (3) Tighten the Screw (x2).

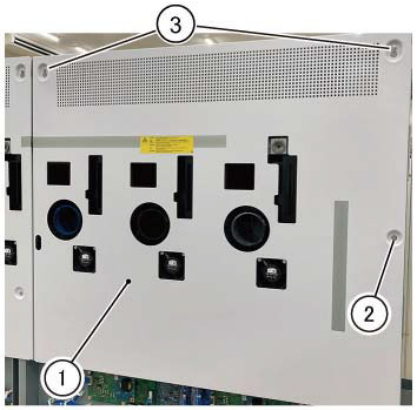


Figure 1 dar913002

2. [Left] Install the IOT-L Rear Right Cover. (Figure 2)
    (1) Install the IOT-L Rear Right Cover.
    (2) Tighten the Screw (x2).
    (3) Tighten the Screw (x2).

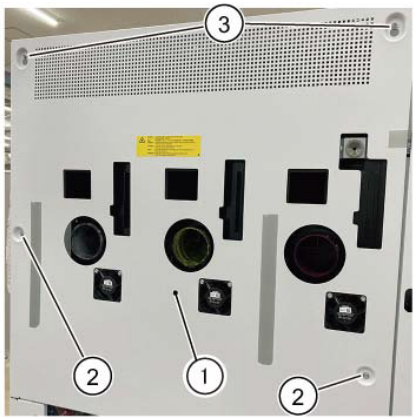


Figure 2 dar913001

3. [ECO] Store the CRU Guide that was removed in Step 13 of 9.1.4.7 Spot Color Extension Kit for #6 Engine (8 of 9) at the location of the ECO Box Unit shown. (Figure 3)

Figure 3 j0kol405010

4. [ECO] Reinstall the ECO Box Unit that was detached in Step 3 of 9.1.4.3 Spot Color Extension Kit for #6 Engine (3 of 9).
5. [ECO] Remove the Hose of ECO Box Unit from the Hose Hook, and insert it in the Duct at the IOT-L side. (Figure 4)
   (1) Insert the Hose.

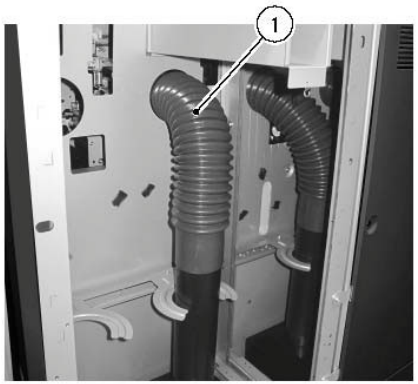


Figure 4 j0kol913024

6. [ECO] Reinstall the ECO Rear Upper Cover and ECO Rear Lower Cover that were removed in Step 4 of 9.1.4.3 Spot Color Extension Kit for #6 Engine (3 of 9).
7. [Right] Reinstall the ELEC Box Rear Cover that was removed in Step 9 of 9.1.4.1 Spot Color Extension Kit for #6 Engine (1 of 9).

NOTE: *In order to prevent bulging, install while holding down the center part of the Cover.*

8. [Right] Reconnect all cables that are connected externally to the Video Box Unit.
9. [Left] Open the IOT-L Front Left/Right Door Assembly.
10. [Right] Open the Switch Cover, and pull the Service Interlock Switch.
11. [Right] Turn the Main Unit of the machine and PC ON.
12. [Right] Check the following software version, and update it if it is not the latest. (Refer to ADJ 18.1.2)
    - PC-UI Software
    - Auto Download Tool
    - RML File
    - LogHarvest Plus
    - PC-Diag Tool
13. Use the [Auto Download Tool] to upgrade the firmware of the Main Unit and Options. (Refer to ADJ 18.1.2)

    NOTE: *If the Auto Download Tool is unable to upgrade the ILS firmware to the latest version, first upgrade the firmware of the Main Unit and options and then use the Download Tool (manual mode) to upgrade it to the latest version.*

14. [Right] Change the following DC131 NVM value.
    (1) Set the value of 740-196 to 1. (With #6 Engine: Default value 0)
    (2) Change the following NVM values depending on the operations.
    - Number of colors used in #6 Engine (754-965 Default value 0)
      – 1 color: 0
      – 2 colors or more: 1
    - Spot color operation (Gold: 740-465, Silver: 740-466, White:740-467, Pink:540-109 Default value 0)
      – Either #1 or #6 is used: 0
      – Both #1 and #6 are used: 1

      NOTE: *When changing spot color operation, take the following measures.*
      (1) Either #1 or #6 is used -> Both #1 and #6 are used
      - *Change the NVM of spot color operation.*
      - *Turn the power OFF and ON, then copy the HFSI value with DC135.*

      b. Both #1 and #6 are used -> Either #1 or #6 is used
      - *Change the NVM of spot color operation.*
      - *Turn the power OFF and ON, then set the HFSI counter of the engine not used to 0.*

      NOTE: *When replacing the same color, take the following measures.*
      Change NVM (740-330) of #6 Engine color specification to "None (= 0)".

15. After setting the NVM, exit PC-Diag, and turn the power OFF/ON.
16. After turning ON the power, the process of writing the spot color-dependent NVM from the PC to the IOT will be automatically executed.
17. After the NVM rewrite process is completed, the IOT will automatically restart.

NOTE: *Check on the PC-UI screen that the correct color is included.*

18. [Right] Enter PC-Diag, and enter the characteristic data (16 digits) of the installed ROS.
    (1) Enter DC961 (ROS Correct), and select ROS data.
    (2) Enter data of the 16 digit number of the ROS bar code label affixed to the Service Log in the ROS data field, and press the [Set] button. (Figure 5)

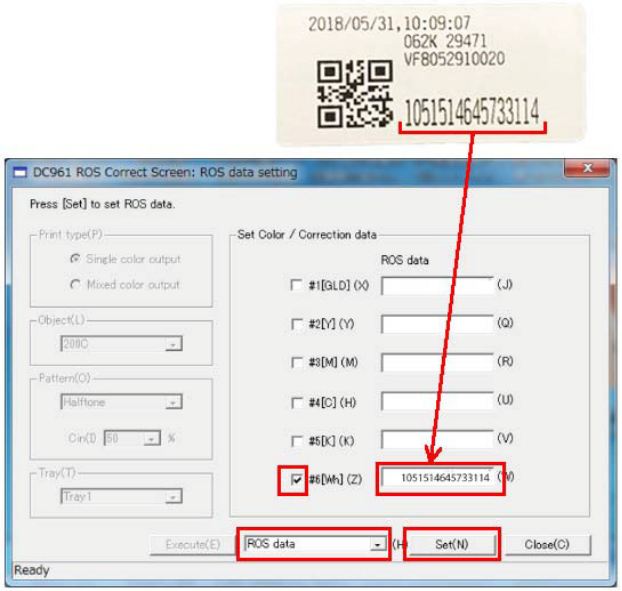
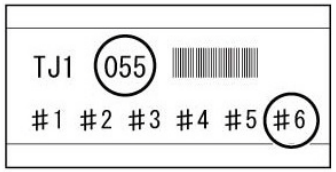


Figure 5 e0913017

19. [Left] Use DC950 (ATC Sensor Setup) to input the ATC Sensor Attribute for #6. (Figure 6)
    (1) Enter the value from the Barcode Label that was peeled off from the MM Assembly (#6) in Step 9 of 9.1.4.8 Spot Color Extension Kit for #6 Engine (8 of 9), and then click [Execute].
    In the following example, the value for the #6 Engine is 55, so enter 55 in the #6 Barcode Number.



j0cx913157

Figure 6 j0cx913157

20. [Left] Use DC955 (Automatic Developer Replacement Mode) to load the Developer for #6. (Refer to REP 5.2.5 Developer)

21. [Right] Select DC960 (Install Toner) of PC-Diag, and transfer the spot color toner for #6 Engine to the toner transport path.

    NOTE: *Check the toner supply with one of the following methods.*

    (1) Disconnect the bellows tube, spread paper, etc. to prevent dispersal, and check the Toner droppage. If performing 1 time of DC960 is not enough to drop any Toner, perform the following until the Toner drops. Change the value of NVM below to 1, and execute DC960 again. (DC960 can only be performed 1 time to prevent secondary problems from occurring.) Changing the NVM value allows it to be performed again (this is also limited to 1 time).
    (2) Make sure that the toner cartridge rotates, and the Dispense Motor is rotating (it can be confirmed by rotating the E ring in front of the developer supply port).
    In the case where the DC960 is re-executed due to some trouble, it can be re-executed by changing the following NVM value to 1, but take note of the possibility that faults may occur if a large amount of toner is sent into the developer.
    - For Engine #6: NVM [754-439]

22. [Right] Set up the gradation of #6 Engine Spot Color.
    (1) Open DC938 [PCON CHECK], select [5C #6] ([6C] is also possible if spot color is also installed in #1 Engine) in the color mode pull-down menu, select [Procon Setup], and execute.
    (2) From the Procon Monitor Value pull-down, check the various ADC Gradation Patch Density (Uncoated)/(Coated) values and verify that the value of No. 20 is smaller than the target of +20.
        i. If the value is larger than the target of +20, execute [Procon Setup] 2 additional times with DC938 [PCON CHECK], and check the value of No. 20 again.
        ii. If the value still does not fall within the proper range, check the value of No. 20 after executing DC895 [DMAX SETUP].
    (3) Use DC612 (Color Test Pattern Print) to output the [ProconPG] pattern and check that there is no problem with the reproducibility of gradation.

23. [Right] Select DC685 of PC-Diag, and adjust the Lead Regi of #6 Engine Spot Color.
    Proceed to the next step without display of any fault.
    If a Fault occurs, go to Chapter 2 Fault FIP to take corrective action.
    (1) Select [Color Regi for Measurement] in DC612, and print. (Recommended paper: 1 sheet of A3 J Paper).
    (2) Check that the printed Color Regi is not badly misaligned. If it is badly misaligned, perform DC685 again.
    (3) Select [Grid] and [2 Sided] in DC129, and print. After printing, check the following.
    - Lead Registration
    - Side Registration
    - Dual Registration (check for any misalignment between the grids on both sides.)

    For details, refer to ADJ 15.6.6, ADJ 15.6.7.

24. [Right] Check the overall operation.
25. [Server] Connect the HSS Cable (9 m). (Figure 7)
26. [Server] Secure the HSS Cable (9 m) (x3) and Net Cable with the Clamp (x7). (Figure 8)

Figure 7 j0cx913159

27. [Right] Install the Print Server Support Cover. (Figure 9)
    (1) Install the Print Server Support Cover.
    (2) Tighten the Screw (x2).

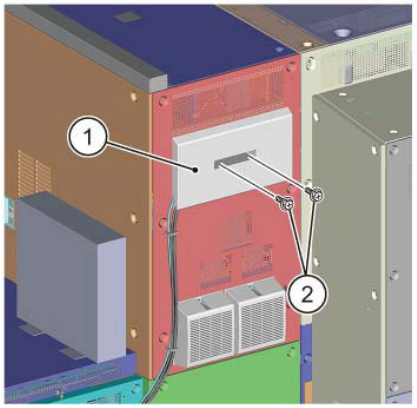


Figure 8 j0kol913013

28. [Server] Turn ON the power of Fiery Server.
29. [Server] Check the overall operation.

9.1.5.1 Installation of Post Card Kit

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

NOTE: *Install the Guide Assembly - Post Kit from the Kit only when loading Postcards in the Tray.*

Product Code

- Post Card Kit : BP-PT24

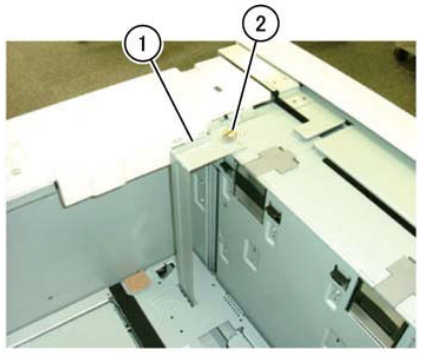
Installation Procedure

1. Open the box, and check the supplied items.

Table 1 Post Card Kit 2 Supplied Items

No	Name	Qty
1	Guide Assembly-Post Kit	1
2	Label-Post (for Side Guide)	1
3	Label-Post (for End Guide)	1

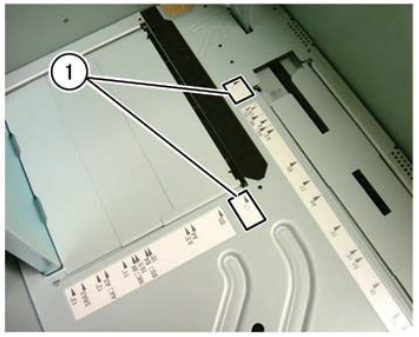
2. Pull out the Tray, on which the Post Card Kit will be installed.
3. Install the Guide Assembly - Post Kit from the Kit. (Figure 1)
   (1) Install the Post Card Kit.
   (2) Secure it by using the Screw.



j0cm90070

Figure 1 j0cm90070

4. Paste the Label-Post (x2) from the Kit to the Bottom Plate. (Figure 2)
   (1) Paste on the Label-Post (x2).



j0cm90071

Figure 2 j0cm90071

5. Move the Side Guide/End Guide to Postcard Size and load the Postcard. (Figure 3)

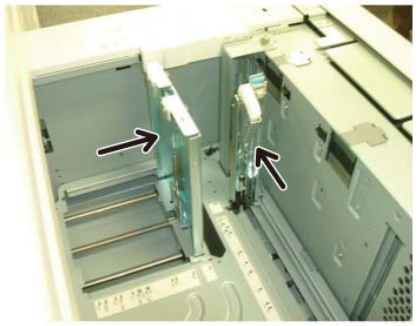


Figure 3 j0kol915001

6. Push in the Tray.
7. Turn ON the power, and change the paper type and paper size settings with PC-UI.
8. Explain to the customer how to operate the machine where necessary.

9.1.6.1 Installation of Mobility Plate

Product Code

- KIT-A:BP-PZ10
- KIT-B:BP-PZ11
- KIT-C:BP-PZ12

Weight of each Plate

- Plate-A: 10.5 kg
- Plate-B: 8.7 kg
- Plate-C: 15.4 kg

Product Configuration

KIT-A

Table 1

No	Name	Qty
1	Plate-A	2
2	Bracket	4
3	Nut	8

KIT-B

Table 2

No	Name	Qty
1	Plate-B	1
2	Bracket	4
3	Nut	8

KIT-C

Table 3

No	Name	Qty
1	Plate-C	1
2	Bracket	4
3	Nut	8

Number of required KIT-A, B, C

Main Unit:

Table 4

No	Name	KIT-A	KIT-B
1	Main Unit-only configuration	3	3

NOTE: *2 sheets of Plate-A are bundled with KIT-A. (Refer to Table 1)*

Options:

- In addition to the mobility plate of the main unit, a separate optional mobility plate is required. Refer to the [Mobility Plate Layout Table] for the required number of mobility plates and their layout.
- When installing the HCF, a separate KIT-A is required.
- When installing HCF/Chained-HCF, two separate KIT-As are required.

Mobility Plate Layout Table

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
1	Finisher	1	1	C+A
2	Finisher w/BM	1	1	C+A
3	Finisher w/BM + SBFT	2	1	C+A+A
4	Folder + Finisher	1	1	C+A
5	Folder + Finisher w/BM	1	1	C+A
6	Folder + Finisher w/BM + SBFT	3	1	C+A+A
7	TCBM + Finisher	2	1	C+A+A
8	TCBM + Finisher w/BM	2	1	C+A+A
9	TCBM + Finisher w/BM + SBFT	3	1	C+A+A+A
10	TCBM + Folder + Finisher	1	2	C+C+A
11	TCBM + Folder + Finisher w/BM	1	2	C+C+A
12	TCBM + Folder + Finisher w/BM + SBFT	2	2	C+C+A+A
13	HCS1	1	1	C+A
14	HCS1 + Finisher	1	2	C+C+A
15	HCS1 + Finisher w/BM	1	2	C+C+A
16	HCS1 + Finisher w/BM + SBFT	2	2	C+C+A+A
17	HCS1 + Folder + Finisher	1	2	C+C+A
18	HCS1 + Folder + Finisher w/BM	1	2	C+C+A
19	HCS1 + Folder + Finisher w/BM + SBFT	3	2	C+C+A+A
20	HCS1 + TCBM + Finisher	2	2	C+C+A+A
21	HCS1 + TCBM + Finisher w/BM	2	2	C+C+A+A
22	HCS1 + TCBM + Finisher w/BM + SBFT	3	2	C+C+A+A+A
23	HCS1 + TCBM + Folder + Finisher	1	3	C+C+C+A
24	HCS1 + TCBM + Folder + Finisher w/BM	1	3	C+C+C+A
25	HCS1 + TCBM + Folder + Finisher w/BM + SBFT	2	3	C+C+C+A+A
26	HCS1 + HCS2	1	2	C+C+A
27	HCS1 + HCS2 + Finisher	1	3	C+C+C+A
28	HCS1 + HCS2 + Finisher w/BM	1	3	C+C+C+A
29	HCS1 + HCS2 + Finisher w/BM + SBFT	2	3	C+C+C+A+A
30	HCS1 + HCS2 + Folder + Finisher	0	4	C+C+C+C
31	HCS1 + HCS2 + Folder + Finisher w/BM	0	4	C+C+C+C
32	HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	1	4	C+C+C+C+A
33	HCS1 + HCS2 + TCBM + Finisher	2	3	C+C+C+A+A
34	HCS1 + HCS2 + TCBM + Finisher w/BM	2	3	C+C+C+A+A
35	HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	2	4	C+C+C+A+A+A
36	HCS1 + HCS2 + TCBM + Folder + Finisher	1	4	C+C+C+C+A
37	HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	1	4	C+C+C+C+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
38	HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	4	3	C+C+C+C+A+A
39	Finisher	2	1	C+A+A
40	Finisher w/BM	2	1	C+A+A
41	Finisher w/BM + SBFT	3	1	C+A+A+A
42	Folder + Finisher	2	1	C+A+A
43	Folder + Finisher w/BM	2	1	C+A+A
44	Folder + Finisher w/BM + SBFT	2	2	C+A+A+A
45	TCBM + Finisher	3	1	C+A+A+A
46	TCBM + Finisher w/BM	3	1	C+A+A+A
47	TCBM + Finisher w/BM + SBFT	4	1	C+A+A+A+A
48	TCBM + Folder + Finisher	2	2	C+A+A+A
49	TCBM + Folder + Finisher w/BM	2	2	C+A+A+A
50	TCBM + Folder + Finisher w/BM + SBFT	3	2	C+A+A+A+A
51	HCS1	2	1	C+A+A
52	HCS1 + Finisher	3	1	C+A+A+A
53	HCS1 + Finisher w/BM	3	1	C+A+A+A
54	HCS1 + Finisher w/BM + SBFT	3	2	C+A+A+A+A
55	HCS1 + Folder + Finisher	4	1	C+A+A+A+A
56	HCS1 + Folder + Finisher w/BM	4	1	C+A+A+A+A
57	HCS1 + Folder + Finisher w/BM + SBFT	5	1	C+A+A+A+A+A
58	HCS1 + TCBM + Finisher	3	2	C+A+A+A+C
59	HCS1 + TCBM + Finisher w/BM	3	2	C+A+A+A+C
60	HCS1 + TCBM + Finisher w/BM + SBFT	4	2	C+A+A+A+C+A
61	HCS1 + TCBM + Folder + Finisher	5	1	C+A+A+A+A+A
62	HCS1 + TCBM + Folder + Finisher w/BM	5	1	C+A+A+A+A+A
63	HCS1 + HCS2	2	2	A+C+C+A
64	HCS1 + HCS2 + Finisher	2	3	A+C+C+C+A
65	HCS1 + HCS2 + Finisher w/BM	2	3	A+C+C+C+A
66	HCS1 + HCS2 + Finisher w/BM + SBFT	3	3	A+C+C+C+A+A
67	HCS1 + HCS2 + Folder + Finisher	1	4	A+C+C+C+C
68	HCS1 + HCS2 + Folder + Finisher w/BM	1	4	A+C+C+C+C
69	HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	2	4	A+C+C+C+C+A
70	HCS1 + HCS2 + TCBM + Finisher	3	3	A+C+C+C+A+A
71	HCS1 + HCS2 + TCBM + Finisher w/BM	3	3	A+C+C+C+A+A
72	HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	4	3	A+C+C+C+A+A+A
73	HCS1 + HCS2 + TCBM + Folder + Finisher	2	4	A+C+C+C+C+A
74	HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	2	4	A+C+C+C+C+A
75	HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	3	4	A+C+C+C+C+A+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
76	1IP + Finisher	1	1	C+A
77	1IP + Finisher w/BM	1	1	C+A
78	1IP + Finisher w/BM + SBFT	2	1	C+A+A
79	1IP + Folder + Finisher	0	2	C+C
80	1IP + Folder + Finisher w/BM	0	2	C+C
81	1IP + Folder + Finisher w/BM + SBFT	1	2	C+C+A
82	1IP + TCBM + Finisher	2	1	C+A+A
83	1IP + TCBM + Finisher w/BM	2	1	C+A+A
84	1IP + TCBM + Finisher w/BM + SBFT	2	2	C+A+A+A
85	1IP + TCBM + Folder + Finisher	3	1	C+A+A+A
86	1IP + TCBM + Folder + Finisher w/BM	3	1	C+A+A+A
87	1IP + TCBM + Folder + Finisher w/BM + SBFT	4	1	C+A+A+A+A
88	1IP + HCS1	3	1	A+A+A
89	1IP + HCS1 + Finisher	4	0	A+A+A+A
90	1IP + HCS1 + Finisher w/BM	4	0	A+A+A+A
91	1IP + HCS1 + Finisher w/BM + SBFT	4	1	A+A+A+A+A
92	1IP + HCS1 + Folder + Finisher	5	0	A+A+A+A+A
93	1IP + HCS1 + Folder + Finisher w/BM	5	0	A+A+A+A+A
94	1IP + HCS1 + Folder + Finisher w/BM + SBFT	6	0	A+A+A+A+A+A
95	1IP + HCS1 + TCBM + Finisher	4	1	A+A+A+A+C
96	1IP + HCS1 + TCBM + Finisher w/BM	4	1	A+A+A+A+C
97	1IP + HCS1 + TCBM + Finisher w/BM + SBFT	5	1	A+A+A+A+C+A
98	1IP + HCS1 + TCBM + Folder + Finisher	6	0	A+A+A+A+A+A
99	1IP + HCS1 + TCBM + Folder + Finisher w/BM	6	0	A+A+A+A+A+A
100	1IP + HCS1 + TCBM + Folder + Finisher w/BM + SBFT	7	0	A+A+A+A+A+A+A
101	1IP + HCS1 + HCS2	3	1	A+A+C+A
102	1IP + HCS1 + HCS2 + Finisher	4	1	A+A+C+A+A
103	1IP + HCS1 + HCS2 + Finisher w/BM	4	1	A+A+C+A+A
104	1IP + HCS1 + HCS2 + Finisher w/BM + SBFT	4	2	A+A+C+A+A+A
105	1IP + HCS1 + HCS2 + Folder + Finisher	5	1	A+A+C+A+A+A
106	1IP + HCS1 + HCS2 + Folder + Finisher w/BM	5	1	A+A+C+A+A+A
107	1IP + HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	6	1	A+A+C+A+A+A+A
108	1IP + HCS1 + HCS2 + TCBM + Finisher	4	2	A+A+C+A+A+C
109	1IP + HCS1 + HCS2 + TCBM + Finisher w/BM	4	2	A+A+C+A+A+C
110	1IP + HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	5	2	A+A+C+A+A+C+A
111	1IP + HCS1 + HCS2 + TCBM + Folder + Finisher	6	1	A+A+C+A+A+A+A
112	1IP + HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	6	1	A+A+C+A+A+A+A
113	1IP + HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	7	1	A+A+C+A+A+A+A+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
114	1IP + Finisher	2	1	C+A+A
115	1IP + Finisher w/BM	2	1	C+A+A
116	1IP + Finisher w/BM + SBFT	3	1	C+A+A+A
117	1IP + Folder + Finisher	1	2	C+C+A
118	1IP + Folder + Finisher w/BM	1	2	C+C+A
119	1IP + Folder + Finisher w/BM + SBFT	2	2	C+C+A+A
120	1IP + TCBM + Finisher	3	1	C+A+A+A
121	1IP + TCBM + Finisher w/BM	3	1	C+A+A+A
122	1IP + TCBM + Finisher w/BM + SBFT	5	1	C+A+A+A+A
123	1IP + TCBM + Folder + Finisher	4	1	C+A+A+A+A
124	1IP + TCBM + Folder + Finisher w/BM	4	1	C+A+A+A+A
125	1IP + TCBM + Folder + Finisher w/BM + SBFT	5	1	C+A+A+A+A+A
126	1IP + HCS1	2	2	C+A+C
127	1IP + HCS1 + Finisher	2	2	C+A+C+A
128	1IP + HCS1 + Finisher w/BM	2	2	C+A+C+A
129	1IP + HCS1 + Finisher w/BM + SBFT	3	2	C+A+C+A+A
130	1IP + HCS1 + Folder + Finisher	1	3	C+A+C+C
131	1IP + HCS1 + Folder + Finisher w/BM	1	3	C+A+C+C
132	1IP + HCS1 + Folder + Finisher w/BM + SBFT	2	3	C+A+C+C+A
133	1IP + HCS1 + TCBM + Finisher	3	2	C+A+C+A+A
134	1IP + HCS1 + TCBM + Finisher w/BM	3	2	C+A+C+A+A
135	1IP + HCS1 + TCBM + Finisher w/BM + SBFT	3	3	C+A+C+A+A+A
136	1IP + HCS1 + TCBM + Folder + Finisher	4	2	C+A+C+A+A+A
137	1IP + HCS1 + TCBM + Folder + Finisher w/BM	4	2	C+A+C+A+A+A
138	1IP + HCS1 + TCBM + Folder + Finisher w/BM + SBFT	5	2	C+A+C+A+A+A+A
139	1IP + HCS1 + HCS2	2	3	C+C+(C) +A
140	1IP + HCS1 + HCS2 + Finisher	2	3	C+C+(C) +A+A
141	1IP + HCS1 + HCS2 + Finisher w/BM	2	3	C+C+(C) +A+A
142	1IP + HCS1 + HCS2 + Finisher w/BM + SBFT	2	4	C+C+(C) +A+A+A
143	1IP + HCS1 + HCS2 + Folder + Finisher	3	3	C+C+(C) +A+A+A
144	1IP + HCS1 + HCS2 + Folder + Finisher w/BM	3	3	C+C+(C) +A+A+A
145	1IP + HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	4	3	C+C+(C) +A+A+A+A
146	1IP + HCS1 + HCS2 + TCBM + Finisher	2	4	C+C+(C) +C+A+A
147	1IP + HCS1 + HCS2 + TCBM + Finisher w/BM	2	4	C+C+(C) +C+A+A
148	1IP + HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	3	4	C+C+(C) +C+A+A+A
149	1IP + HCS1 + HCS2 + TCBM + Folder + Finisher	1	5	C+C+(C) +C+C+A
150	1IP + HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	1	5	C+C+(C) +C+C+A
151	1IP + HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	2	5	C+C+(C) +C+C+A+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
152	SEM + Finisher	1	1	C+A
153	SEM + Finisher w/BM	1	1	C+A
154	SEM + Finisher w/BM + SBFT	2	1	C+A+A
155	SEM + Folder + Finisher	0	2	C+C
156	SEM + Folder + Finisher w/BM	0	2	C+C
157	SEM + Folder + Finisher w/BM + SBFT	1	2	C+C+A
158	SEM + TCBM + Finisher	1	2	C+C+A
159	SEM + TCBM + Finisher w/BM	1	2	C+C+A
160	SEM + TCBM + Finisher w/BM + SBFT	2	2	C+C+A+A
161	SEM + TCBM + Folder + Finisher	0	3	C+C+C
162	SEM + TCBM + Folder + Finisher w/BM	0	3	C+C+C
163	SEM + TCBM + Folder + Finisher w/BM + SBFT	1	3	C+C+C+A
164	SEM + HCS1	3	0	A+A+A
165	SEM + HCS1 + Finisher	3	1	A+A+A+C
166	SEM + HCS1 + Finisher w/BM	3	1	A+A+A+C
167	SEM + HCS1 + Finisher w/BM + SBFT	4	1	A+A+A+C+A
168	SEM + HCS1 + Folder + Finisher	3	1	A+A+A+C
169	SEM + HCS1 + Folder + Finisher w/BM	3	1	A+A+A+C
170	SEM + HCS1 + Folder + Finisher w/BM + SBFT	4	1	A+A+A+C+A
171	SEM + HCS1 + TCBM + Finisher	4	1	A+A+A+C+A
172	SEM + HCS1 + TCBM + Finisher w/BM	4	1	A+A+A+C+A
173	SEM + HCS1 + TCBM + Finisher w/BM + SBFT	5	1	A+A+A+C+A+A
174	SEM + HCS1 + TCBM + Folder + Finisher	3	2	A+A+A+C+C
175	SEM + HCS1 + TCBM + Folder + Finisher w/BM	3	2	A+A+A+C+C
176	SEM + HCS1 + TCBM + Folder + Finisher w/BM + SBFT	4	2	A+A+A+C+C+A
177	SEM + HCS1 + HCS2	3	1	A+A+C+A
178	SEM + HCS1 + HCS2 + Finisher	3	2	A+A+C+C+A
179	SEM + HCS1 + HCS2 + Finisher w/BM	3	2	A+A+C+C+A
180	SEM + HCS1 + HCS2 + Finisher w/BM + SBFT	4	2	A+A+C+C+A+A
181	SEM + HCS1 + HCS2 + Folder + Finisher	2	3	A+A+C+C+C
182	SEM + HCS1 + HCS2 + Folder + Finisher w/BM	2	3	A+A+C+C+C
183	SEM + HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	3	3	A+A+C+C+C+A
184	SEM + HCS1 + HCS2 + TCBM + Finisher	4	2	A+A+C+C+A+A
185	SEM + HCS1 + HCS2 + TCBM + Finisher w/BM	4	2	A+A+C+C+A+A
186	SEM + HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	5	2	A+A+C+C+A+A+A
187	SEM + HCS1 + HCS2 + TCBM + Folder + Finisher	3	3	A+A+C+C+C+A
188	SEM + HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	3	3	A+A+C+C+C+A
189	SEM + HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	4	3	A+A+C+C+C+A+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
190	SEM +Finisher	2	1	C+A+A
191	SEM +Finisher w/BM	2	1	C+A+A
192	SEM +Finisher w/BM + SBFT	3	1	C+A+A+A
193	SEM +Folder + Finisher	1	2	C+C+A
194	SEM +Folder + Finisher w/BM	1	2	C+C+A
195	SEM +Folder + Finisher w/BM + SBFT	1	3	C+C+C+A
196	SEM +TCBM + Finisher	2	2	C+C+A+A
197	SEM +TCBM + Finisher w/BM	2	2	C+C+A+A
198	SEM +TCBM + Finisher w/BM + SBFT	3	2	C+C+A+A+A
199	SEM +TCBM + Folder + Finisher	1	3	C+C+C+A
200	SEM +TCBM + Folder + Finisher w/BM	1	3	C+C+C+A
201	SEM +TCBM + Folder + Finisher w/BM + SBFT	2	3	C+C+C+A+A
202	SEM +HCS1	0	3	C+C+C
203	SEM +HCS1 + Finisher	1	3	C+C+C+A
204	SEM +HCS1 + Finisher w/BM	1	3	C+C+C+A
205	SEM +HCS1 + Finisher w/BM + SBFT	0	4	C+C+C+C
206	SEM +HCS1 + Folder + Finisher	1	3	C+C+C+A
207	SEM +HCS1 + Folder + Finisher w/BM	1	3	C+C+C+A
208	SEM +HCS1 + Folder + Finisher w/BM + SBFT	2	3	C+C+C+A+A
209	SEM +HCS1 + TCBM + Finisher	2	3	C+C+C+A+A
210	SEM +HCS1 + TCBM + Finisher w/BM	2	3	C+C+C+A+A
211	SEM +HCS1 + TCBM + Finisher w/BM + SBFT	3	3	C+C+C+A+A+A
212	SEM +HCS1 + TCBM + Folder + Finisher	1	4	C+C+C+C+A
213	SEM +HCS1 + TCBM + Folder + Finisher w/BM	1	4	C+C+C+C+A
214	SEM +HCS1 + TCBM + Folder + Finisher w/BM + SBFT	2	4	C+C+C+C+A+A
215	SEM +HCS1 + HCS2	0	4	C+C+C+C
216	SEM +HCS1 + HCS2 + Finisher	1	4	C+C+C+C+A
217	SEM +HCS1 + HCS2 + Finisher w/BM	1	4	C+C+C+C+A
218	SEM +HCS1 + HCS2 + Finisher w/BM + SBFT	0	5	C+C+C+C+C
219	SEM +HCS1 + HCS2 + Folder + Finisher	1	4	C+C+C+C+A
220	SEM +HCS1 + HCS2 + Folder + Finisher w/BM	1	4	C+C+C+C+A
221	SEM +HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	2	4	C+C+C+C+A+A
222	SEM +HCS1 + HCS2 + TCBM + Finisher	2	4	C+C+C+C+A+A
223	SEM +HCS1 + HCS2 + TCBM + Finisher w/BM	2	4	C+C+C+C+A+A
224	SEM +HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	3	4	C+C+C+C+A+A+A
225	SEM +HCS1 + HCS2 + TCBM + Folder + Finisher	1	5	C+C+C+C+C+A
226	SEM +HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	1	5	C+C+C+C+C+A
227	SEM +HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	2	5	C+C+C+C+C+A+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
228	1IP + SEM +Finisher	3	0	A+A+A
229	1IP + SEM +Finisher w/BM	3	0	A+A+A
230	1IP + SEM +Finisher w/BM + SBFT	4	0	A+A+A+A
231	1IP + SEM +Folder + Finisher	2	1	A+C+A
232	1IP + SEM +Folder + Finisher w/BM	2	1	A+C+A
233	1IP + SEM +Folder + Finisher w/BM + SBFT	3	1	A+C+A+A
234	1IP + SEM +TCBM + Finisher	4	0	A+A+A+A
235	1IP + SEM +TCBM + Finisher w/BM	4	0	A+A+A+A
236	1IP + SEM +TCBM + Finisher w/BM + SBFT	5	0	A+A+A+A+A
237	1IP + SEM +TCBM + Folder + Finisher	3	1	A+A+C+A
238	1IP + SEM +TCBM + Folder + Finisher w/BM	3	1	A+A+C+A
239	1IP + SEM +TCBM + Folder + Finisher w/BM + SBFT	4	1	A+A+C+A+A
240	1IP + SEM +HCS1	2	1	A+C+A
241	1IP + SEM +HCS1 + Finisher	3	1	A+C+A+A
242	1IP + SEM +HCS1 + Finisher w/BM	3	1	A+C+A+A
243	1IP + SEM +HCS1 + Finisher w/BM + SBFT	4	1	A+C+A+A+A
244	1IP + SEM +HCS1 + Folder + Finisher	2	2	A+C+C+A
245	1IP + SEM +HCS1 + Folder + Finisher w/BM	2	2	A+C+C+A
246	1IP + SEM +HCS1 + Folder + Finisher w/BM + SBFT	3	2	A+C+C+A+A
247	1IP + SEM +HCS1 + TCBM + Finisher	3	2	A+C+A+C+A
248	1IP + SEM +HCS1 + TCBM + Finisher w/BM	3	2	A+C+A+C+A
249	1IP + SEM +HCS1 + TCBM + Finisher w/BM + SBFT	4	2	A+C+A+C+A+A
250	1IP + SEM +HCS1 + TCBM + Folder + Finisher	2	3	A+C+A+C+C
251	1IP + SEM +HCS1 + TCBM + Folder + Finisher w/BM	2	3	A+C+A+C+C
252	1IP + SEM +HCS1 + TCBM + Folder + Finisher w/BM + SBFT	3	3	A+C+A+C+C+A
253	1IP + SEM +HCS1 + HCS2	1	3	A+C+C+C
254	1IP + SEM +HCS1 + HCS2 + Finisher	2	3	A+C+C+C+A
255	1IP + SEM +HCS1 + HCS2 + Finisher w/BM	2	3	A+C+C+C+A
256	1IP + SEM +HCS1 + HCS2 + Finisher w/BM + SBFT	1	4	A+C+C+C+C
257	1IP + SEM +HCS1 + HCS2 + Folder + Finisher	2	3	A+C+C+C+A
258	1IP + SEM +HCS1 + HCS2 + Folder + Finisher w/BM	2	3	A+C+C+C+A
259	1IP + SEM +HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	3	3	A+C+C+C+A+A
260	1IP + SEM +HCS1 + HCS2 + TCBM + Finisher	3	3	A+C+C+C+A+A
261	1IP + SEM +HCS1 + HCS2 + TCBM + Finisher w/BM	3	3	A+C+C+C+A+A
262	1IP + SEM +HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	3	4	A+C+C+C+A+C+A
263	1IP + SEM +HCS1 + HCS2 + TCBM + Folder + Finisher	2	4	A+C+C+C+C+A
264	1IP + SEM +HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	2	4	A+C+C+C+C+A
265	1IP + SEM +HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	3	4	A+C+C+C+C+A+A

No.	Option configuration to be connected (including CDM) (option configuration following CDM)	Plate quantity		Plate arrangement
		A	C	
266	1IP + SEM +Finisher	1	2	C+C+A
267	1IP + SEM +Finisher w/BM	1	2	C+C+A
268	1IP + SEM +Finisher w/BM + SBFT	2	2	C+C+A+A
269	1IP + SEM +Folder + Finisher	0	3	C+C+C
270	1IP + SEM +Folder + Finisher w/BM	0	3	C+C+C
271	1IP + SEM +Folder + Finisher w/BM + SBFT	1	3	C+C+C+A
272	1IP + SEM +TCBM + Finisher	1	3	C+C+C+A
273	1IP + SEM +TCBM + Finisher w/BM + SBFT	0	4	C+C+C+C
274	1IP + SEM +TCBM + Folder + Finisher	1	3	C+C+C+A
275	1IP + SEM +TCBM + Folder + Finisher w/BM	1	3	C+C+C+A
276	1IP + SEM +TCBM + Folder + Finisher w/BM + SBFT	2	3	C+C+C+A+A
277	1IP + SEM +HCS1	0	3	C+C+C
278	1IP + SEM +HCS1 + Finisher	1	3	C+C+C+A
279	1IP + SEM +HCS1 + Finisher w/BM	1	3	C+C+C+A
280	1IP + SEM +HCS1 + Finisher w/BM + SBFT	2	3	C+C+C+A+A
281	1IP + SEM +HCS1 + Folder + Finisher	3	2	C+C+A+A+A
282	1IP + SEM +HCS1 + Folder + Finisher w/BM	3	2	C+C+A+A+A
283	1IP + SEM +HCS1 + Folder + Finisher w/BM + SBFT	4	2	C+C+A+A+A+A
284	1IP + SEM +HCS1 + TCBM + Finisher	2	3	C+C+A+C+A
285	1IP + SEM +HCS1 + TCBM + Finisher w/BM	2	3	C+C+A+C+A
286	1IP + SEM +HCS1 + TCBM + Finisher w/BM + SBFT	3	3	C+C+A+C+A+A
287	1IP + SEM +HCS1 + TCBM + Folder + Finisher	1	4	C+C+A+C+C
288	1IP + SEM +HCS1 + TCBM + Folder + Finisher w/BM	1	4	C+C+A+C+C
289	1IP + SEM +HCS1 + TCBM + Folder + Finisher w/BM + SBFT	2	4	C+C+A+C+C+A
290	1IP + SEM +HCS1 + HCS2	3	2	C+C+A+A+A
291	1IP + SEM +HCS1 + HCS2 + Finisher	4	2	C+C+A+A+A+A
292	1IP + SEM +HCS1 + HCS2 + Finisher w/BM	4	2	C+C+A+A+A+A
293	1IP + SEM +HCS1 + HCS2 + Finisher w/BM + SBFT	5	2	C+C+A+A+A+A+A
294	1IP + SEM +HCS1 + HCS2 + Folder + Finisher	3	3	C+C+A+A+C+A
295	1IP + SEM +HCS1 + HCS2 + Folder + Finisher w/BM	3	3	C+C+A+A+C+A
296	1IP + SEM +HCS1 + HCS2 + Folder + Finisher w/BM + SBFT	4	3	C+C+A+A+C+A+A
297	1IP + SEM +HCS1 + HCS2 + TCBM + Finisher	4	3	C+C+A+A+C+A+A
298	1IP + SEM +HCS1 + HCS2 + TCBM + Finisher w/BM	4	3	C+C+A+A+C+A+A
299	1IP + SEM +HCS1 + HCS2 + TCBM + Finisher w/BM + SBFT	5	3	C+C+A+A+C+A+A+A
300	1IP + SEM +HCS1 + HCS2 + TCBM + Folder + Finisher	3	4	C+C+A+A+C+C+A
301	1IP + SEM +HCS1 + HCS2 + TCBM + Folder + Finisher w/BM	3	4	C+C+A+A+C+C+A
302	1IP + SEM +HCS1 + HCS2 + TCBM + Folder + Finisher w/BM + SBFT	4	4	C+C+A+A+C+C+A+A

*: GBC: GBC Punch Module

*: SBFT: Square Back Fold Trimmer

*: w/BM: With Booklet

Installation Procedure

1. Confirm the installation location with the customer.
2. After installation (Main Unit-only configuration), it becomes like the figure below. (Figure 1)

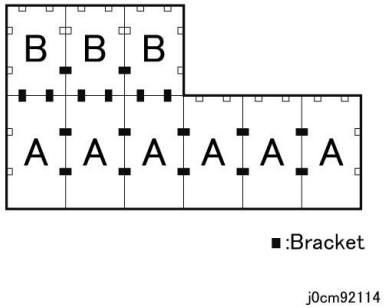


Figure 1 j0cm92114

3. Install the 1st Plate-A from the front of the leftmost position. (Decide Home Position)
4. Install the 2nd Plate-A. (Figure 2)

   NOTE: *Place the Bracket before placing the Plate since the Plate is heavy.*

   (1) Install the Bracket (x2) to the 1st Plate-A.
   (2) Place the 2nd Plate-A, and secure it by using the Nut (x4). (Use 10 mm wrench)

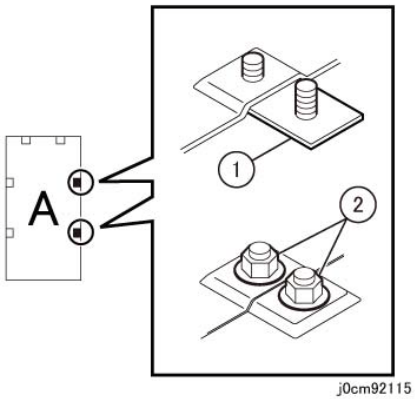


Figure 2 j0cm92115

5. Install the other 4 Plate-A as well.
6. Install the Plate-B. (Figure 3)

(1) Install the Bracket (x2) to the rear of Plate-A.

(2) Place the Plate-B, and secure it with the Nut (x4) to Plate-A.

NOTE: *Since between Plate-B and Plate-B in the figure is an obstacle to traffic, do not secure the Bracket.*

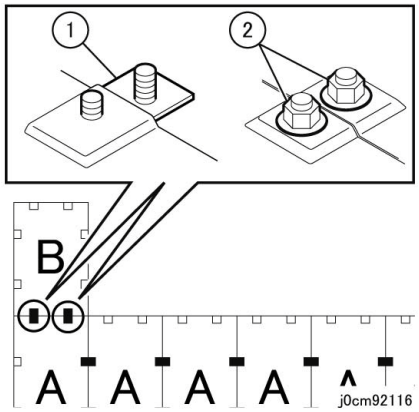


Figure 3 j0cm92116

7. Install the 2nd Plate-B. (Figure 4)

(1) Install the Bracket (x2) to the rear of Plate-A.

(2) Install Bracket (x1) at the front of Plate-B, which has already been installed.

(3) Place the Plate-B, and secure it with the Nut (x6) to Plate-A, B.

NOTE: *Since between Plate-B and Plate-B rear in the figure is an obstacle to traffic, do not secure the Bracket.*

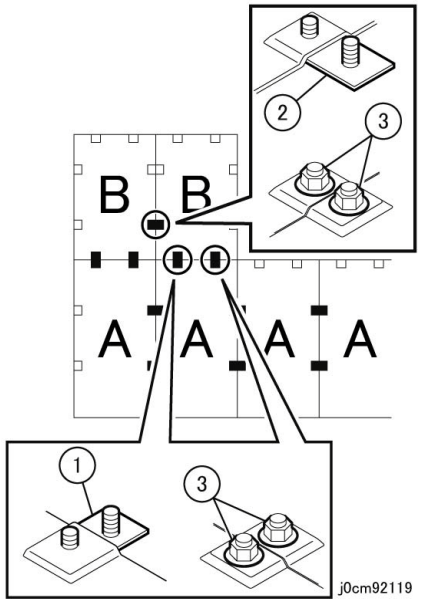


Figure 4 j0cm92119

8. Similarly, install 1 Plate-B.

9. When installing the optional HCF/Chained-HCF, install Plate-A as shown below. (Figure 5)

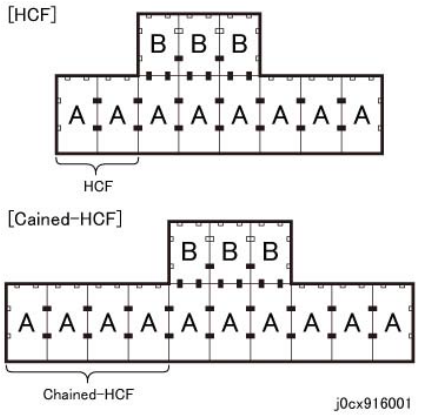


Figure 5 j0cx916001

10. When installing other options, install Plate-A/Plate-C in the required quantity according to the contents of [Plate arrangement] in Table 5.

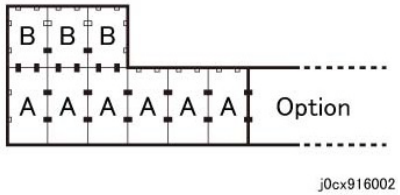


Figure 6 j0cx916002

11. Refer to the figure below for the position of the IOT Main Unit. (Figure 7)

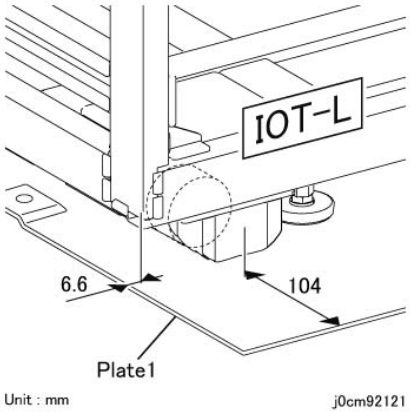


Figure 7 j0cm92121

9.1.7.1 Add Specialty Toner (#1: CLR/GLD/SLV/WHT/TX/PINK, #6: GLD/SLV/WHT/PINK)

Before Starting

- This procedure describes how to install a newly purchased specialty toner in a 6 Color Type model.
  Refer to 9.1.3 and 9.1.4 when adding a specialty toner to the 4 Color Type model.
  #1 can be installed by selecting 1 color from GLD, SLV, WHT, PINK, CLR, TX.
  #6 can be installed by selecting 1 color from GLD, SLV, WHT, PINK.

Product Code

Table 1

Part Name	FBAP
Toner Enabling Kit (Clear)	BP-PM16
Toner Enabling Kit (Gold)	BP-PM17
Toner Enabling Kit (Silver)	BP-PM18
Toner Enabling Kit (White)	BP-PM21
Toner Enabling Kit (Textured Paper)	BP-PM20
Toner Enabling Kit (Pink)	BP-PM19
Marking Module Kit	BP-PM14
White Marking Module Kit	BP-PM15

Bundled Items

- Toner Enabling Kit (CLR/GLD/SLV/WHT/TX/PINK)
  Bundled items differ depending on the color. (O: Bundled)

Table 2

No.	Name	Qty	CLR	GLD	SLV	WHT	TX	PINK
1	Toner Cartridge	1	O	O	O	O	O	O
2	Dispenser Inner Cover	1	O	O	O	O	O	O
3	Label L	2	-	O	O	O	-	O
4	Label R	2	-	O	O	O	-	O
5	Label	1	O	O	O	O	O	O
6	Screw (M3x6)	2	O	O	O	O	O	O

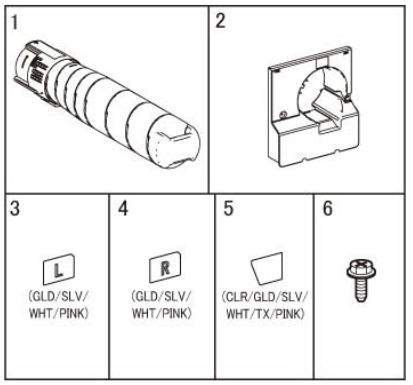


Figure 1 dar917002

- Marking Module Kit / White Marking Module Kit

Table 3

No.	Name	Qty
1	MM Assembly	1
2	Shoulder Screw	2
3	Dispenser Assembly (*)	1
4	Replace the Drum Cartridge	1
5	Screw (M4x8)	2

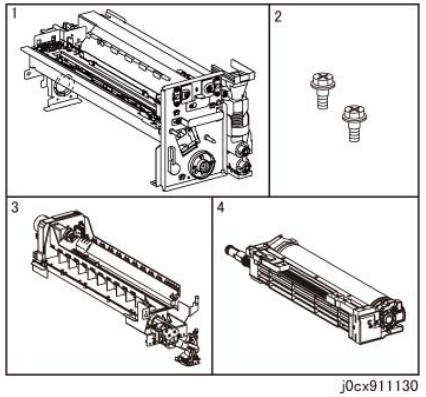


Figure 2 j0cx911130

*: Only WHT is labeled for identification.

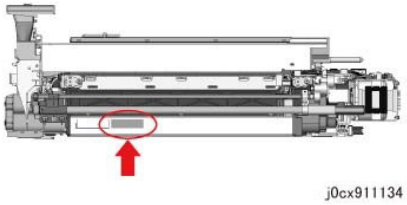


Figure 3 j0cx911134

Installation Procedure

1. Turn OFF the machine.

WARNING

Turn OFF the Fiery Server and unplug the Power Cord.

WARNING

Turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.

2. Open the IOT-L Front Left Door/Front Right Door.
3. Open the Left/Right Dispenser Cover.
4. Rotate the Handle of the Big Module in the direction shown to unlock it.

Figure 4 kol917016

5. Remove the Developer Inner Cover Assembly and IBT Front Cover Assembly.
   (1) Loosen the screw (x4).
   (2) Remove the IBT Front Cover Assembly.

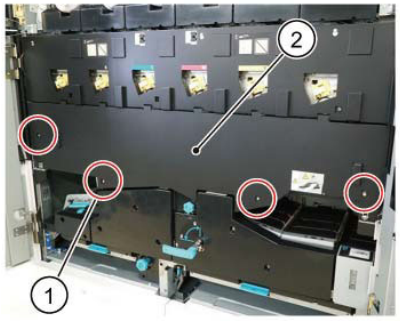


Figure 5 kol917017

   (3) Loosen the screw (x6).
   (4) Remove the Developer Inner Cover Assembly.

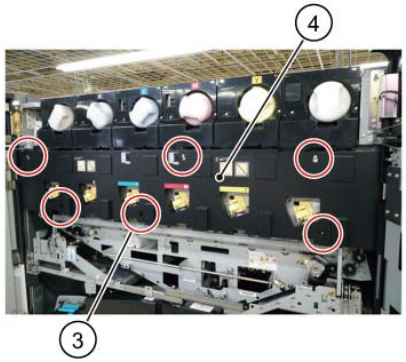


Figure 6 kol917018

6. Lower the IBT Lever to lower the IBT Belt Assembly.
   (1) Lightly push the IBT Lever to rotate the Stopper Plate.
   (2) Lower the IBT Lever.

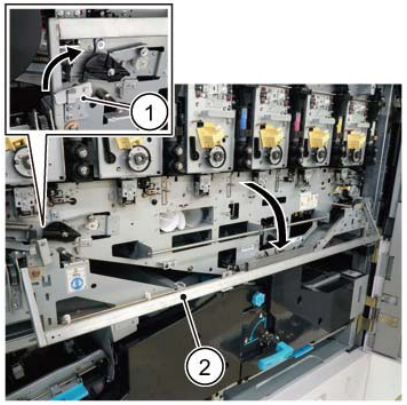


Figure 7 kol917020

7. [Only when replacing MM Assembly #6] Remove the Wheel Assembly from the IBT Module.
   (1) Remove the Hexalobular TP Screw (x2).
   (2) Remove the Wheel Assembly.

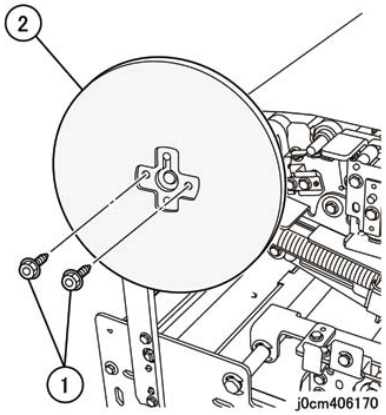


Figure 8 j0cm406170

8. Remove the CC Assembly of the target specialty toner.
   (1) Remove the CRU Guide.
   (2) Set the CRU Guide to the pin (x2) of the Front Plate Assembly of the target specialty toner.
   (3) Lower the Lever and pull out the CC Assembly of the specialty toner.
   (4) Remove the CC Assembly together with the CRU Guide.

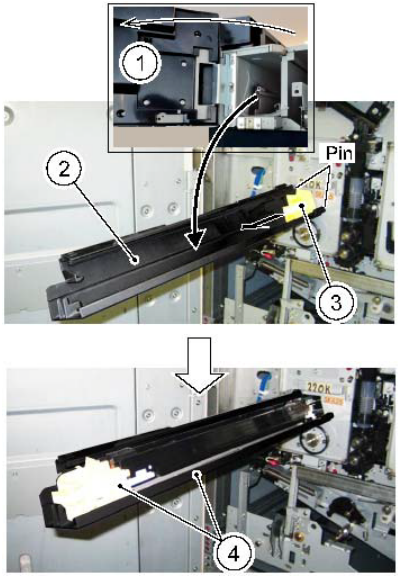


Figure 9 j0kol405006

NOTE: *After removing the CC Assembly together with the CRU Guide, do not remove the CC Assembly from the CRU Guide. (This is because the CC Assembly is easily damaged)*

9. Pull out the MM Assembly of the target specialty toner a little.
   (1) Loosen the screw.
   (2) Loosen the screw (x2).
   (3) Hold the Handle, and pull out the Spot Color MM Assembly slightly.

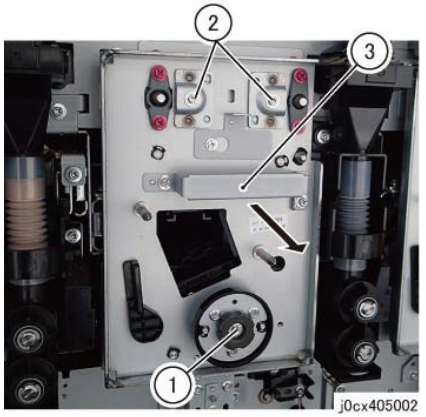


Figure 10 j0cx405002

10. Remove Drum Cartridge.

NOTE: *When removing the Spot Color Drum Cartridge, do not directly touch the surface of the Drum.*

NOTE: *Make sure to put the Spot Color Drum Cartridge into the ERU BAG to prevent light-induced fatigue.*

(1) Pull and rotate the Knob at the same time to secure it.
(2) Pull and rotate the Knob Assembly at the same time to secure it.
(3) Free the tab from the square hole of the EPG Frame, and remove the Drum Cartridge.

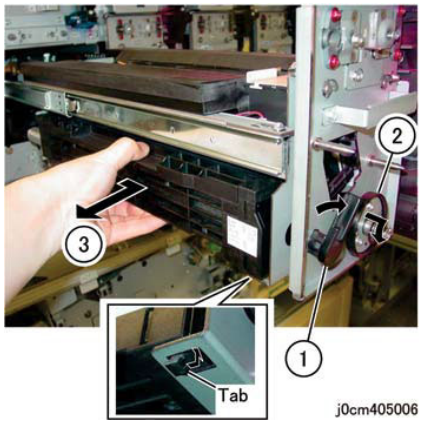


Figure 11 j0cm405006

11. Put the Drum Cartridge into the ERU BAG to prevent light-induced fatigue.
(1) Loosen the Screw at the inner side of the IOT-L Front Right Door.
(2) Remove the Blind Cover.
(3) Take out the ERU Bag.
(4) Orientate the Drum Cartridge as shown in the figure.
(5) Put the Drum Cartridge into the ERU BAG.

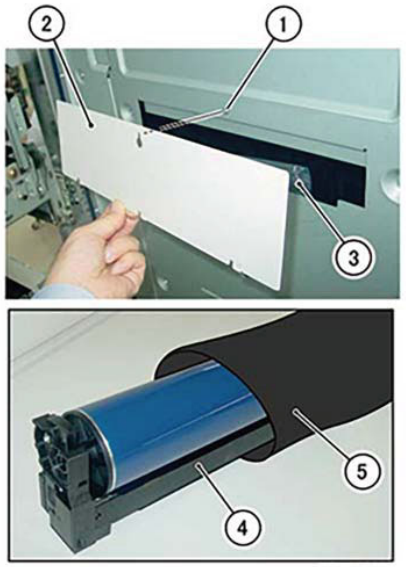


Figure 12 j0kol405009

12. Remove the MM Assembly of the target specialty toner.

NOTE: *As the MM Assembly is heavy, pay close attention to your working posture.*

(1) Remove the Shoulder Screw (M4x10) (x2).
(2) While pressing the Lever, slightly lift the Handle at the front of MM Assembly and pull it forward about 10 cm.
(3) Hold the Handle at the front of the MM Assembly and the notch on the metal plate at the rear, and remove the MM Assembly.

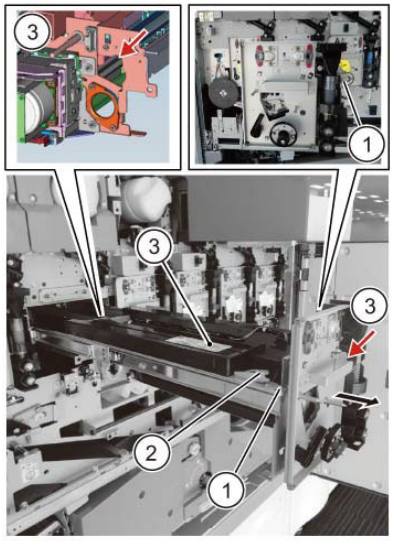


Figure 13 kol917045

WARNING

Do not hold to the pin at the Rear Frame of the MM Assembly. It might damage the pin and cause the MM Assembly to drop.

(4) Release the Left and Right MM Rail Assembly Stoppers (x2) and store the MM Rail Assembly (x2) inside the device.

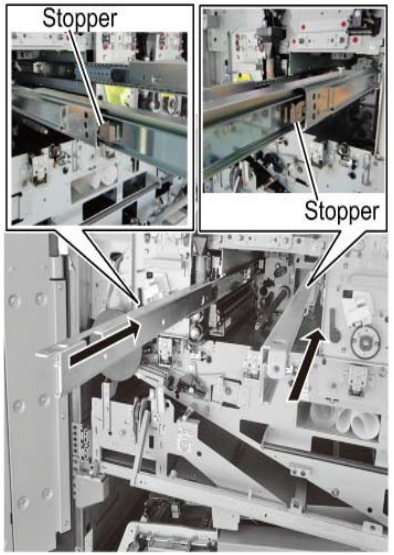


Figure 14 kol917030

CAUTION

Working with the MM Rail Assembly out may result in injury.

13. Remove the Toner Cartridge of the target specialty toner.
14. Remove the Toner Dispenser Assembly of the target specialty toner.
    (1) Remove the screw (x2).
    (2) Loosen the screw.

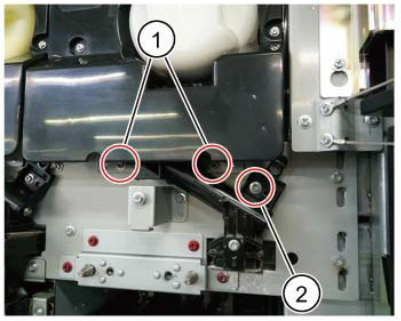


Figure 15 kol917031

(3) Slightly lift the front part of the Toner Dispenser Assembly and pull it forward about 10 cm.
(4) Rotate the Pipe Auger Assembly in the direction shown and fix it to the Pin.

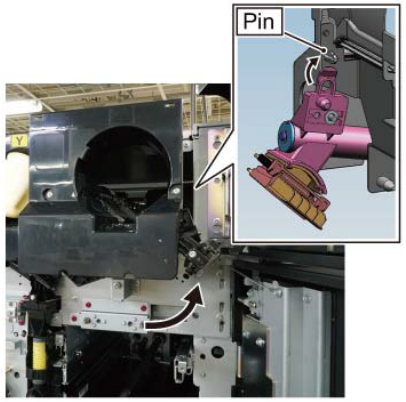


Figure 16 kol917032

(5) Remove the Toner Dispenser Assembly.

NOTE: *Do not tilt or turn the Toner Dispenser Assembly sideways because this will cause the toner to spill.*

NOTE: *Do not touch the Motor or Connector at the rear when holding the Toner Dispenser Assembly.*

15. Put the removed Spot Color Toner Dispenser Assembly, Toner Cartridge, and MM Assembly in the Storage Box.
16. Install the Toner Dispenser Assembly in the Marking Module Kit.
    (1) Install the Toner Dispenser Assembly on the Main Unit.
    (2) Attach the screw (x2) that was removed in Step 14.
    (3) Tighten the screw.
    (4) Install the Developer Inner Cover.
    (5) Attach the screw (M3x6) (x2).
    (6) [GLD/SLV/WHT/PINK only] Label R for #1 and Label L for #6. (The figure is for #1)

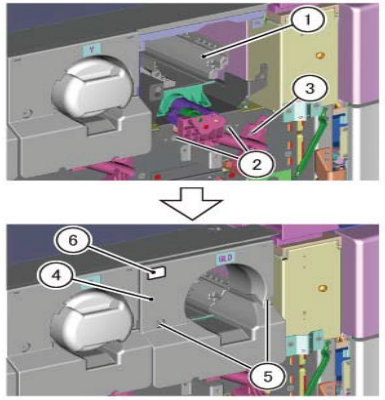


Figure 17 kol917039

17. Install the Toner Cartridge in the Enabling Kit on the Main Unit.
18. Close the Left/Right Dispenser Cover.
19. Pull out the left and right MM Rail Assembly.
20. Install the MM Assembly in the Marking Module Kit.

NOTE: *As the MM Assembly is heavy, pay close attention to your working posture.*

CAUTION

Be careful not to touch the MM Rail Assembly.

NOTE: *When holding the MM Assembly, hold the Handle at the front and the notch on the metal plate at the rear.*

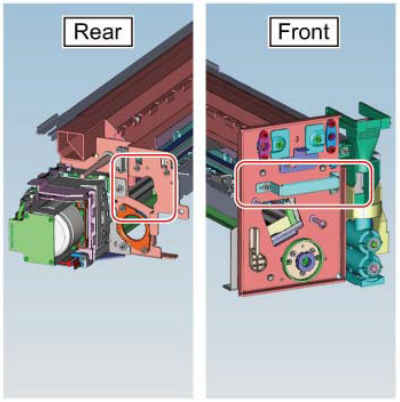


Figure 18 kol917040

(1) Place the MM Assembly on the Left and Right MM Rail Assembly.

(2) Insert the MM Assembly until it is locked by the Stopper of the MM Rail Assembly.

NOTE: *Make sure the MM Assembly rests properly on the MM Rail Assembly.*

(3) Attach the Shoulder Screw (M4x10)(x2) that was removed in Step 12.

Figure 19 kol917041

NOTE: *If the Shoulder Screw is loose, tighten it all the way.*

Figure 20 kol917034

(4) Peel off the Barcode Label from the right surface of the MM Assembly and paste it on the Service Log.

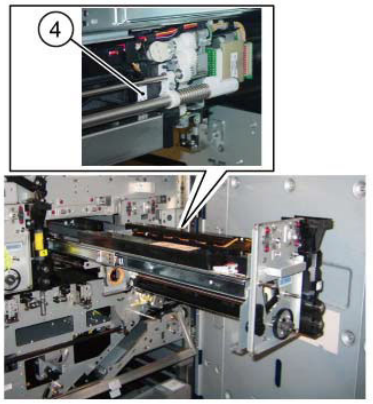


Figure 21 kol917042

21. Install the Drum Cartridge in the Marking Module Kit.
    (1) Pull out the Knob Assembly, and rotate it.
    (2) Pull out the Knob, and rotate it.
    (3) Install the Drum Cartridge. After installation, check that the Tab is in the position shown.

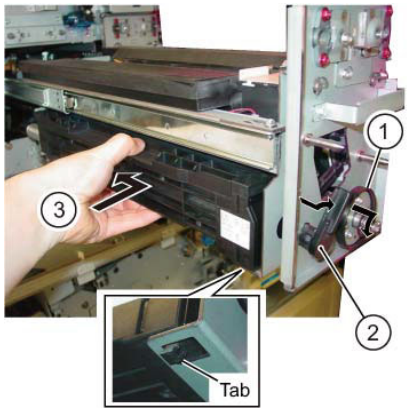


Figure 22 j0kol913010

22. Insert the MM Assembly all the way and secure it.
    (1) Rotate while pushing the Knob to restore it.
    (2) Push in the MM Assembly.
    (3) Press the Stopper (x2) of the MM Rail Assembly to unlock it, and insert the MM Assembly all the way.

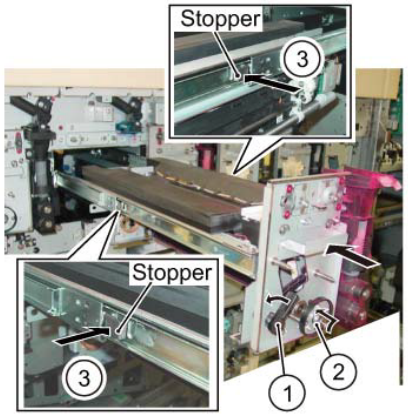


Figure 23 j0kol913011

NOTE: *If the MM Assembly does not go all the way in, repeat the operation of turning the illustrated flange about 30 degrees clockwise and pushing it in again.*

NOTE: *Do not turn the flange counterclockwise. Also, do not touch the Drum part (Blue part).*

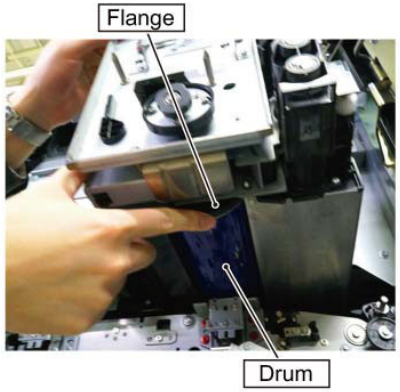


Figure 24 kol917035

(4) Tighten the screw (x2).
(5) Tighten the screw.
(6) Affix the Label of the applicable color.
(7) [GLD/SLV/WHT/PINK only] Label R for #1 and Label L for #6.

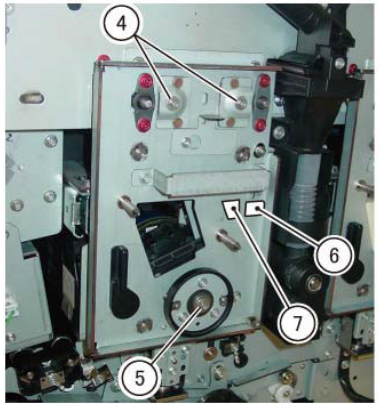


Figure 25 kol917043

23. Install the CC Assembly by reversing Step 8.
24. Open the IOT-R Front Right Cover Assembly.
25. Remove the Inner Right Upper Cover.
    (1) Remove the screw of the Stopper Wire.
    (2) Remove the screw (x4).
    (3) Remove the Inner Right Upper Cover.

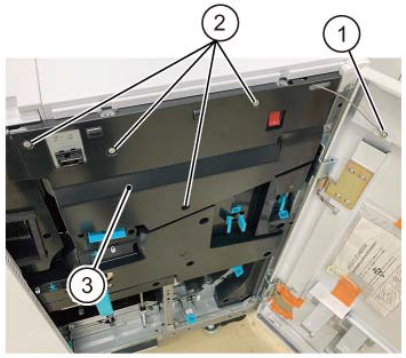


Figure 26 dar420001

26. Open the Switch Cover, and pull the Service Interlock Switch.
    (1) Loosen the screw.
    (2) Open the Switch Cover.
    (3) Pull the Service Interlock Switch.

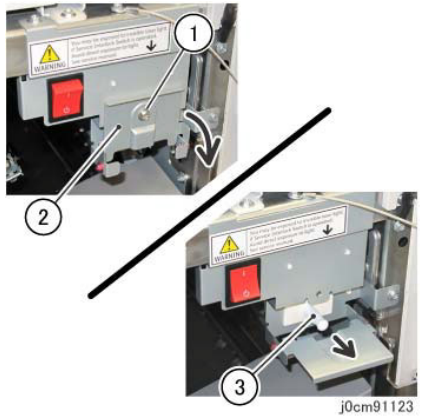


Figure 27 j0cm91123

27. Turn ON the power of the Main Unit and the PC.
28. Tilt the #1 or #6 guide of the supply port toward you and set the paper funnel.
    (1) Remove the screw.
    (2) Bring down the Guide.
    (3) Set the bundled paper funnel on the Joint Pipe.

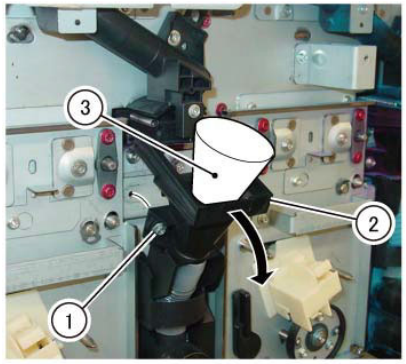


Figure 28 j0cx911015

29. Use the DC955 Automatic Developer Replacement Mode to fill the Developer.
    (1) Select the developer supply feature.
    (2) Select the toner color of Developer to be supplied.
    (3) Click the [Execute] button.

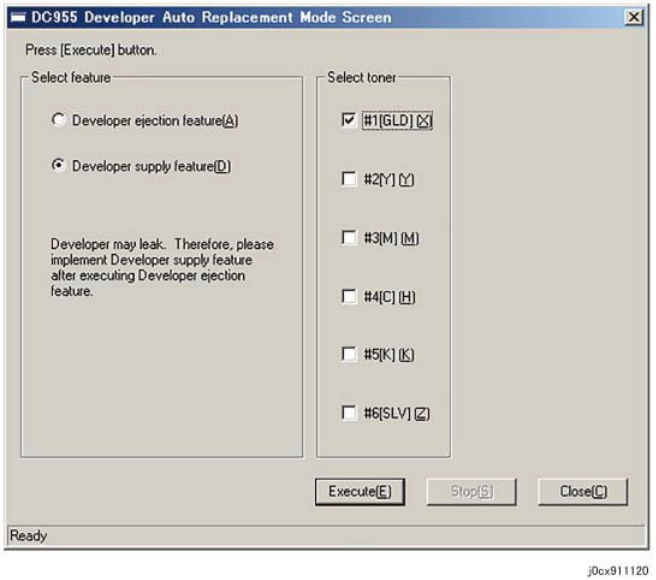


Figure 29 j0cx911120

30. Supply Developer.

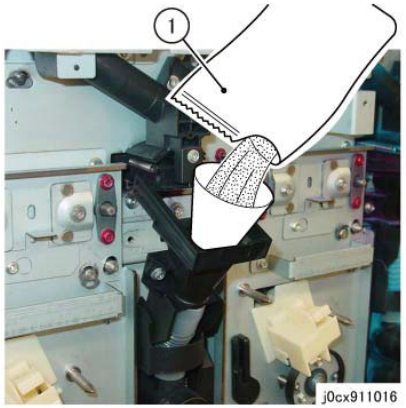


Figure 30 j0cx911016

31. Restore the supply port.
32. Use DC950 (ATC Sensor Setup) to enter the characteristic value of the ATC Sensor.
    (1) Enter the numerical value written on the Barcode Label that was peeled off from the MM Assembly in Step 20 and then click [Execute]. In the figure below, the value for #1 Engine is 55. In this case, enter 55 in #1 Barcode Number. (Same for #6)

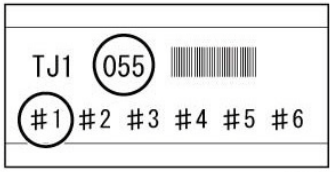


Figure 31 j0cx913156

33. Select DC960 (Install Toner), and transfer the specialty toner for #1 or #6 Engine to the toner transport path.

    NOTE: *Check the toner supply with one of the following methods.*

    (1) Disconnect the bellows tube, spread paper, etc. to prevent dispersal, and check the Toner droppage. If performing 1 time of DC960 is not enough to drop any Toner, perform the following until the Toner drops. Change the value of NVM below to 1, and execute DC960 again.

    DC960 can only be performed 1 time to prevent secondary problems from occurring. Changing the NVM value allows it to be performed again (this is also limited to 1 time).

    (2) Make sure that the toner cartridge rotates, and the Dispense Motor is rotating (it can be confirmed by rotating the E ring in front of the developer supply port).

    In the case where the DC960 is re-executed due to some trouble, it can be re-executed by changing the following NVM value to 1, but take note of the possibility that faults may occur if a large amount of toner is sent into the developer.

    - For Engine #1: NVM [754-434]
    - For Engine #6: NVM [754-439]

Table 4

NVM	Feature	Meaning of Setting Value
754-434	Toner Filling Implementation Switch#1	0: Do not perform 1: Perform
754-439	Toner Filling Implementation Switch#2	0: Do not perform 1: Perform

34. [Only when replacing MM Assembly #6] Install the Wheel Assembly on the IBT Module by reversing Step 7.

    NOTE: *Install with a torque of 1.8Nm using a Torque Screwdriver.*

35. Install the IBT Belt Assembly by reversing Step 6.
36. Install the Developer Inner Cover Assembly and IBT Front Cover Assembly.
37. Rotate the Handle of the Big Module in the opposite direction of Step 4 to lock it.
38. Reinstall the Service Interlock Switch in the reverse order of Step 26.
39. Reinstall the Inner Right Upper Cover in the reverse order of Step 25.
40. Close the IOT-R Front Right Cover Assembly.
41. Close the IOT-L Front Left/Right Door Assembly.
42. Change the following NVM depending on the operation.

Table 5

NVM	Feature	Setting Value
754-964	No. of Colors used on #1 Engine	0: 1 color 1: 2 colors or more
754-965	No. of Colors used on #6 Engine	0: 1 color 1: 2 colors or more
740-465	Gold Toner Operation Switch	0: Use on either #1 or #6 1: Use on both #1 and #6
740-466	Silver Toner Operation Switch	0: Use on either #1 or #6 1: Use on both #1 and #6
740-467	White Toner Operation Switch	0: Use on either #1 or #6 1: Use on both #1 and #6
540-109	KP Toner Operation Switch	0: Use on either #1 or #6 1: Use on both #1 and #6

NOTE: *If you change any of 740-465, 740-466, 740-467, or 540-109, do the following:*

(1) When changing from 0: Use on either #1 or #6 -> 1: Use on both #1 and #6

i. After setting the NVM, exit PC-Diag, and turn the power OFF/ON.

ii. At DC135, copy the HFSI information.

- *When adding to #1: Copy #6 to #1.*
- *When adding to #6: Copy #1 to #6.*

(2) When changing from 1: Use on both #1 and #6 -> 0: Use on either #1 or #6

i. After setting the NVM, exit PC-Diag, and turn the power OFF/ON.

ii. Set the HFSI counter associated with the engine you no longer use to 0.

The relevant NVMs are shown in the table below.

Table 6

NVM	Feature	NVM	Feature
009-801	DEVELOPER WHT #1	009-803	DEVELOPER WHT #6
009-802	DEVELOPER GLD #1	009-804	DEVELOPER GLD #6
009-807	DEVELOPER SLV #1	009-806	DEVELOPER SLV #6
009-826	DEVELOPER P #1	009-828	DEVELOPER P #6
009-813	DEVE Housing WHT #1	009-815	DEVE Housing WHT #6
009-814	DEVE Housing GLD #1	009-816	DEVE Housing GLD #6
009-819	DEVE Housing SLV #1	009-818	DEVE Housing SLV #6
009-827	DEVE Housing P #1	009-829	DEVE Housing P #6

NOTE: *When replacing the kit with the same color, change the following NVM on the engine to be replaced to the following settings. (For the following NVMs, the color is automatically determined after the power is turned OFF/ON, and the setting value is rewritten.)*

Table 7

NVM	Feature	Setting Value
740-329	#1 Engine Color	0
740-330	#6 Engine Color	0

43. After setting each NVM, exit PC-Diag, and turn the power OFF/ON.

    NOTE: *After turning ON the power, the process of writing the NVM related to the specialty toner to the IOT will be automatically executed. After the process is complete, the IOT will automatically restart.*

44. Set up the gradation of specialty toner for # 1 or #6 Engine.
    (1) Open DC938 (PCON CHECK), select [5C#1] or [5C#6] ([6C] if specialty toner is installed in both #1 and #6) from the color mode pull-down menu, select [Procon Setup], and execute. (See ADJ 18.1.7)
    (2) From the Procon Monitor Value pull-down, check the various ADC Gradation Patch Density (Uncoated)/(Coated) values and verify that the value of No.20 is smaller than the target of +20.
        i. If the value is larger than the target of +20, execute [Procon Setup] 2 additional times with DC938 [PCON CHECK], and check the value of No.20 again.
        ii. If the value still does not fall within the proper range, check the value of No.20 after executing DC895 [DMAX SETUP]. (See ADJ 18.1.15)
    (3) Use DC612 (Color Test Pattern Print) to output the [ProconPG] pattern and check that there is no problem with the reproducibility of gradation.
45. Adjust the registration of #1 or #6 engine.
    (1) Perform DC685 Regi Control Setup Cycle. (ADJ 18.1.12)

        NOTE: *If a Fault occurs, go to Chapter 2 Fault FIP to take corrective action. If no Fault occurs, proceed to the next step.*

    (2) Select [Color Regi for Measurement] in DC612, and print. (Recommended paper: 1 sheet of A3 J Paper)
    (3) Check that the printed Color Regi is not badly misaligned. If it is badly misaligned, perform DC685 again.
    (4) Refer to ADJ 15.6.6 and ADJ 15.6.7 to adjust the Lead Registration, Side Registration, Side 1/Side 2 Registration.

9.1.8.1 Installation of WHT Toner

Before Starting

- This procedure explains the installation procedure for the WHT Toner.
  Follow the WHT toner installation flow below to proceed with installation.

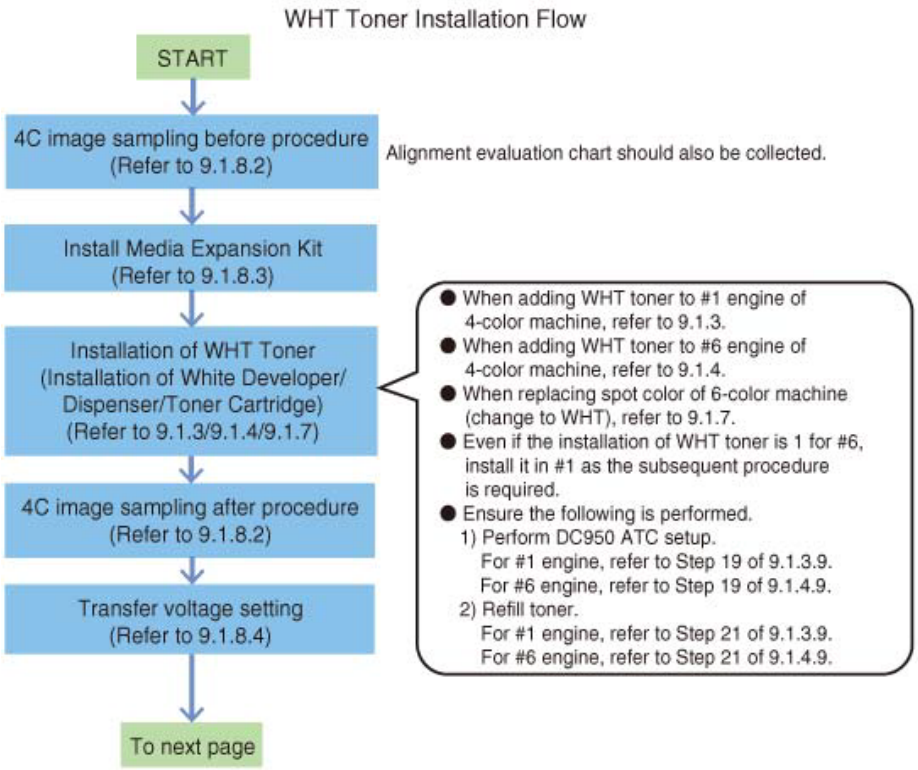

WHT Toner Installation Flow
START
4C image sampling before procedure
(Refer to 9.1.8.2)
Alignment evaluation chart should also be collected.
Install Media Expansion Kit
(Refer to 9.1.8.3)
Installation of WHT Toner
(Installation of White Developer/
Dispenser/Toner Cartridge)
(Refer to 9.1.3/9.1.4/9.1.7)
● When adding WHT toner to #1 engine of 4-color machine, refer to 9.1.3.
● When adding WHT toner to #6 engine of 4-color machine, refer to 9.1.4.
● When replacing spot color of 6-color machine (change to WHT), refer to 9.1.7.
● Even if the installation of WHT toner is 1 for #6, install it in #1 as the subsequent procedure is required.
● Ensure the following is performed.
1) Perform DC950 ATC setup.
For #1 engine, refer to Step 19 of 9.1.3.9.
For #6 engine, refer to Step 19 of 9.1.4.9.
2) Refill toner.
For #1 engine, refer to Step 21 of 9.1.3.9.
For #6 engine, refer to Step 21 of 9.1.4.9.
4C image sampling after procedure
(Refer to 9.1.8.2)
Transfer voltage setting
(Refer to 9.1.8.4)
To next page

Figure 1 e0kol912007

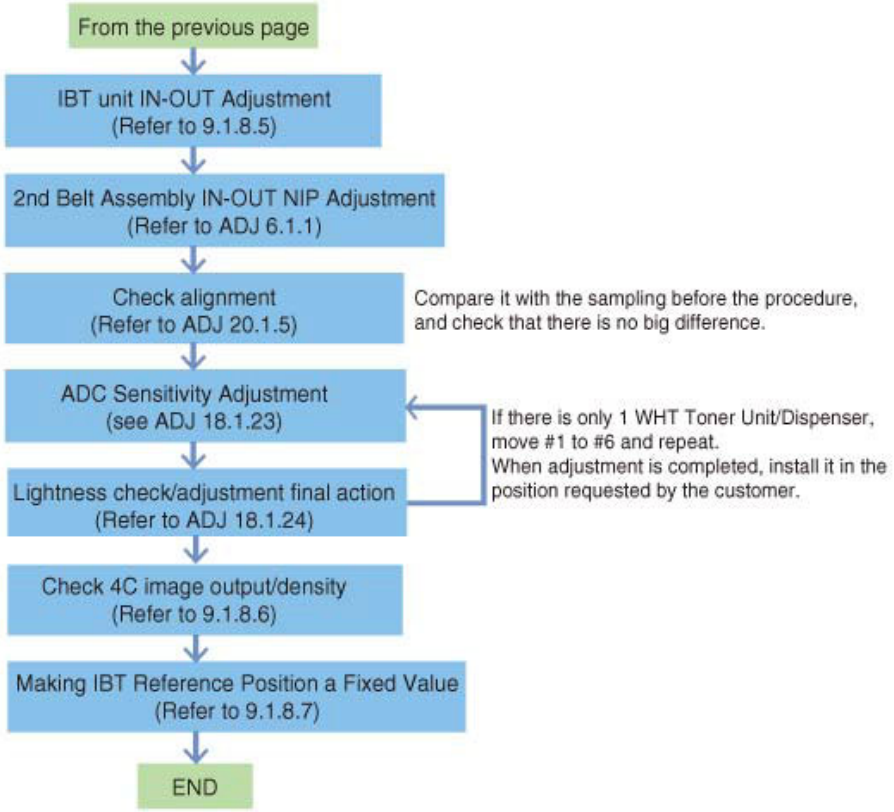

From the previous page
IBT unit IN-OUT Adjustment
(Refer to 9.1.8.5)
2nd Belt Assembly IN-OUT NIP Adjustment
(Refer to ADJ 6.1.1)
Check alignment
(Refer to ADJ 20.1.5)
Compare it with the sampling before the procedure, and check that there is no big difference.
ADC Sensitivity Adjustment
(see ADJ 18.1.23)
If there is only 1 WHT Toner Unit/Dispenser, move #1 to #6 and repeat.
When adjustment is completed, install it in the position requested by the customer.
Lightness check/adjustment final action
(Refer to ADJ 18.1.24)
Check 4C image output/density
(Refer to 9.1.8.6)
Making IBT Reference Position a Fixed Value
(Refer to 9.1.8.7)
END

Figure 2 e0kol912008

9.1.8.2 4C Image Sampling

Purpose

- Sample of 4C image is collected before and after procedure to confirm that there is no influence on 4C image quality due to additional spot color hardware change.

NOTE: *Always perform sampling in "4C mode" and follow the print collection conditions below.*

Before procedure: Print collection conditions

1. For density check
   Paper: J Paper/OSC A3 size
   Image: Specify DC 612 Total Chart1.
   Quantity: 10 sheets
   Check method: Check that it is not extremely low/high density. Also check image defects such as color fading and image distortion.
2. For alignment check
   DC612 (Built-in pattern output)
   Pattern name: Grid 90 degree C- 204
   Paper: J Paper A3
   Number of sheets: 1 to 3 sheets (recommended to output 3 samples to check the average deviation.)
   Registration check method: Check the registration shift between the front and back of the output sample.

After procedure: Print collection conditions

Paper: J Paper A3 size
Image: Specify DC 612 Total Chart1.
Quantity: 10 sheets
Check method: Also check that there are no image defects such as color fading and image distortion. It is only necessary to confirm that there is no Mod mistake.

9.1.8.3 Installation of Media Expansion Kit

Product Code

- Media Expansion Kit: BP-PM24

Installation Procedure

1. Open the package and check the Bundled Items.
   - Media Expansion Kit Bundled Items (Figure 1)
     (1) Media Expansion Kit 1

Table 1

No	Name	Qty
1	Backup Roll Assembly for Media Expansion Kit	1

Figure 1 j0cx913179

(2) Media Expansion Kit 2 (Figure 2)

Table 2

No	Name	Qty
1	Earth Bracket	1
2	PWB Support	3
3	Clamp	2
4	Power Save PWB	1
5	Screw (M3x6)	2
6	Cam Assembly	1
7	Wire Harness	1

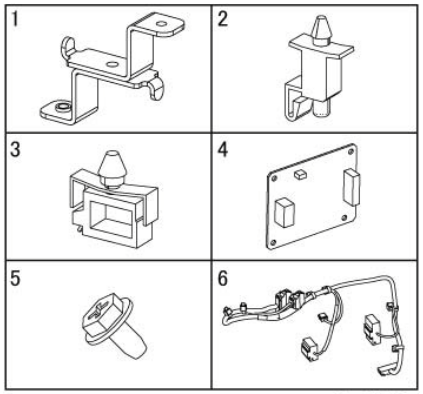


Figure 2 j0cx913180

2. Remove the 1st Roll Assembly (Y (#2)). (REP 6.7.1).
3. Install the Earth Bracket. (Figure 3)
   (1) Install the Earth Bracket.
   (2) Tighten the screw.

   NOTE: *When tightening the Screw, access with the driver in the vertical direction from above the IBT Unit.*

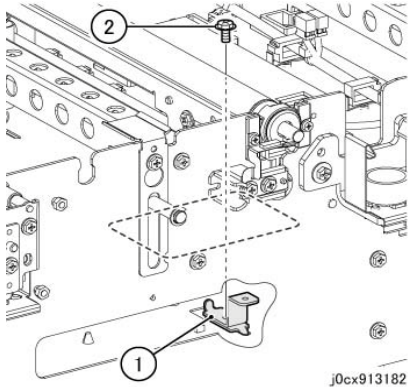


Figure 3 j0cx913182

4. Remove the Backup Roll Assembly. (REP 6.6.1 Perform Step 2, Step 3)

NOTE: *Be careful not to touch the alignment adjustment screw when removing the Backup Roll Bracket Assembly securing the Backup Roll Assembly. Since there are marks on the alignment adjustment screws, return them to their original position if they have moved. (Figure 4)*

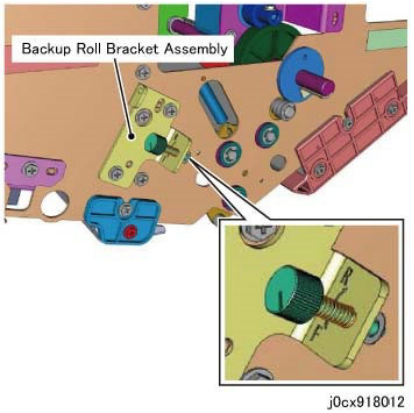


Figure 4 j0cx918012

5. Install the Backup Roll Assembly for Media Expansion Kit.

NOTE: *Install by performing Step 4 in reverse. However, take note of the following points.*

When installing the Backup Roll Assembly for Media Extension Kit, make sure to insert the Pin (x2) of the Backup Roll Assembly for Media Extension Kit into the hole of the IBT Belt Frame. (Figure 5)

(1) Insert the Pin (x2) of the Backup Roll Assembly for Media Extension Kit into the hole of the IBT Belt Frame.

NOTE: *Be careful not to touch the alignment adjustment screw when installing the Backup Roll Assembly (especially when installing the Backup Roll Spring, care is required). Also, when securing the Backup Roll Bracket Assembly, secure the screw with the sheet metal surface of the Backup Roll Plate Assembly in contact with the tip of the screw. Since there are marks on the alignment adjustment screws, return them to their original position if they have moved. (Figure 6)*

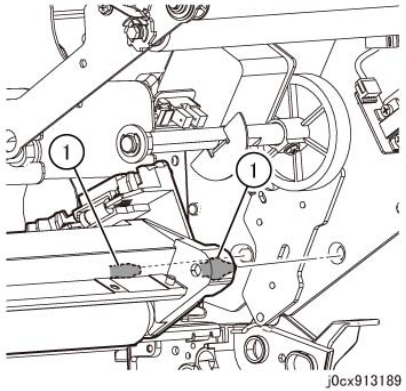


Figure 5 j0cx913189

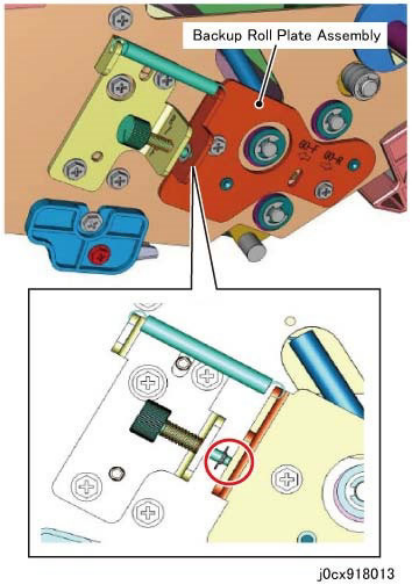


Figure 6 j0cx918013

NOTE: *After replacing the Backup Roll Assembly for Media Extension Kit, clear the following HFSI (DC 135) counters.*

- *Backup Roll Assembly for Backup Roll Assembly for Media Extension Kit "Chain Link: 009-886"*

NOTE: *Because of performing 9.1.8.4 Transfer Voltage Setting, check the resistance value on the label attached to the Backup Roll Assembly*

NOTE: *Be careful with removing the Backup Roll Spring as the alignment of the Backup Roll Assembly may be shifted.*

6. Remove the Front/Rear 2nd Nip Adjustable Motor Assembly. (Figure 7)
   (1) Disconnect the connector (x2).
   (2) Remove the screw (x2).
   (3) Remove the Front/Rear 2nd Nip Adjustable Motor Assembly.

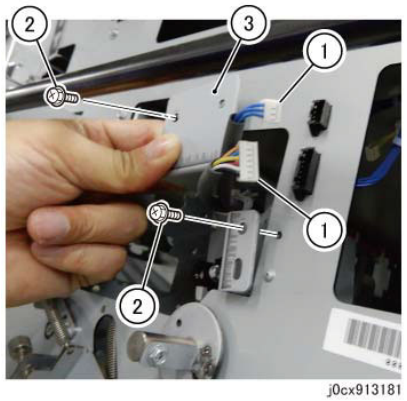


Figure 7 j0cx913181

7. Install the Power Save PWB. (Figure 8)
   (1) Install the clamp (x2).
   (2) Install the Support (x3).
   (3) Tighten the screw.
   (4) Install the Power Save PWB.

   NOTE: *When installing the Support (x3), be careful not to mistake Clamp to be installed in Step 12.*

   NOTE: *When installing the Power Save PWB, refer to the figure below and pay attention to the orientation of the board.*

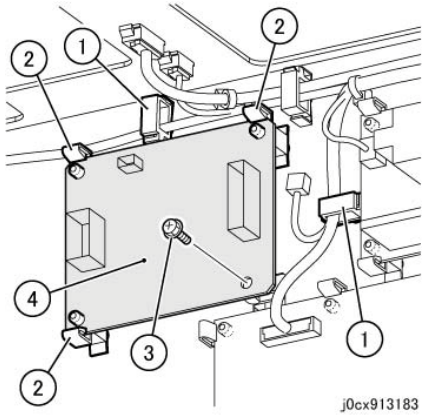


Figure 8 j0cx913183

8. Disconnect the connector. (Figure 9)
   (1) Disconnect the connector.

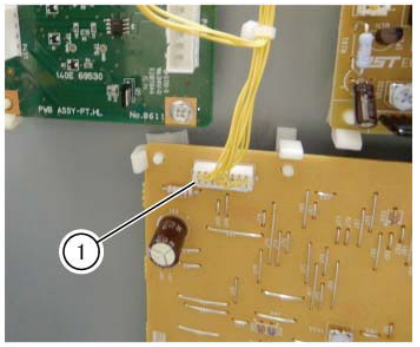


Figure 9 j0cx913184

9. Connect the connector (x2). (Figure 10)
   (1) Connect the connector (x2).

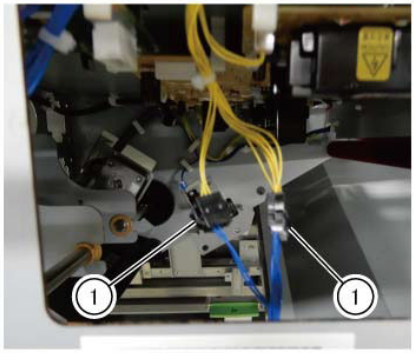
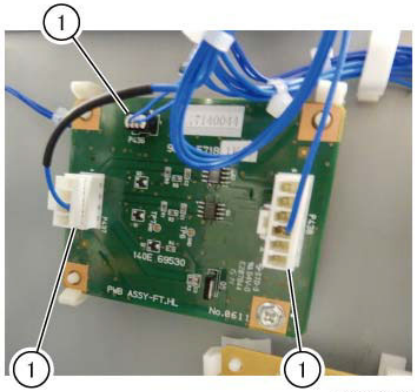


Figure 10 j0cx913185

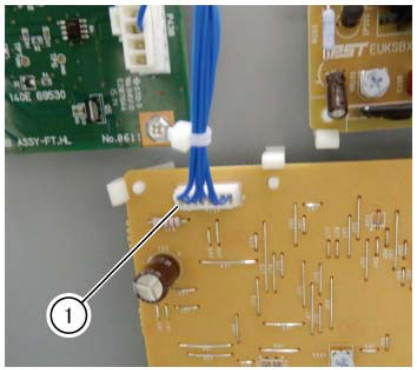
10. Connect the Connector (x3). (Figure 11)
    (1) Connect the Connector (x3).



j0cx913186

Figure 11 j0cx913186

11. Connect the connector. (Figure 12)
    (1) Connect the connector.

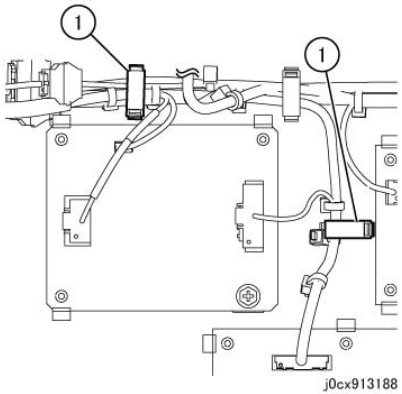


j0cx913187

Figure 12 j0cx913187

12. Secure it by using the clamps (x2). (Figure 13)
    (1) Secure the Wire Harness by using the Clamp (x2).

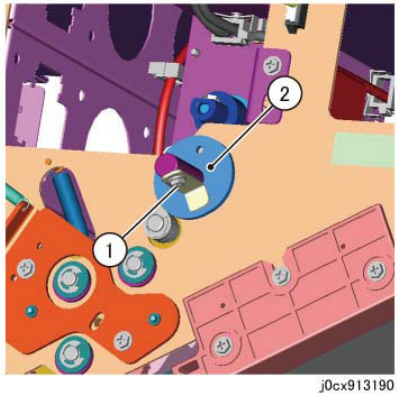
NOTE: *Since the Power Save PWB and Clamp are close to each other, be careful about routing so that the Wire Harness will not be scratched.*



j0cx913188

Figure 13 j0cx913188

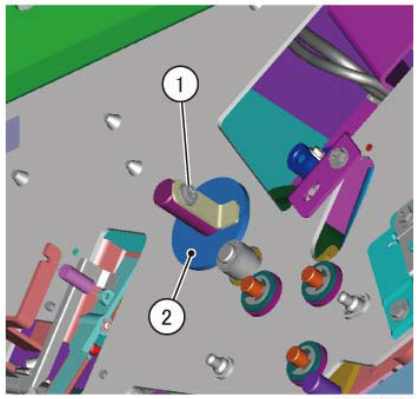
13. Remove the Front Cam Assembly. (Figure 12)
    (1) Remove the screw.
    (2) Remove the Cam Assembly.



j0cx913190

Figure 14 j0cx913190

14. Install the bundled Cam Assembly with Step 13 in the reverse order.
15. Remove the Rear Cam Assembly. (Figure 15)
    (1) Remove the screw.
    (2) Remove the Cam Assembly.



j0cx913202

Figure 15 j0cx913202

16. Install the supplied Cam Assembly with Step 15 in reverse.
17. Reinstall the 1st Roll Assembly (Y (#2)).
18. Reinstall the IBT Belt.
19. Reinstall the IBT Module.

9.1.8.4 Transfer Voltage Setting

Purpose

- In the case of using black paper together with WHT toner, for a pigment-based black paper having low electrical resistance, the transfer current flows into the transport chute through the paper, and the transferability deteriorates. Since this flow is determined by the electrical resistance value of the Backup Roll Assembly, it is necessary to correct it so as to achieve an appropriate transfer voltage according to the resistance value.

Procedure

1. Check the numerical value (7.0 to 7.45 Log ohms/square) of BUR resistance attached to the Backup Roll Assembly. (Figure 1)

j0cx918006

Figure 1 j0cx918006

2. Enter a value to the following NVM that is 100 times the BUR resistance value checked in Step 1 (example: if BUR resistance is 7.34, enter [734]).

   NVM746-685

9.1.8.5 IN-OUT Adjustment of IBT Unit

Before Starting

- This adjustment procedure will explain the adjustment method for the edge density reduction of the WHT toner image of #1. There is no adjustment effect of the WHT toner image of #6 engine.

Adjustment Procedure

1. Output image samples.
   Output 1 sheet with DC-612 (Test Pattern Print) under the following conditions.
   Color mode: 6C#1 or 5C#1
   Cin: #1 100%
   Paper: Kishu Bond black paper A3
2. Perform image checking and shim affixing procedures.
   (1) Put a few sheets of blank paper (recommended J paper) and measure L* of the sample of Step 1 with ES-3000.
   The measurement positions are the 2 positions at both edges in the center of the feed direction (about inner 20mm from the image edge). (Figure 1)

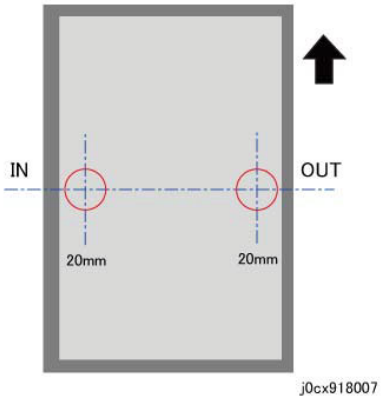


Figure 1 j0cx918007

   (2) If the L* of the IN side (Rear) or OUT side (Front) is lower than the guideline, affix shim to the IBT unit protruding section on the side where L* is lower. Perform adjustment when L* difference (difference between both edges) => 2.0 (if L* difference < 2.0, do not perform adjustment).
   Example) When the IN side: L* = 65, OUT side: L* = 70, L* difference = 5, which exceeds the guideline of 2, add the shim to the IN side since it is the lower side.

NOTE: *Affix the shim on the IN side with the double-sided tape facing down at the position shown below (2 locations). (Figure 2)*

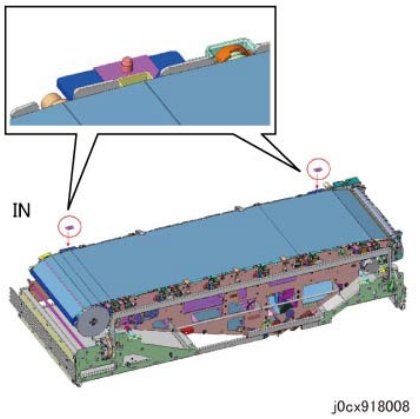


Figure 2 j0cx918008

NOTE: *Affix the shim on the OUT side with the double-sided tape facing down at the position shown below (4 locations). (Figure 3)*

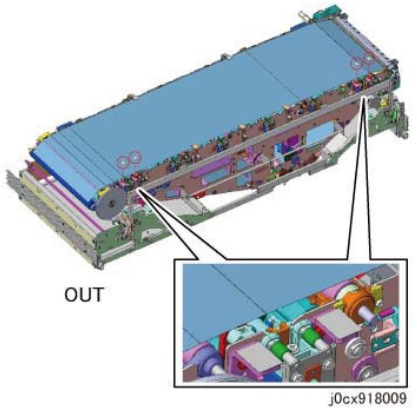


Figure 3 j0cx918009

Color Measurement Method

NOTE: *If you use ES-3000 by connecting PC-UI for the first time, install the driver software stored in the following destination to the PC for PC-UI.*

*C:\V26.2.**\90.Utility\Easymeasure\Driver_i1Pro3\X-Rite_i1Pro3_i1iO3_Driver_v3.0.0*

1. Connect i1Pro3(ES-3000) to the PC for PC-UI by USB.
2. Start Easymeasure.exe.

C:\V26.2.**\90.Utility\Easymeasure\ Easymeasure.exe

3. The following screen is shown.

Figure 4 dar418527

4. Click [Connect] button to recognize ES-3000.

NOTE: *The interface of ES-3000 and i1Pro3 is the same, so i1Pro-3 is shown.*

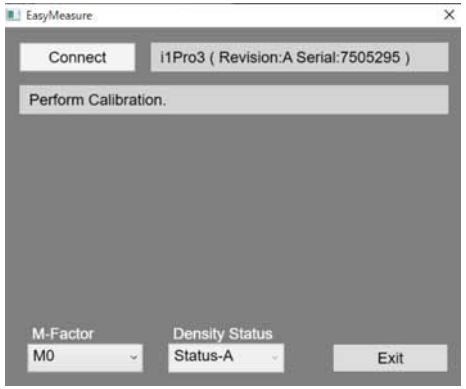


Figure 5 dar418528

5. "Perform color measurement" is shown.
6. Set ES-3000 to a print sample to be measured and press the button on the ES-3000.

NOTE: *Use the default [M0] and [Status-A] to [M-Factor] and [Density Status].*

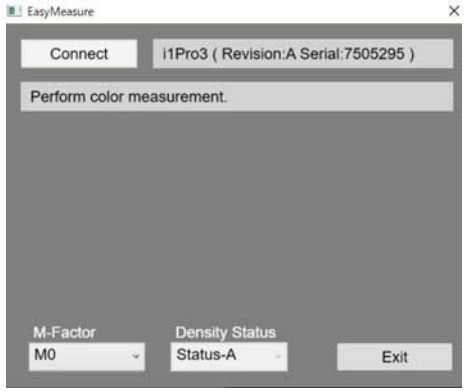


Figure 6 dar418529

7. The measurement result is shown.
8. Click [Exit] button to exit the app.

NOTE: *[M-Factor] can be changeable during software running.*

NOTE: *Density Status can be changed after exiting the app and restarting Easymeasure.exe.*

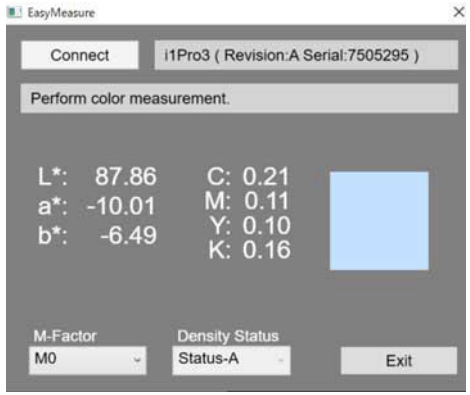


Figure 7 dar418530

9.1.8.6 4C Image Output/Density Check

Purpose

- Perform fine adjustment of the 4C density as required to bring out the maximum performance of 5C/6C image quality by adding WHT toner.

NOTE: *Refer to the following for print collection conditions, color measurement, and adjustment procedure during 4C adjustment.*

1. Print collection conditions during 4C adjustment
   Recommended paper: J Paper/OSC Paper A3 size
   Image: Specify DC 612 Total Chart1.
   Contact Engine: 4C
   Quantity: 10 sheets
2. Color measurement and adjustment procedures
   (1) Only the CMYK 100% enclosed in red in the figure below is measured with a colorimeter. (Figure 1)

   NOTE: *About the color measurement method, refer to 9.1.8.5 Color Measurement Method of IN-OUT Adjustment of IBT Unit.*

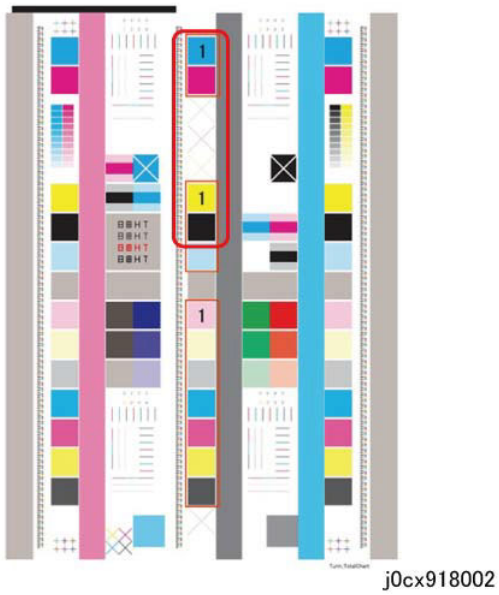


Figure 1 j0cx918002

   (2) Change the volume by 1 Step with DC801. (Figure 2)

NOTE: *When the volume is changed, the density adjustment operation is executed immediately before printing.*

NOTE: *As there is a concern that control delay will occur, resulting in overshoot, change the volume 1 step at a time.*

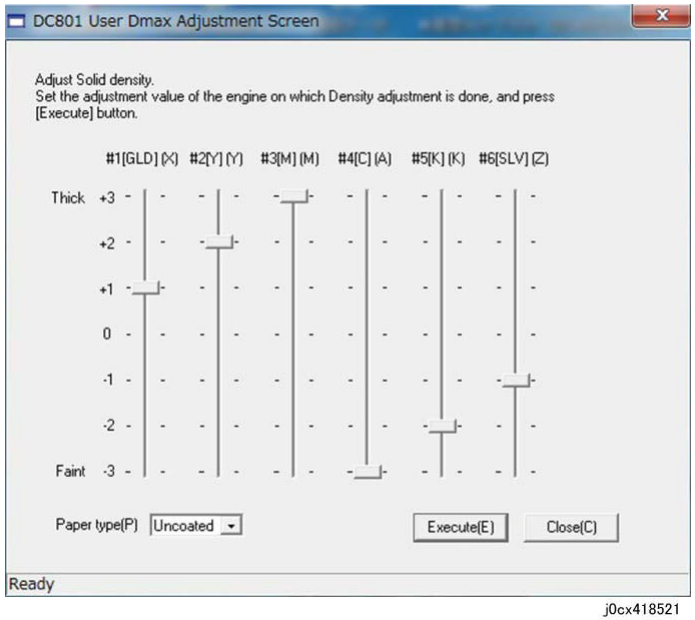
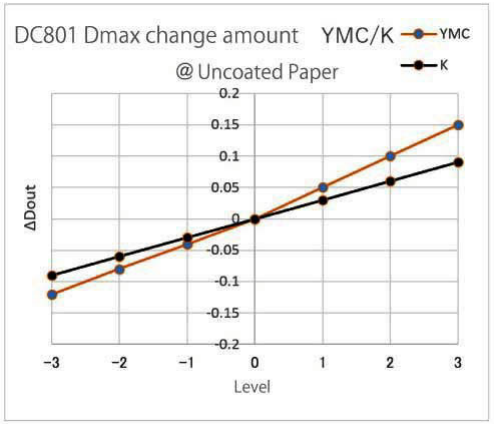


Figure 2 j0cx418521

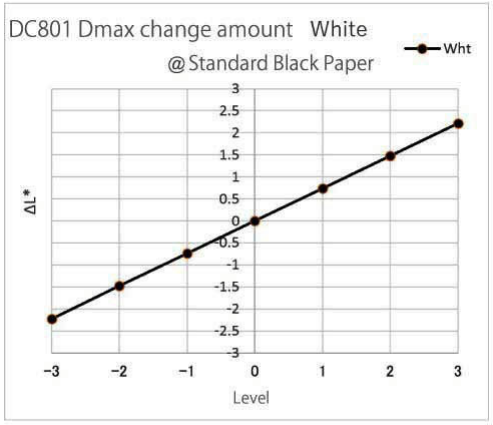
NOTE: *Refer to the figure below for setting value and change amount. (Figure 3, 4)*

NOTE: *The amount of change is a rough guide, so be careful as there is a possibility of saturation, especially on the side which is to be darker because development capacity dependence is high.*



j0cx918003

Figure 3 j0cx918003



j0cx918004

Figure 4 j0cx918004

(3) Adjust the volume repeatedly until the numerical value measured by the colorimeter reaches the following numerical value (range shown in Color Professional Service II).

● Revoria Press PC1120

Paper		J Paper				OS coated paper			
Measure area		Y	M	C	K	Y	M	C	K
Dmax	Upper limit	1.77	1.72	1.68	1.93	2.04	1.98	1.95	2.22
	Lower limit	1.45	1.40	1.36	1.61	1.72	1.66	1.63	1.90

Figure 5 e0kol912006

9.1.8.7 Making IBT Reference Position a Fixed Value

Purpose

- Belt Position Fail (042-336) or Belt Edge Sensor1 Fail (042-337) may occur after white toner installation because of model differences, so the IBT Reference Position may be fixed as required.

1. Execute DC956 Belt Edge Learn.
2. Calculate skew amount from 004-100: Edge Sensor 1st (E1) and 004-101: Edge Sensor 3rd (E3) in DC140 Analog Monitor. Subtract E3 from E1 to obtain the skew amount.
3. If the skew amount checked in Step 2 is less than 200, stop. If it is 200 or more, perform Step 4.
4. Make Reference Position a fixed value.

   NVM 749-599 Reference Position Auto Adjustment SW: 1 -> 0

   NVM 749-138 Reference Position: XXX -> 100 or -100

   NOTE: *For NVM 749-138, the change amount depends on the current value.*

   If the current value of NVM 749-138 is positive, change it by +100. If the current value is negative, change it by -100.

9.1.9.1 Installation of Long Paper Kit

Before Starting

- This procedure explains the installation procedure for the Long Paper Kit. Follow the Long Paper installation flow below to proceed with installation.

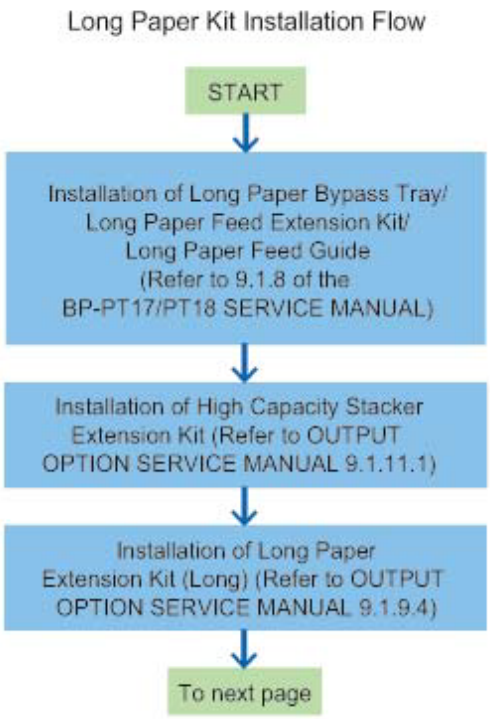

Long Paper Kit Installation Flow
START
Installation of Long Paper Bypass Tray/ Long Paper Feed Extension Kit/ Long Paper Feed Guide (Refer to 9.1.8 of the BP-PT17/PT18 SERVICE MANUAL)
Installation of High Capacity Stacker Extension Kit (Refer to OUTPUT OPTION SERVICE MANUAL 9.1.11.1)
Installation of Long Paper Extension Kit (Long) (Refer to OUTPUT OPTION SERVICE MANUAL 9.1.9.4)
To next page

Figure 1 dar919004

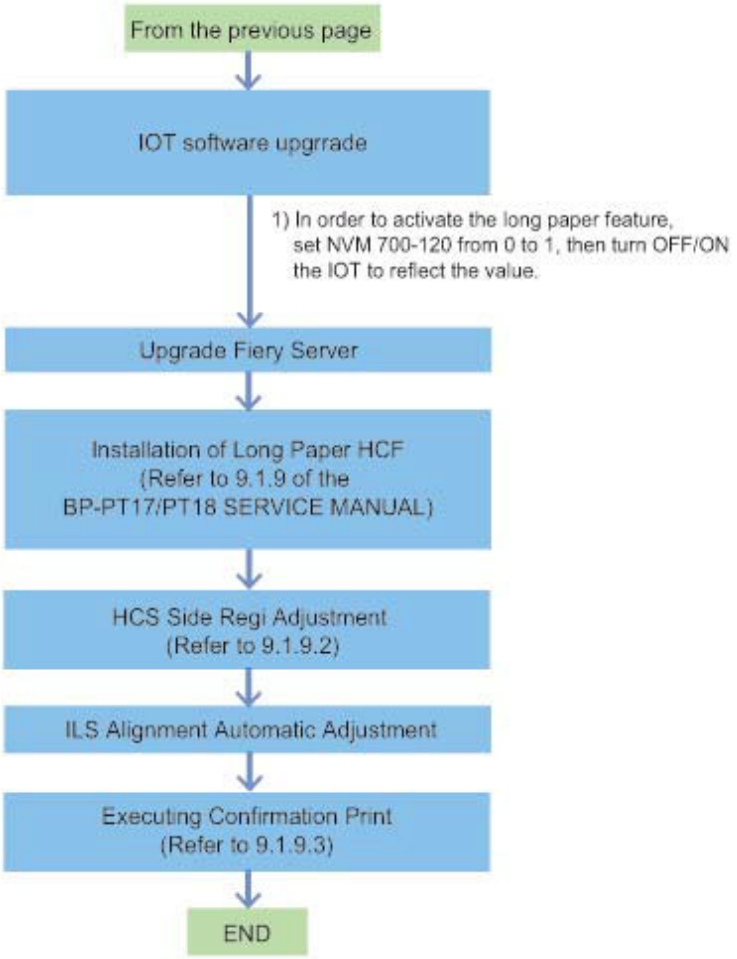

From the previous page
IOT software upgrrade
1) In order to activate the long paper feature, set NVM 700-120 from 0 to 1, then turn OFF/ON the IOT to reflect the value.
Upgrade Fiery Server
Installation of Long Paper HCF (Refer to 9.1.9 of the BP-PT17/PT18 SERVICE MANUAL)
HCS Side Regi Adjustment (Refer to 9.1.9.2)
ILS Alignment Automatic Adjustment
Executing Confirmation Print (Refer to 9.1.9.3)
END

Figure 2 dar919005

9.1.9.2 HCS Side Regi Adjustment

Before Starting

- This adjustment procedure explains the side registration adjustment in the case of a HCS-installed machine.

  Because you can not directly adjust the HCS, adjust the CDM module. (Figure 1)

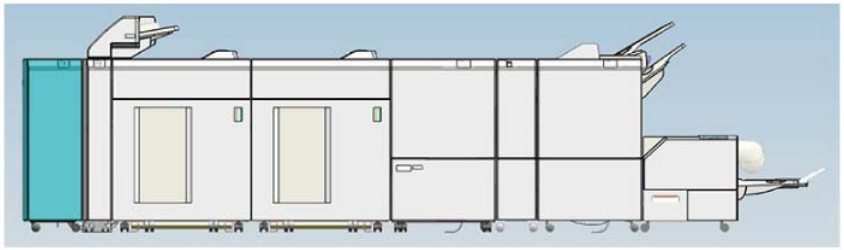


Figure 1 j0kol917019

Adjustment Procedure

1. Enter DC612 Color Test Pattern Print and obtain the following test pattern.
   Contact Engine: Any setting
   Select Test Pattern: Any Halftone
   Select Color: Any setting
   Print Side: 1 Sided
   Tray: Bypass Tray (Also perform tray setting according to adjustment paper)
   Use the Adjuster Kit paper (1089.0 mm x 330.2 mm)
   Procon TRC: ON
   Object (screen): 600C
   No. of Prints: 1 sheets
2. Visually check the output opening of the HCS during printing of the test pattern of Step 1, and check if the paper is transported at approximately the center. The measurement standard is 2 mm or more on one side (A). (Figure 2)

NOTE: *If it is not in the center, adjust the docking adjustment plate according to the following procedure.*

NOTE: *When adjustment of CDM is carried out, since the registration of all Modules is skewed after CDM, readjustment of Finisher/Folder is necessary.*

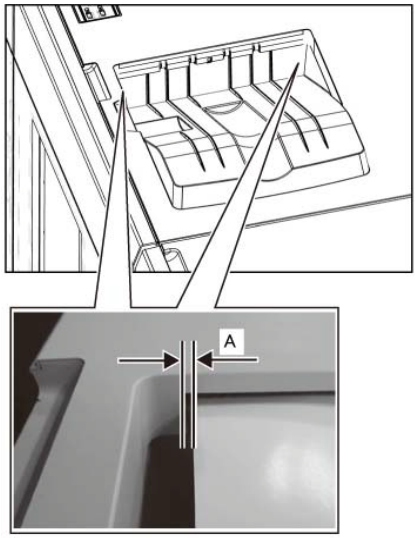


Figure 2 j0kol917033

3. Adjust the docking adjustment plate. (Figure 3)
   (1) Loosen the rear screw.
   (2) Remove the front screw and re-attach it to the long hole for adjustment.
   (3) Adjust the docking adjustment plate. (Table 1)

Table 1

Direction of paper skew	Direction of moving adjustment plate
Front direction	Front direction (a)
Rear direction	Rear direction (b)

   (4) Secure the screw (x2).

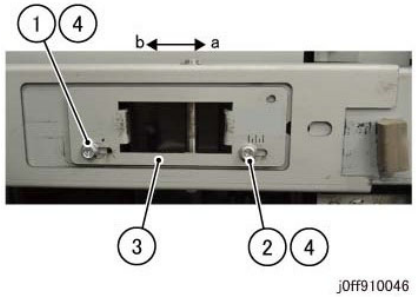


Figure 3 j0ff910046

9.1.9.3 Executing Confirmation Print

Procedure

1. Perform ILS automatic alignment correction in user mode, then check Side 1 and Side 2 Regi/Side Regi/Lead Regi with test print.

   NOTE: *The paper to be run is 729 mm x 330 mm 2 Sided Print.*

   NOTE: *Run a 204 grid chart with the test pattern print from PC-Diag.*

2. If the ILS automatic alignment correction does not end successfully, perform ILS automatic alignment correction again after manual adjustment.

   NOTE: *If the grid point of the adjustment chart exceeds +/-5 mm from the target position, automatic adjustment will fail, but if the alignment shift is reduced by manual adjustment, the automatic adjustment will be successful.*

   NOTE: *The figure below shows an alert displayed when the ILS automatic alignment correction does not end successfully, but be aware that the same alert will be displayed on the UI even if it does not end successfully due to a paper jam, out of paper, etc. (Figure 1)*

Alignment Error
Alignment could not be completed.
For details, close this screen and check Error Information and tray.
Close

Figure 1 dar919001

Manual Adjustment (Example)

- When skew of Side 2 deviates by about 5 mm (in the case where side regi is 9 mm at the lead edge, 4 mm at the trail edge, and paper length is 729 mm) (Figure 2)

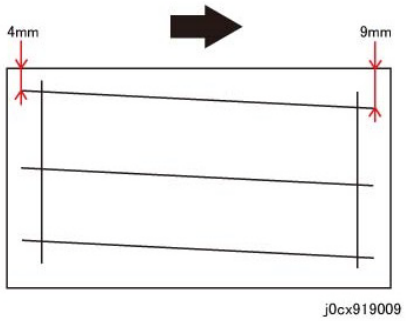


Figure 2 j0cx919009

1. Enter 28 (more than 2.8 mm per 400 mm) as the skew correction value of Side 2. (Figure 3)

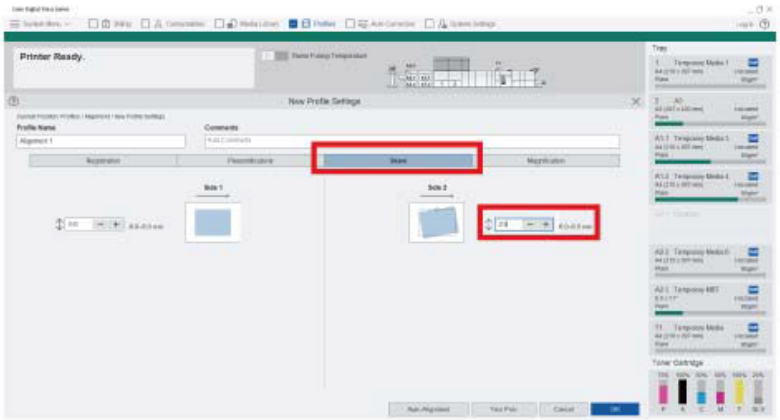


Figure 3 dar919002

2. Perform ILS automatic alignment correction. (Figure 4)

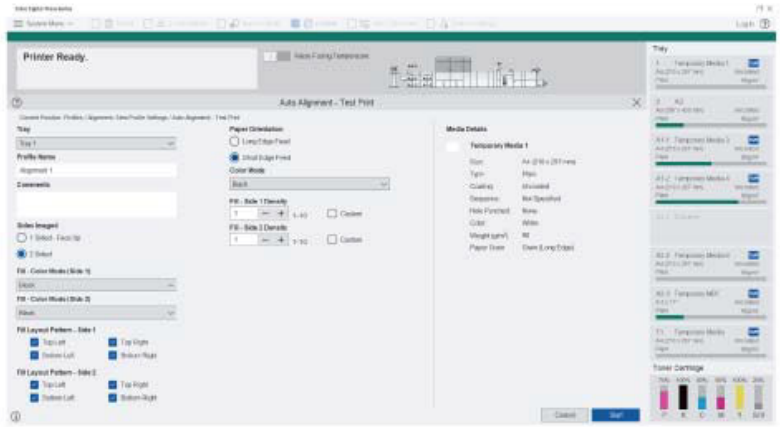


Figure 4 dar919003

9.2.2 Cancellation Overview of Main Unit

Preparation

Procure in advance the transportation pipe which is removed at the time of installation.

Square Pipe: x2. Screw: x12

Attach the Shipping Bracket that was removed at the time of installation at the IOT-R part, IOT-L part as follows.

Details of installation procedures of each part are described below in 9.2.3 Cancellation of Registration.

IOT-R Shipping Bracket and Packing Materials Location (Figure 1)

Table 1

Module	Name	Location	Number	Reference Procedure
Cooling Unit	A	Inner	1	Refer to Step 8 of 9.1.1.7 Installation of Main Unit (7 of 14).
	B	Inner	2	Refer to Step 5 of 9.1.1.7 Installation of Main Unit (7 of 14).
	F	Front	2	Refer to Step 16 of 9.1.1.6 Installation of Main Unit (6 of 14).
DCR Section	C	Front	1	Refer to Step 24 of 9.1.1.6 Installation of Main Unit (6 of 14) to Step 2 of 9.1.1.7 Installation of Main Unit (7 of 14).
Inverter 1 Section	D	Front	3	Refer to Step 23 of 9.1.1.6 Installation of Main Unit (6 of 14).
	Q	Right	3	Refer to Step 16 of 9.1.1.4 Installation of Main Unit (4 of 14).
Exit Drawer Section	E	Front	2	Refer to Step 19 of 9.1.1.6 Installation of Main Unit (6 of 14).
Inverter 2 Section	G	Front	2	Refer to Step 14 of 9.1.1.6 Installation of Main Unit (6 of 14).
Duplex Unit	H	Front	3	Refer to Step 12 of 9.1.1.6 Installation of Main Unit (6 of 14).
	N	Front	1	Refer to Step 4 of 9.1.1.5 Installation of Main Unit (5 of 14).
	P	Front	1	Refer to Step 4 of 9.1.1.5 Installation of Main Unit (5 of 14).
Fusing Unit	J	Inner	1	Refer to Step 6 of 9.1.1.6 Installation of Main Unit (6 of 14).
	K	Inner	2	Refer to Step 13 of 9.1.1.5 Installation of Main Unit (5 of 14).
	L	Front	2	Refer to Step 9 of 9.1.1.5 Installation of Main Unit (5 of 14).
Frame Section	M	Front	1	Refer to Step 4 of 9.1.1.5 Installation of Main Unit (5 of 14).

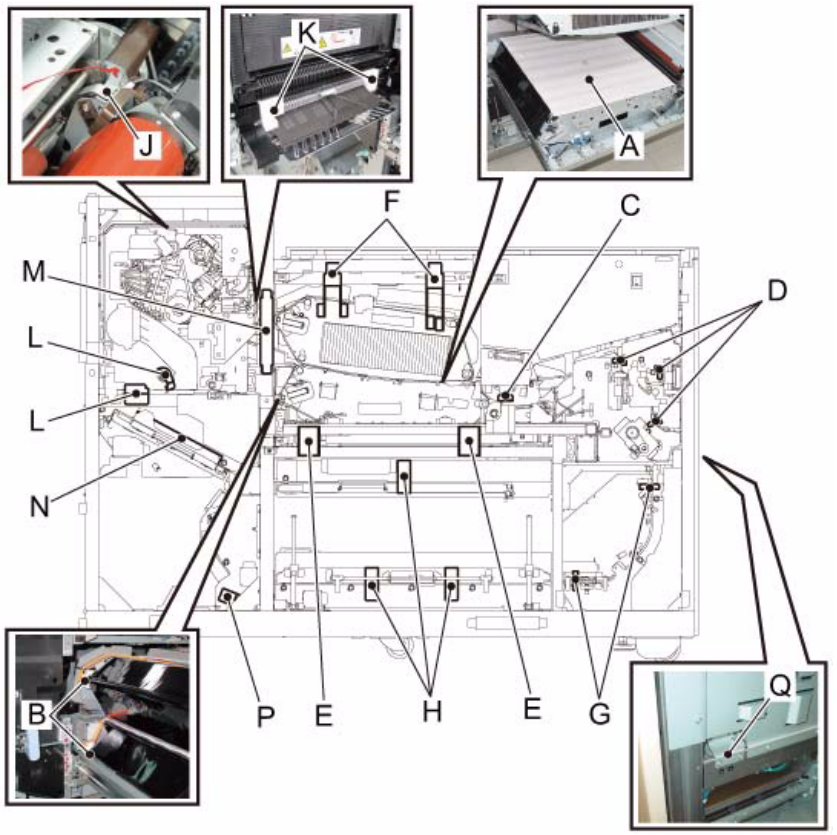


Figure 1 j0kol921001

IOT-L Shipping Bracket and Packing Materials Location (Figure 2)

Table 2

Module	Name	Location	Number	Reference Procedure
IBT Module Section	R	Inner	1	Refer to Step 17 of 9.1.1.9 Installation of Main Unit (9 of 14).
	S	Inner	2	Refer to Steps 12 and 13 of 9.1.1.9 Installation of Main Unit (9 of 14).
	T	Inner	3	Refer to Steps 12 and 13 of 9.1.1.9 Installation of Main Unit (9 of 14).
	U	Inner	2	Refer to Step 8 of 9.1.1.3 Installation of Main Unit (3 of 14).

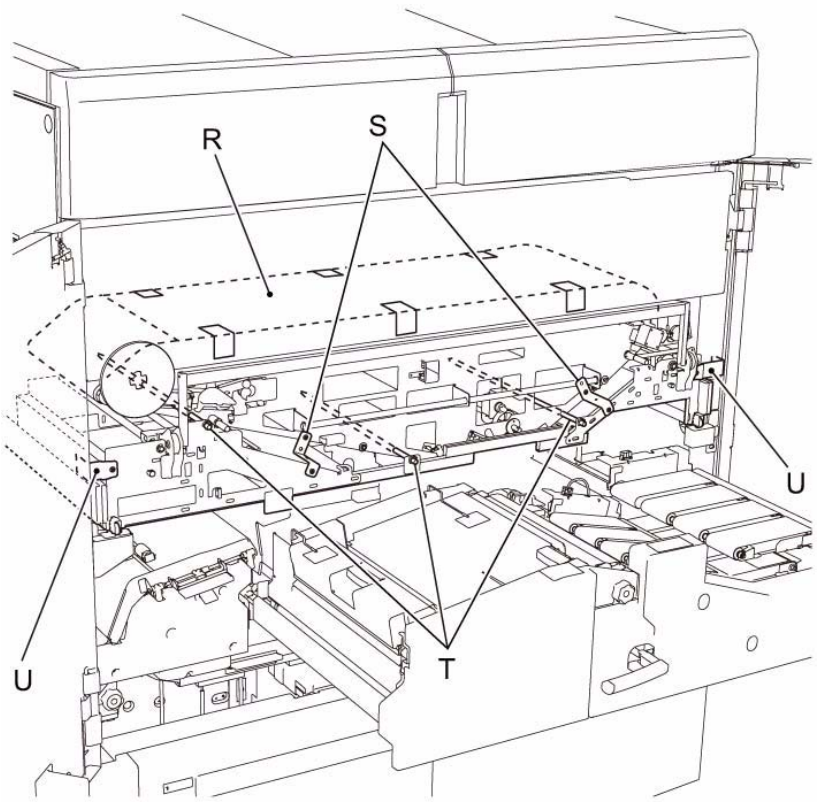


Figure 2 j0kol921002

IOT-L Shipping Bracket and Packing Materials Location (Figure 3)

Table 3

Module	Name	Location	Number	Reference Procedure
Big Module Section	W	Inner	2	Refer to Step 14 of 9.1.1.8 Installation of Main Unit (8 of 14).
	Y	Inner	3	Refer to Step 10 of 9.1.1.8 Installation of Main Unit (8 of 14).
	Z	Inner	4	Refer to Step 8 of 9.1.1.8 Installation of Main Unit (8 of 14).
	AA	Inner	2	Refer to Step 4 of 9.1.1.8 Installation of Main Unit (8 of 14).

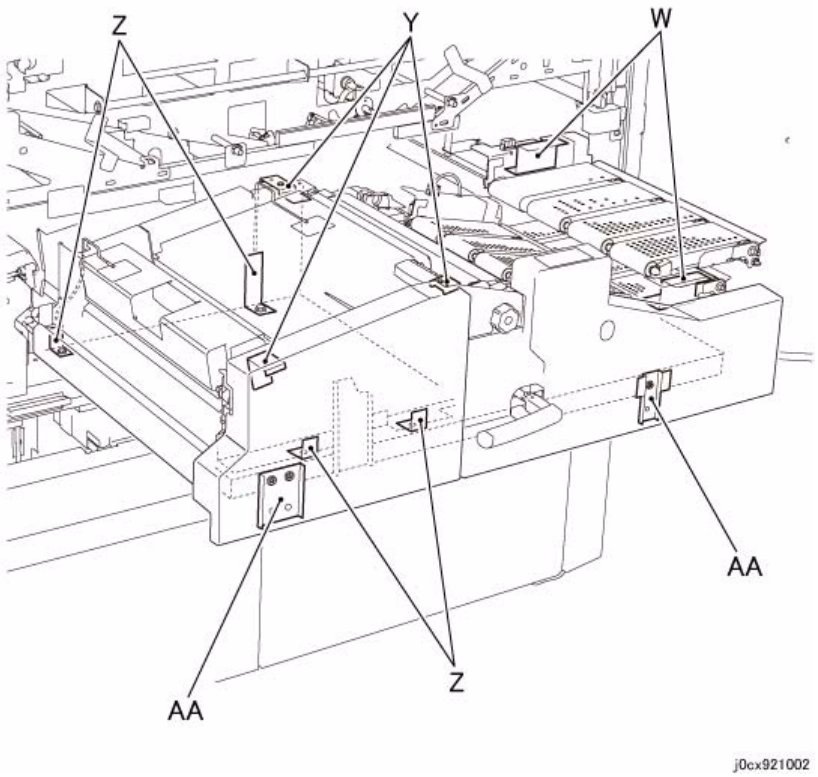


Figure 3 j0cx921002

IOT-L Shipping Bracket and Packing Materials Location (Figure 4)

Table 4

Module	Name	Location	Number	Reference Procedure
Tray 1/2 Section	AB	Inner	2	Refer to Step 21 of 9.1.1.7 Installation of Main Unit (7 of 14).
	AC	Front	4	Refer to Step 19 of 9.1.1.7 Installation of Main Unit (7 of 14).
IOT-L Frame Section	AE	Left/Right	2	-

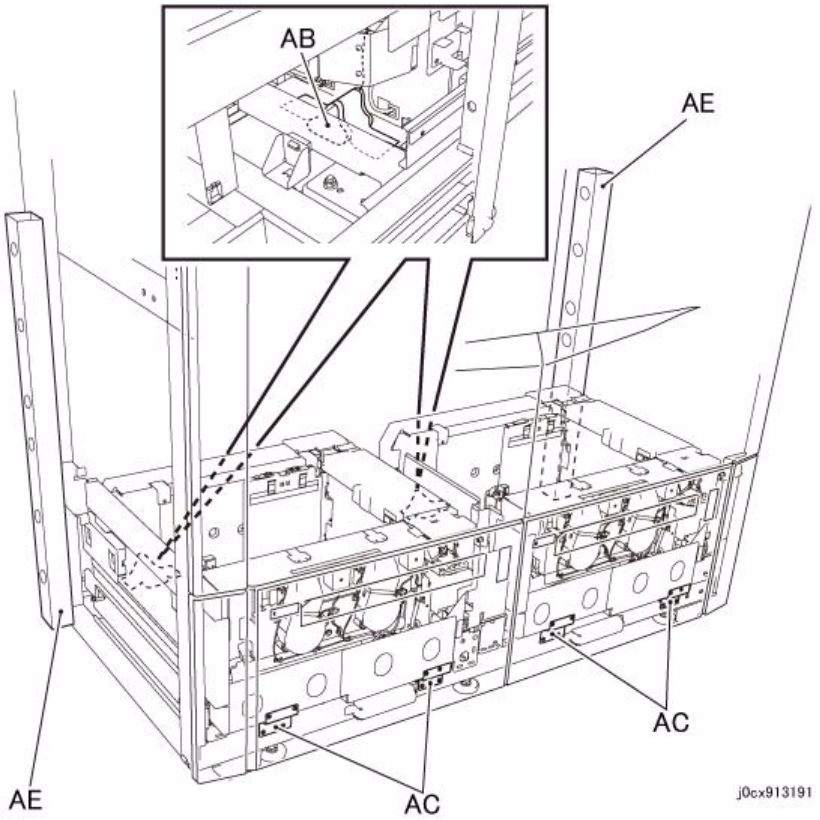


Figure 4 j0cx913191

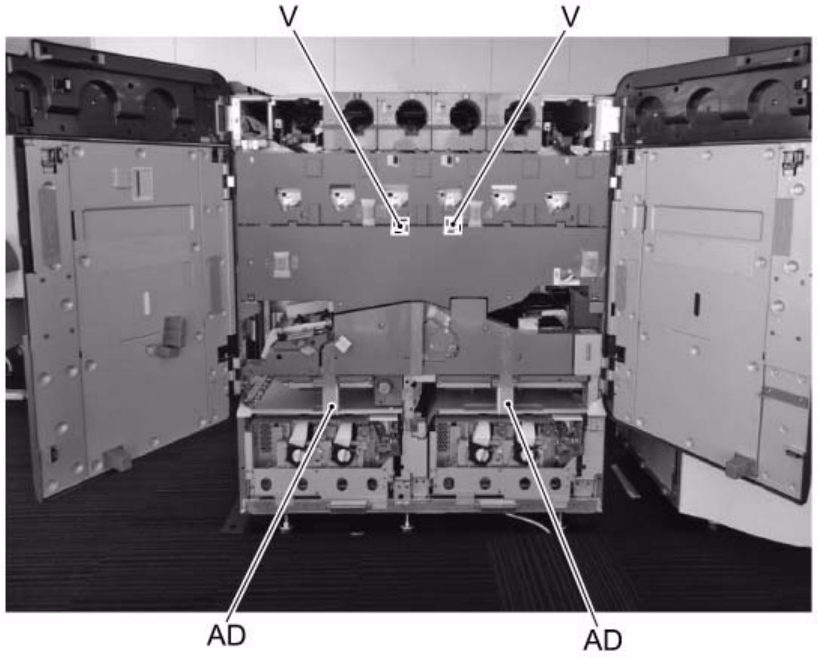


Figure 5 j0kol921003

IOT-L Shipping Bracket and Packing Materials Location (Figure 5)

Table 5

Module	Name	Location	Number	Reference Procedure
IBT Module Section	V	Front	2	Refer to Step 7 of 9.1.1.3 Installation of Main Unit (3 of 14).
Big Module Section	AD	Front	2	Refer to Step 2 of 9.1.1.8 Installation of Main Unit (8 of 14).

9.2.3 Registration Cancellation Procedure of Main Unit

Removal Procedure

1. Obtain print sample.
2. Check that there is no error, record the meter, turn OFF the Main Switch and the Emergency Switch, turn OFF the Breaker, and then unplug the Power Cord.
3. Remove paper from each tray.
4. For devices with options other Special Color Extension Kit installed, refer to the following for more efficient registration cancellation.

   NOTE: *With the Special Color Extension Kit, cancel registration as is without any change to what is installed.*

   - *Finisher/ HCS (Supplement)*
   - *HCF A3 & 2nd HCF A3 (Supplement)*
   - *For other options, refer to the various items in Chapter 9.*
5. Disconnect all cables that are connected externally to the Video Box Unit.
6. Disconnect all cables that are connected to the PC, LCD, Fiery Server and LCD Monitor (Fiery Server). (Refer to only removal procedures of physical cables, etc. from Step 11 of 9.1.1.11 Installation of Main Unit (11 of 14) to Step 40 of 9.1.1.14 Installation of Main Unit (14 of 14).)
7. Separate ECO BOX Unit and ECO BOX Unit 2. (Refer to Step 1 of 9.1.1.11 Installation of Main Unit (11 of 14) to Step 6 of 9.1.1.12 Installation of Main Unit (12 of 14).)
8. Remove the following parts: (Refer to Step 9 to 17 of 9.1.1.7 Installation of Main Unit (7 of 14).)
   - Latch Assembly
   - Inner Left Lower Cover
   - CLG Upper Cover
   - Stopper Assembly
   - Inner Left Upper Cover
   - Inner Frame Cover
   - Inverter 1 Front Cover
   - Inner Right Lower Cover
9. Install the Shipping Bracket (A, B, C, D). (Figure 1)
   (1) Place packing material A in the figure above on the Lower Cooling Assembly, and close the Upper Cooling Assembly. (Refer to Step 8 of 9.1.1.7 Installation of Main Unit (7 of 14).)
   (2) Install the Shipping Bracket B (x2) in the figure to the Fusing Cooling Unit. (Refer to Step 5 of 9.1.1.7 Installation of Main Unit (7 of 14).)
   (3) Remove the Exit Drawer Handle Assembly. (Refer to Steps 3 and 4 of 9.1.1.7 Installation of Main Unit (7 of 14).)
   (4) Install the Shipping Bracket in the figure to the Upper Decurler Unit. (Refer to Step 23 of 9.1.1.6 Installation of Main Unit (6 of 14) to Step 2 of 9.1.1.7 Installation of Main Unit (7 of 14).)
   (5) Install the Shipping Bracket D (x3) in the figure to Inverter 1 Assembly. (Refer to Step 22 of 9.1.1.6 Installation of Main Unit (6 of 14).)
   (6) Install the Inner Right Lower Cover. (Refer to Step 21 of 9.1.1.6 Installation of Main Unit (6 of 14).)
   (7) Install the Inverter 1 Front Cover. (Refer to Step 20 of 9.1.1.6 Installation of Main Unit (6 of 14).)
   (8) Push in the Exit Drawer Unit.

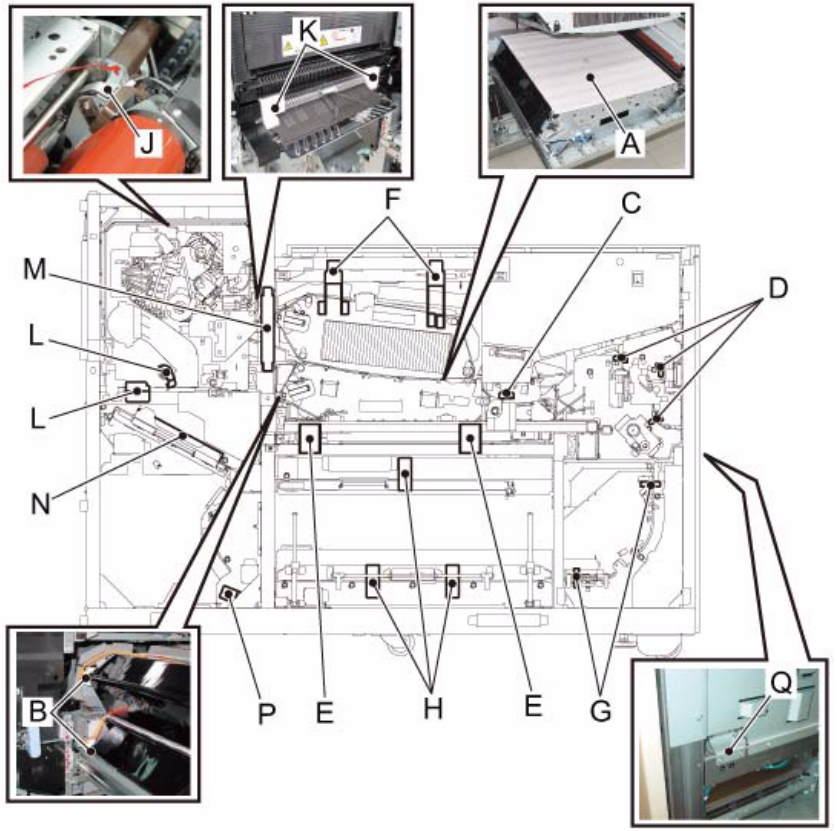


Figure 1 j0kol921001

10. Install the Shipping Bracket (E, F, G, H). (Figure 2)
    (1) Install the Shipping Bracket E (x2) in the figure to the Exit Drawer Unit. (Refer to Step 19 of 9.1.1.6 Installation of Main Unit (6 of 14).)
    (2) Install the Shipping Bracket F (x2) in the figure to the Cooling Unit. (Refer to Step 16 of 9.1.1.6 Installation of Main Unit (6 of 14).)
    (3) Install the Shipping Bracket G (x2) in the figure to Inverter 2 Assembly. (Refer to Step 14 of 9.1.1.6 Installation of Main Unit (6 of 14).)
    (4) Install the Shipping Bracket H (x3) in the figure to the Duplex Unit. (Refer to Step 12 of 9.1.1.6 Installation of Main Unit (6 of 14).)

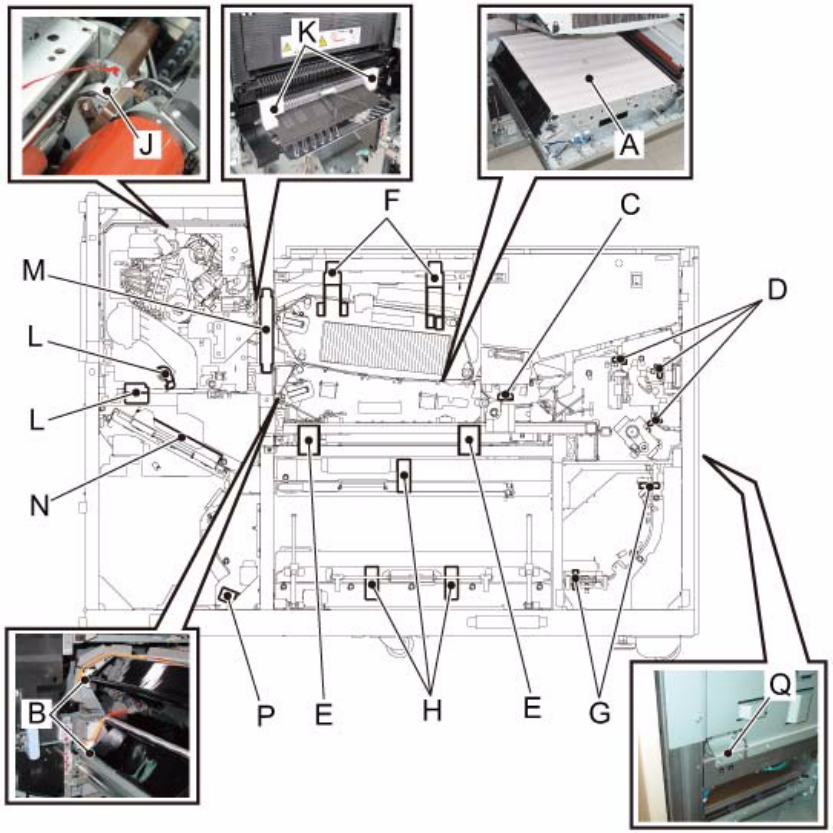


Figure 2 j0kol921001

11. Install the Shipping Bracket (J, K, L). (Figure 3)
    (1) Remove the Fusing Front Cover. (Refer to Step 7 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (2) Pull out the Fusing Unit, and open the Fusing Right Assembly. (Refer to Step 16 of 9.1.1.5 Installation of Main Unit (5 of 14) to Step 5 of 9.1.1.6 Installation of Main Unit (6 of 14).)
    (3) Install the Shipping Bracket J in the figure to the Fusing Unit. (Refer to Step 6 of 9.1.1.6 Installation of Main Unit (6 of 14).)
    (4) Reinstall the Fusing Unit. (Refer to Step 16 of 9.1.1.5 Installation of Main Unit (5 of 14) to Step 5 of 9.1.1.6 Installation of Main Unit (6 of 14).)
    (5) Install packing material K (x2) in the figure to the Fusing Unit. (Refer to Step 15 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (6) Remove the Fusing Handle Assembly-5. (Refer to Step 11 to 14 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (7) Push in the Fusing Unit.
    (8) Install the Shipping Bracket L (x2) in the figure to the Fusing Unit. (Refer to Step 7 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (9) Install the Fusing Front Cover.

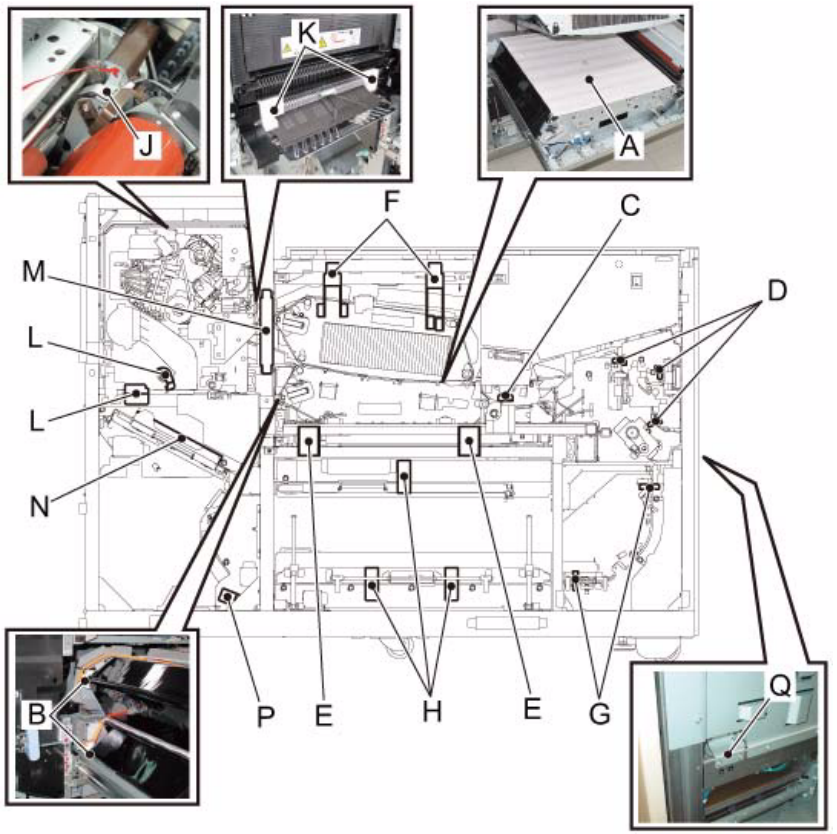


Figure 3 j0kol921001

12. Install the Shipping Bracket (M, N, P, Q). (Figure 4)
    (1) Install the Shipping Bracket M in the figure to the Frame. (Refer to Step 4 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (2) Remove the Lock Cover. (Refer to Step 2 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (3) Install packing material N and Shipping Bracket P in the figure to Duplex Transport Assembly and the D2 Transport Assembly section. (Refer to Step 2 of 9.1.1.5 Installation of Main Unit (5 of 14).)
    (4) Install the Lock Cover.
    (5) Remove the IOT-R Right Cover. (Refer to Step 15 of 9.1.1.4 Installation of Main Unit (4 of 14).)
    (6) Install the Shipping Bracket Q in the Right figure to Inverter 1. (Refer to Step 17 of 9.1.1.4 Installation of Main Unit (4 of 14).)

(7) Install the IOT-R Right Cover.

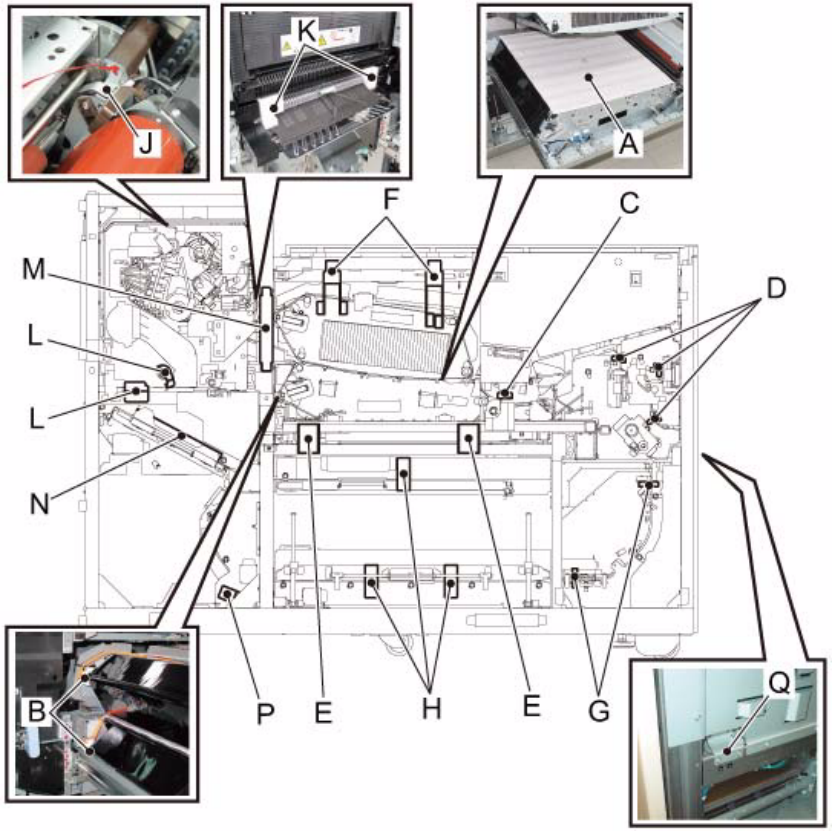


Figure 4 j0kol921001

13. Remove the IOT R Top Cover. (Refer to Step 20 of 9.1.1.3 Installation of Main Unit (3 of 14).)
14. Remove V-Transport Assembly 3. (Refer to Step 17 of 9.1.1.8 Installation of Main Unit (8 of 14) to Step 4 of 9.1.1.9 Installation of Main Unit (9 of 14).)
15. Separate IOT-L and IOT-R. (Refer to Step 9 of 9.1.1.3 Installation of Main Unit (3 of 14) to Step 14 of 9.1.1.4 Installation of Main Unit (4 of 14).)
16. Install the IOT-R Top Cover.
17. Remove the LVPS H1U. (Refer to Step 5 of 9.1.1.1 Installation of Main Unit (1 of 14) to Step 13 of 9.1.1.2 Installation of Main Unit (2 of 14).)
18. Remove the IBT Front Cover from IOT-L. (Refer to Step 7 of 9.1.1.3 Installation of Main Unit (3 of 14))
19. Rotate the Stopper Plate of IBT Module, lower the IBT Lever, and pull out the IBT Module. (Refer to Step 14 of 9.1.1.9 Installation of Main Unit (9 of 14).)
20. Rotate the Belt Guard (x3). (Refer to Step 18 of 9.1.1.9 Installation of Main Unit (9 of 14).)
21. Install the Shipping Bracket (R, S, T, U). (Figure 5)
    (1) Install the packing material R (Cushion) in the figure on the IBT Belt. (Refer to Step 17 of 9.1.1.9 Installation of Main Unit (9 of 14).)
    (2) Push in the IBT Module, lift IBT Lever, and rotate the Stopper Plate.
    (3) Install the Shipping Bracket S (x2) in the figure to the IBT Frame. (Refer to Steps 12 and 13 of 9.1.1.9 Installation of Main Unit (9 of 14).)
    (4) Install the Shipping Shaft T (x3) in the figure to the IBT Frame. (Refer to Steps 12 and 13 of 9.1.1.9 Installation of Main Unit (9 of 14).)
    (5) Install the Shipping Bracket U (x2) in the figure to the IBT Module. (Refer to Step 8 of 9.1.1.3 Installation of Main Unit (3 of 14).)

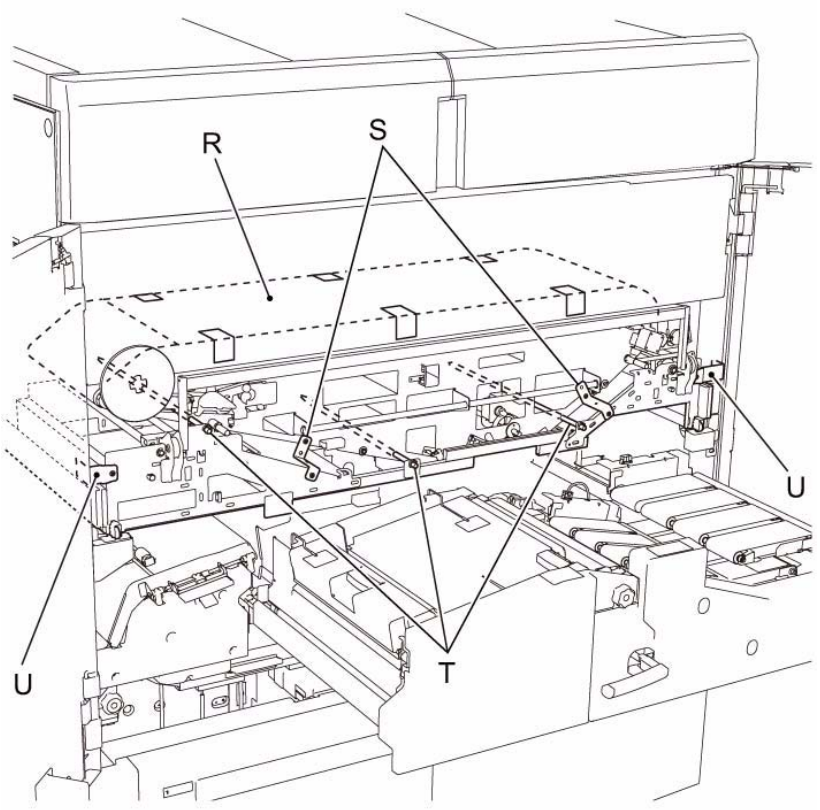


Figure 5 j0kol921002

22. Pull out the Big Module, remove the screw of Rail, and pull it up to the Service Position. (Refer to Step 6 of 9.1.1.8 Installation of Main Unit (8 of 14).)
23. Perform the following procedures:
    (1) Remove the Drawer Left/Right Cover. (Refer to Step 3 of 9.1.1.8 Installation of Main Unit (8 of 14).)

(2) Remove the V-Transport Rear Cover. (Refer to Step 9 of 9.1.1.9 Installation of Main Unit (9 of 14).)
(3) Remove the V-Transport Front Cover. (Refer to Step 8 of 9.1.1.9 Installation of Main Unit (9 of 14).)
(4) Remove V-Transport 1/2 Assembly. (Refer to Step 15 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(5) Remove the 2nd Belt Assembly. (Refer to Step 16 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(6) Secure BTB Frame by the screw (x2). (Refer to Step 12 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(7) Install V-Transport 1/2 Assembly.
(8) Install the V-Transport 3 Front Cover. (Refer to Step 17 of 9.1.1.8 Installation of Main Unit (8 of 14).)

24. Install the Shipping Bracket (W, Y, Z, AA). (Figure 6)
(1) Install the Shipping Bracket (x2) at W in the figure to the V-Transport Assembly 2. (Refer to Step 14 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(2) Install V-Transport Assembly 3 on the Shipping Bracket (x2). (Refer to Step 13 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(3) Install the Shipping Bracket Y (x3) in the figure to Aligner Assembly and Pre Aligner Assembly. (Refer to Step 10 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(4) Remove the Gear Cover. (Refer to Step 7 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(5) Install the Shipping Bracket Z (x4) in the figure to Aligner Assembly and Pre Aligner Assembly. (Refer to Step 8 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(6) Release the Service Position of the Big Module, tighten screw to the Rail, and push the Big Module inside the machine. (Refer to Step 6 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(7) Install the Shipping Bracket AA (x2) in the figure to the Big Module. (Refer to Step 4 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(8) Remove the Handle of the Big Module. (Refer to Step 5 of 9.1.1.8 Installation of Main Unit (8 of 14).)
(9) Install the Drawer Left/Right Cover.

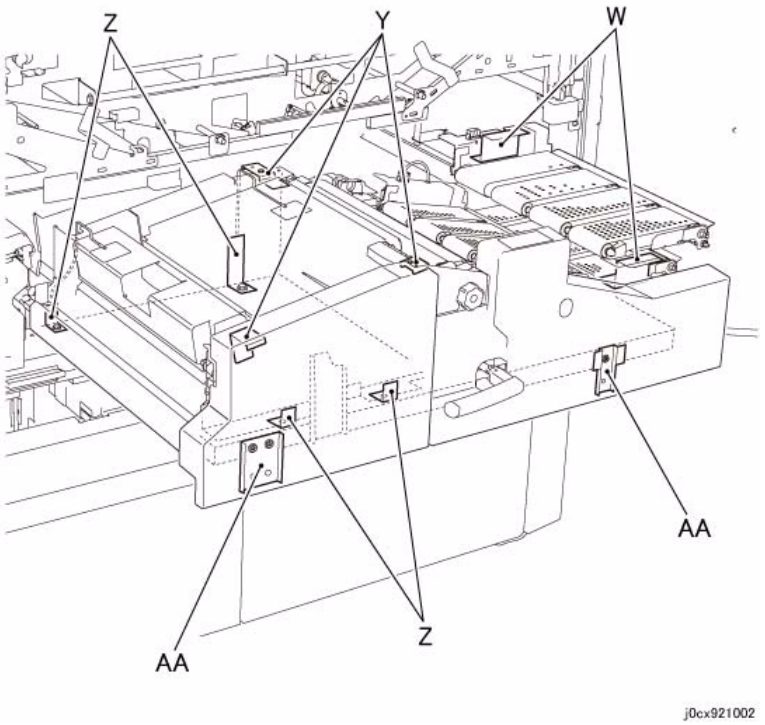


Figure 6 j0cx921002

25. Install the Shipping Bracket (AB, AC, AE). (Figure 7)
(1) Pull out Tray 1/2 up to the Service Position. (Refer to Step 20 of 9.1.1.7 Installation of Main Unit (7 of 14).)
(2) Remove Safety Plate (x2) from Tray 1/2. (Refer to Step 22 of 9.1.1.7 Installation of Main Unit (7 of 14).)
(3) Install packing material AB (x2) in the figure to the rear of Tray 1/2. (Refer to Step 21 of 9.1.1.7 Installation of Main Unit (7 of 14).)
(4) Remove Tray 1/2 Front Cover Assembly. (Refer to Steps 23 and 24 of 9.1.1.7 Installation of Main Unit (7 of 14).)
(5) Release Tray 1/2 Stopper (x2) and push Tray inside the machine.
(6) Install the Shipping Bracket AC (x4) in the figure to Tray 1/2. (Refer to Step 19 of 9.1.1.7 Installation of Main Unit (7 of 14).)
(7) Remove IOT-L Left Cover Assembly and IOT-L Left Low Cover. (Refer to Step 20 of 9.1.1.9 Installation of Main Unit (9 of 14).)
(8) Install Square Pipe AE (x4) in the figure to the IOT-L Frame.

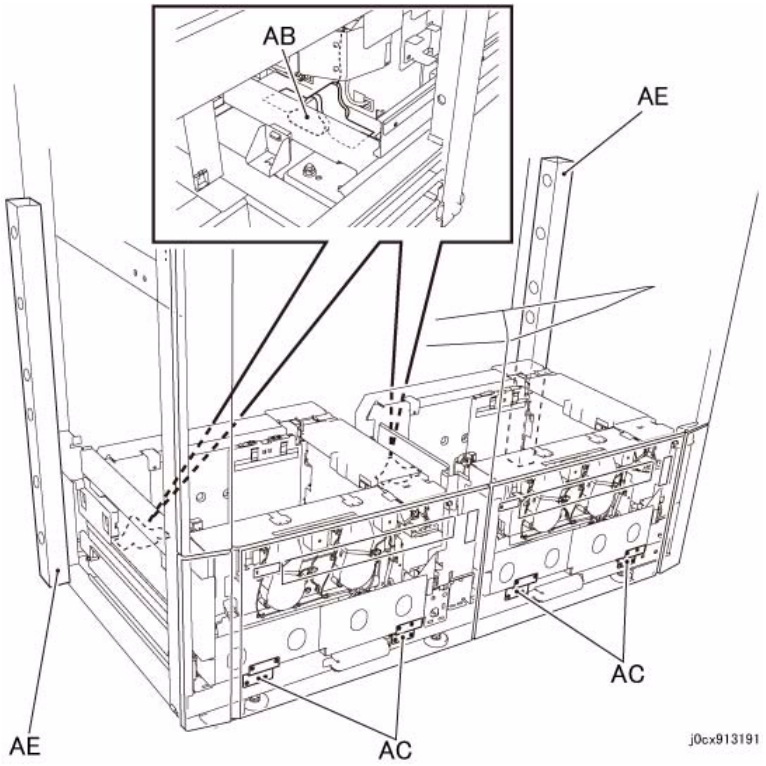


Figure 7 j0cx913191

26. Install the Shipping Bracket (V, AD). (Figure 8)
    (1) Install packing material V (x2) in the figure to the IBT Front Cover, and install the IBT Front Cover to the IBT Module. (Refer to Step 7 of 9.1.1.3 Installation of Main Unit (3 of 14).)
    (2) Install packing material AD (x2) in the figure to the gap of Tray 1/2 and Big Module. (Refer to Step 2 of 9.1.1.8 Installation of Main Unit (8 of 14).)
    (3) Install the cushion (x2) that protects the arm of Tray 1/2. (Refer to Step 13 of 9.1.1.4 Installation of Main Unit (4 of 14).)

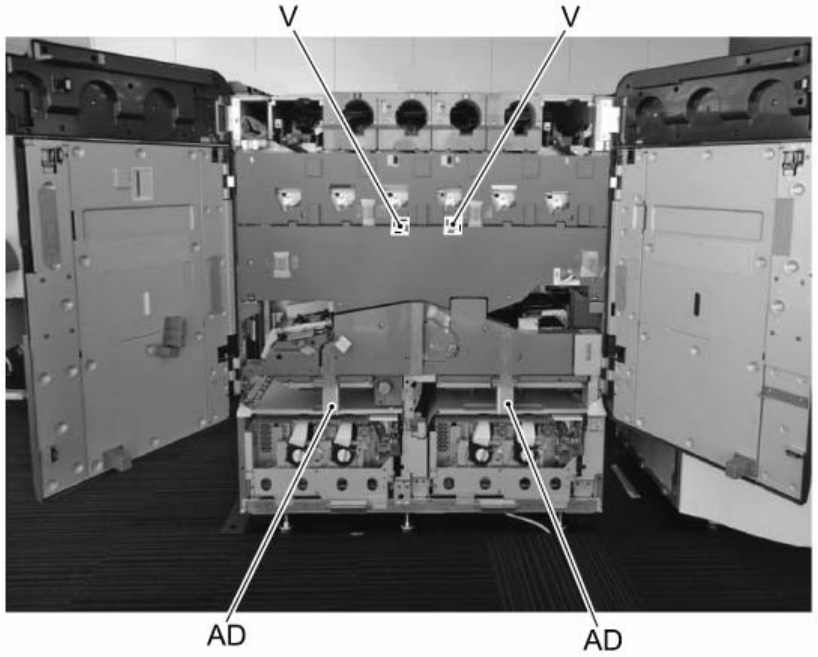


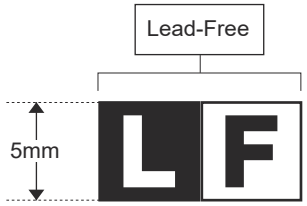
Figure 8 j0kol921003

27. Rotate and lift Foot (x6) of IOT-L.
28. When installing the Mobility Plate, remove the latch between the plates to make it easier to move the machine after transportation.

LEAD-FREE SOLDER

The PWB's of this model employs lead-free solder. The "LF" marks indicated on the PWB's and the Service Manual mean "Lead-Free" solder.

Example:



indicates tin-silver-copper or tin-copper-nickel lead-free solder

(1) NOTE FOR THE USE OF LEAD-FREE SOLDER THREAD

When repairing a lead-free solder PWB, use lead-free solder thread.
Never use conventional lead solder thread, which may cause a breakdown or an accident.
Since the melting-point of lead-free solder thread is about 40°C higher than that of conventional lead solder thread, the use of the exclusive-use soldering iron is recommended.

(2) NOTE FOR SOLDERING WORK

Since the melting-point of lead-free solder is about 220°C, which is about 40°C higher than that of conventional lead solder, and its soldering capacity is inferior to conventional one, it is apt to keep the soldering iron in contact with the PWB for longer time. This may cause land separation or may exceed the heat-resistive temperature of components. Use enough care to separate the soldering iron from the PWB when completion of soldering is confirmed.
Since lead-free solder includes a greater quantity of tin, the iron tip may corrode easily. Turn ON/OFF the soldering iron power frequently.
If different-kind solder remains on the soldering iron tip, it is melted together with lead-free solder. To avoid this, clean the soldering iron tip after completion of soldering work.
If the soldering iron tip is discolored black during soldering work, clean and file the tip with steel wool or a fine filer.

CAUTION FOR BATTERY REPLACEMENT

(Danish) ADVARSEL !
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandoren.

(English) Caution !
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type
recommended by the manufacturer.
Dispose of used batteries according to manufacturer's instructions.

(Finnish) VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.

(French) ATTENTION
Il y a danger d'explosion s' il y a remplacement incorrect
de la batterie. Remplacer uniquement avec une batterie du
même type ou d'un type équivalent recommandé par
le constructeur.
Mettre au rebut les batteries usagées conformément aux
instructions du fabricant.

(Swedish) VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens
instruktion.

(German) Achtung
Explosionsgefahr bei Verwendung inkorrekter Batterien.
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder
vom Hersteller empfohlene Batterien verwendet werden.
Entsorgung der gebrauchten Batterien nur nach den vom
Hersteller angegebenen Anweisungen.

CAUTION FOR BATTERY DISPOSAL

(For USA, CANADA)
"BATTERY DISPOSAL"
THIS PRODUCT CONTAINS A LITHIUM PRIMARY
(MANGANESS DIOXIDE) MEMORY BACK-UP BATTERY
THAT MUST BE DISPOSED OF PROPERLY. REMOVE THE
BATTERY FROM THE PRODUCT AND CONTACT YOUR
LOCAL ENVIRONMENTAL AGENCIES FOR INFORMATION
ON RECYCLING AND DISPOSAL OPTIONS.

"TRAITEMENT DES PILES USAGÉES"
CE PRODUIT CONTIENT UNE PILE DE SAUVEGARDE DE
MÉMOIRE LITHIUM PRIMAIRE (DIOXYDE DE MANGANÈSE)
QUI DOIT ÊTRE TRAITÉE CORRECTEMENT. ENLEVEZ LA
PILE DU PRODUIT ET PRENEZ CONTACT AVEC VOTRE
AGENCE ENVIRONNEMENTALE LOCALE POUR DES
INFORMATIONS SUR LES MÉTHODES DE RECYCLAGE ET
DE TRAITEMENT.

SHARP

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